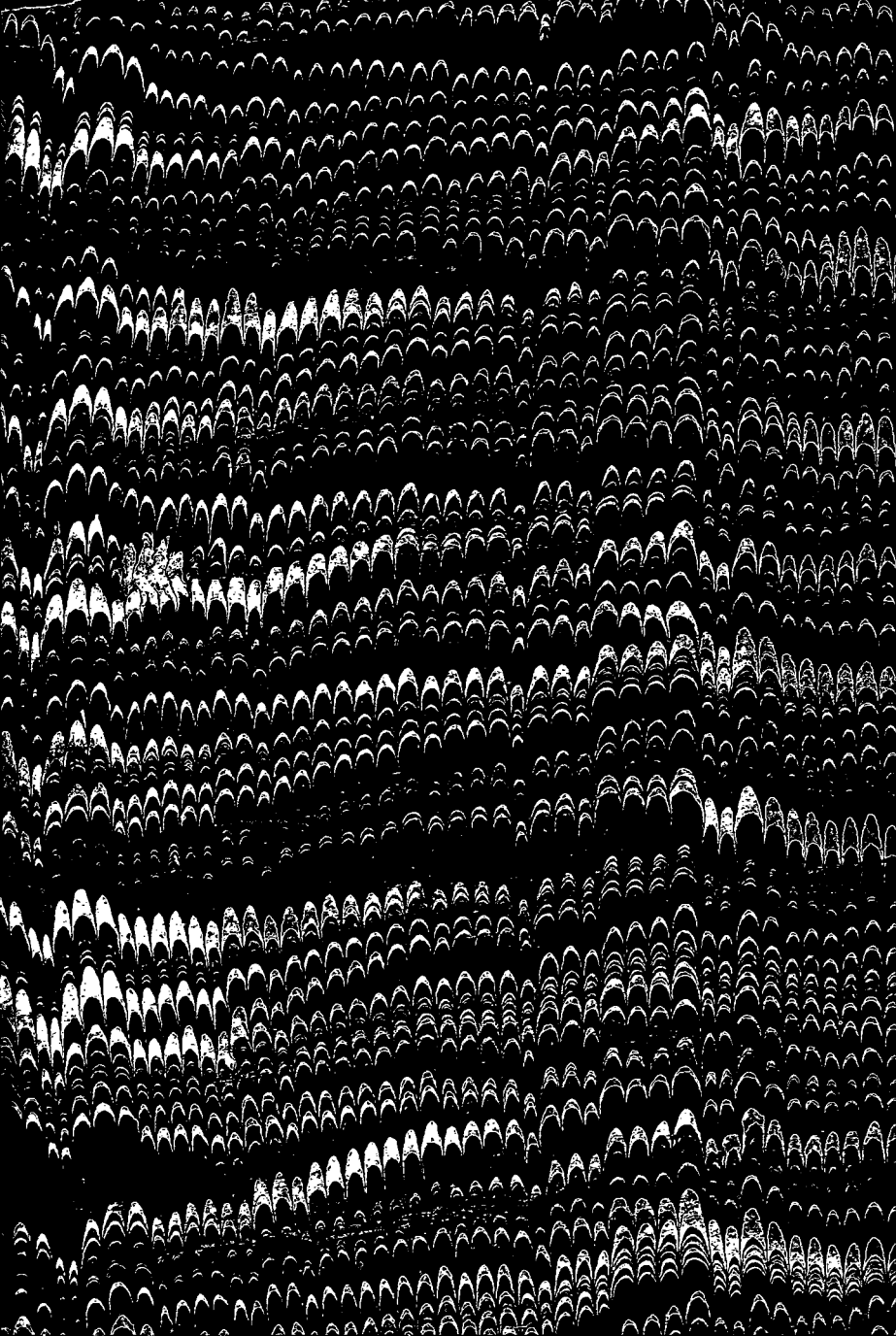

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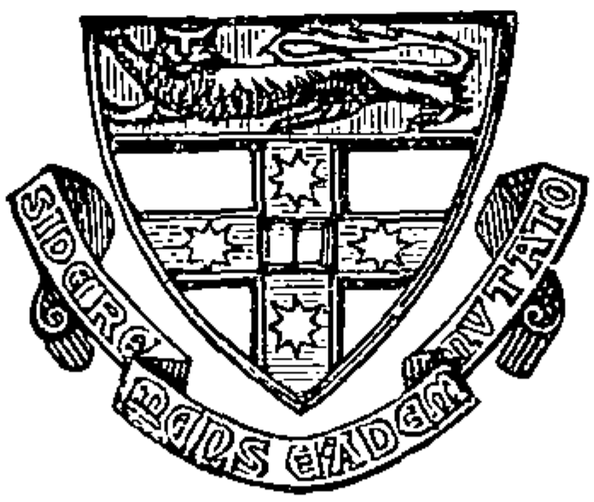
CALENDAR

OF THE

UNIVERSITY OF SYDNEY

FOR THE YEAR

1898



SYDNEY

ANGUS AND ROBERTSON

PUBLISHERS TO THE UNIVERSITY

1898

TABLE OF CONTENTS.

	PAGE.
INDEX	v.
PREFACE	ix.
CALENDAR FOR 1898-9	xiii.
ROYAL CHARTER AND LISTS OF ACTS OF PARLIAMENT RELATING TO THE UNIVERSITY, COLLEGES, PRINCE ALFRED HOSPITAL, AND DEEDS OF GRANT OF LANDS	1
BY-LAWS OF THE UNIVERSITY	3
REGULATIONS, DISCIPLINE, LIBRARY, MUSEUMS	45
GENERAL REGULATIONS, MATRICULATION, TIME TABLES OF LECTURES, LECTURE AND EXAMINATION SUBJECTS	54
LIST OF SCHOLARSHIPS, EXHIBITIONS, PRIZES, ETC.	135
TABLE OF FEES	140
FOUNDATIONS	145
UNIVERSITY PRIZES	169
PRIVATE ANNUAL PRIZES	172
HONOURS AT DEGREE EXAMINATIONS	175
RESULTS OF MATRICULATION AND ANNUAL EXAMINATIONS	183
UNIVERSITY OFFICERS, ETC.	205
MEMBERS OF THE UNIVERSITY	214
AFFILIATED COLLEGES	246
PRINCE ALFRED HOSPITAL	259
OTHER HOSPITALS	264
LIST OF BENEFACTIONS	265
LIST OF DONATIONS TO THE LIBRARY	268
REPORT OF THE SENATE AND BALANCE SHEETS FOR THE YEAR 1897	270
UNIVERSITY CLUBS, ETC.	296
ARMY AND NAVY MEDICAL SERVICE	304
EXAMINATION FOR THE CIVIL SERVICE OF INDIA	305
EXAMINATION PAPERS	*Appendix*

INDEX.

A

PAGE

Academic Costume 37
Accountant 213
Acts of Parliament relating to University and Colleges 1
Admission *ad eundem* 10, 36
,, of Attorneys—Regulations 134
,, Barristers—Regulations 133
Aitken Scholarship ... 135, 156.
Alexander (Maurice) Bursary ... 163
Allen (George) Scholarship ... 136, 154
,, (Wigram) Scholarship ... 137, 154
Anatomy, Lecture Subjects 105
,, Museum 51
,, Examination Questions in *Appendix*
Anderson Prizes 139, 174
Antiquities, Nicholson Museum of ... 50
Applied Mechanics—Lecture Subjects 112
,, ,, Examination Questions in ... *Appendix*
Architecture, Lecture Subjects... ... 120
Army Medical Service 304
Arts, Faculty of, By-laws 13
,, Examiners in 212
,, Examination Papers .. *Appendix*
,, Graduates in 226
Assaying 96
Attorneys, Regulations for Admission of 134
Auditor 213

B

B.A. Examination, Class Lists... ... 192
,, ,, Papers *Appendix*
,, ,, Prizes at ... 169
,, ,, Class Lists in Honours 175
B.E. ,, Honours at 182
,, ,, Prizes at 170
B.Sc. ,, Honours at 181
,, ,, Prizes at 170
Bachelor of Arts, By-laws 15
,, of Engineering, By-laws ... 32
,, of Laws, By-laws 18
,, of Medicine, By-laws ... 22
,, of Science, By-laws 28
Bachelor of Arts, Alphabetical List ... 228
,, of Engineering ,, ... 239
,, of Laws ,, ... 235
,, of Medicine ,, ... 236
,, of Science ,, ... 239
Balance Sheets for 1897 286
Barker Scholarships ... 135, 136, 152
Barristers, Regulations for Admission of 133
Belmore Medal 138, 166

PAGE

Benefactors, List of 265
Biology, Lecture Subjects 104
Books presented to Library 268
Botany, Lecture Subjects 104
Botany, Examination Questions in *Appendix*
Bowman-Cameron Scholarship... 135, 155
Burdekin Bursary... 160
Bursaries, List of 136, 160
By-laws of the University 3

C

Caird Scholarship 137, 155
Calendar ... ... xv.
Challis Lectureships 146
,, Professorships 145
,, Fund 145
Chancellor 3, 205
Chemical Laboratory 96
Chemistry, Lecture Subjects 94
,, Examination Questions in *Appendix*
Civil Engineering, By-laws 32
,, Lecture Subjects ... 114
Civil Service of India 305
Classical Lecture Subjects 75
Class Lists of Examinations 177
College, St. Paul's... 246
,, St. Andrew's 252
,, St. John's 249
,, for Women 255
Collie Prize 136, 168
Commission, Military 158
Constitutional Law 122
Convocation... 207
Convocation, Members of 214
,, Meetings of 6
Cooper Scholarships ... 135, 136, 153
Costume, Academic 37
Council of Education Scholarship .. 157
Curators of Museums 205

D

Dalton Bequest 152
David Prize 173
Deans of Faculties 8
Deas-Thomson Scholarships ... 136, 152
Deeds of Grant of Lands... 2
Degrees, *ad eundem* 36
Demonstrators, List of 209
Diseases of Women Lecture Subjects 110
Discipline, Regulations for 45
Dixson Prize 172
Doctor of Laws—By-laws 20
,, ,, Subjects of Examination for 132

PAGE

Doctors of Laws—Alphabetical List . 235
,, of Medicine—Alphabetical List 236
Doctor of Medicine—By-laws 26
,, of Science—By-laws 30

E

Electrical Engineering By-laws ... 34
Engineering, Department of—By-laws 31
,, Class Lists 202
,, Drawing 117
,, Degrees in 31
,, Examination Papers *Appendix*
,, Graduates in 239
,, Laboratory 117
,, Lecture Subjects 114
,, Mining 33
Engineers in Royal Navy 306
English, Lecture Subjects 80
English Verse, Medal for ... 138, 170
Entrance Examination for Law, Medicine and Science 56
Essays, English 138, 166
Evening Lectures—By-laws 39
Examination Subjects 125
,, Papers *Appendix*
Examinations for Articled Clerks ... 134
Examiners 212
Exhibitions, List of 135
,, Account of 159
Extension Lectures 40, 52
Ex-Professors 209

F

Faculties 8
,, Deans of... ... ... 8, 209
Faculty of Arts—By-laws 13
,, ,, Examination Class Lists 186
,, ,, Examination Subjects 124
,, of Law - By-laws 18
,, of Medicine—By-laws... ... 21
,, of Science—By-laws 28
Fairfax Prizes 166
Fees, Table of 140
Fellowship, Wentworth 150
Finance—By-laws... 42
Fisher Library 49
Foundations 145
Frazer Bursaries 164
Frazer Scholarship 137, 157
Freemasons Scholarship ... 135, 155
French—Lecture Subjects 78
,, Examination Papers *Appendix*

G

Geology and Palæontology, Lecture Subjects 102
Geometrical Drawing 113
German, Lecture Subjects 79
,, Examination Papers ... *Appendix*
Graduates, Alphabetical List of ... 226
,, Register of 36
Gradum, ad eundem 36
Greek, Lecture Subjects 74

PAGE

Greek Examination Questions ... *Appendix*
Grahame Medal 168
Gynæcology... 110

H

Harris (John) Scholarship ... 137, 156
Haswell Prize 172
History, Lecture Subjects 88
Honours at Degree Examinations ... 175
Horner Exhibition 136, 160
Hospitals recognised by the University 259
Hovell Lectureship 150
Hunter-Baillie Bursaries 165

I

International Law... 122

J

Junior Public Examination ... 38, 133
Jurisprudence and Roman Law ... 122

K

King (James) Travelling Scholarship 137, 156

L

Latin, Lecture Subjects 73
,, Examination Papers ... *Appendix*
,, Verse 138, 166
Law, Faculty of, Class Lists 196
,, ,, By-laws 18
,, ,, Examiners in... ... 212
,, ,, Examination Papers *Appendix*
,, ,, Examination Subjects 131
,, ,, Graduates in 235
,, ,, Lecture Subjects ... 122
LL.B. Examination, Honours at ... 180
,, ,, Subjects 131
,, ,, Prizes 169
LL.D. Examination, Subjects ... 21, 132
Law Matriculation Examination ... 134
Lecturers, List of 209
,, Tenure of Office 42
Lectures, By-laws relating to 11
,, Exemption from 11
,, Synopsis of 73
,, Time Tables of 60
Lecture Subjects 73
Lent Term 10
Levey and Alexander Bursary 163
Levey Scholarship... ... ... 136, 161
Librarian 213
Library, Donations to 268
Library, Regulations 46
Lithgow Scholarship 133, 148
Liversidge Prize 173
Logic and Mental Philosophy, Lecture Subjects 87

M

M.A. Examination, Honours at ... 175
,, Prizes at 169
,, Subjects of... ... 125
M.B. ,, Prizes at 170

PAGE

M.B. Examination, Honours at ... 180
M.D. ,, Honours at ... 180
,, Prizes at ... 169
M.E. ,, Honours at ... 181
,, Prizes at ... 170
MacCallum Prizes 172
MacCormick, Prize 173
Macleay Museum 50, 150
Masters of Arts, By-laws 17
Masters of Arts Examination Subjects 124
,, of Engineering, By-laws ... 35
,, of Surgery, By-laws 22
Masters of Arts, Alphabetical List ... 226
Masters of Engineering, Alphabetical List 239
Masters of Surgery, Alphabetical List 238
Materia Medica and Therapeutics, Lecture Subjects 108
Materia Medica, Examination Papers *Appendix*
Mathematics, Lecture Subjects ... 81
,, Examination Papers *Appendix*
Matriculation, By-laws 10, 14
,, Class List for 183
,, Examination Papers *Appendix*
,, Honours 55
,, Subjects of Examination 54
Maurice Alexander Bursary 158
Mechanical Engineering By-laws ... 32
,, ,, Lecture Subjects ... 116
,, ,, Scholarships 147
,, ,, Medal ... 149
Medical Class Lists 191
Medical Jurisprudence, Lecture Subjects 111
Medicine, Faculty of, By-laws 22
,, ,, Class Lists 197
,, ,, Degrees in 22
,, ,, Examination Papers in *Appendix*
,, ,, Examiners in ... 212
,, ,, Graduates in ... 236
,, ,, Lecture Subjects ... 109
Medicine, Practice of, Lecture Subjects 109
Metallurgy, Lecture Subjects 95
Metallurgical Laboratory 96
Members of Convocation 214
,, University 214
Michaelmas Term 11
Microscopes 124
Midwifery, Lecture Subjects 109
Military Commissions 158
Mineralogy, Lecture Subjects 101
,, Examination Papers *Appendix*
Mining Engineering, By-laws 33
Mining, Lectures 120
Modern Literature, Lecture Subjects... 78
Morphology and Physiology of Plants 104
Museums 50

N

Natural History, Lecture Subjects ... 104
Navy Medical Service 304

PAGE

Nicholson Medal 138, 168
,, Museum 50
Non-Matriculated Students ... 10, 72
Norbert Quirk Prize 136, 168

O

Officers of the University 205
,, Substitutes for 36
Ophthalmic Medicine, &c., Lecture Subjects 111

P

Pathology, Lecture Subjects 110
,, Examination Papers *Appendix*
Philosophy, Medal for Essay ... 139, 194
Physical Laboratory 92
Physics, Lecture Subjects 89
,, Examination Papers *Appendix*
Physiography, Lecture Subjects ... 102
,, Prize for 170
Physiology, Lecture Subjects 106
,, Examination Papers *Appendix*
,, Practical 106
Practical Plane and Solid Geometry ... 113
Preface ... ... ix.
Prince Alfred Hospital 259
Private Annual Prizes 172
Prize Compositions 138
Prizes, List of 135
,, Private Annual 172
,, Scholarships and Exhibitions .. 151
,, University 171
Professor, Title of 8
Professors, List of 209
Professorial Board 8
Psychological Medicine, Lecture Subjects 111
Public Examinations 38, 133
,, Health, Lecture Subjects ... 111

Q

Quirk, (Norbert) Prize 136, 168
Quorum of Boards 9

R

Register of Graduates 36
Registrar 8, 213
Regulations for Discipline 45
,, Library 46
Renwick Scholarship 137, 154
Report of Senate 270
Roberts Bequest 137, 156
Royal Charter of University 1
Roman Law 122
Russell (P. N.) Endowment and Lectures 146
Russell (P. N.) Scholarships 147

S

Salting Exhibition 135, 159
Scholarships, By-laws relating to ... 13
,, Account of 151
,, List of 135
Science, Faculty of, By-laws 28

PAGE

Science, Class Lists 201
,, Examination Papers in *Appendix*
Science, Examiners in 213
,, Graduates in 239
,, Scholarship 137, 157
Seal of the University 8
Senate, Election to Vacancies 5
,, Ex Members 207
,, *Ex-officio* Members 6
,, Meetings 4
,, Original Members 206
,, Present Members... 208
Senior Public Examination ... 38, 133
Slade Prize 136, 168
Smith Prize 136, 167
Solicitor to the University ... 7, 213
Solicitors, Admission of 134
St. Andrew's College 252
St. John's College 249
St. Paul's College 246
Statum, Ad eundem 10
Struth Exhibition 136, 137, 159
Superior Officers 7
Surgery, Degree in... 22
,, Graduates in 236
,, Lecture Subjects 109
Surveying, Lecture Subjects 118

T

Teaching Staff 209
Tenure of Lecturers 42
Terms 10
Time Tables of Lectures... 60
Therapeutics—Lecture Subjects ... 107
Travelling Scholarship ... 137, 150, 156
Trinity Term 10

U

Undergraduates, List of 240

PAGE

University Extension 40, 52
,, Clubs, &c. 296
,, Medals 137, 169
University Prizes 138, 169
University Scholarships, By-laws Relating to... 13
University, Scholarship 151
,, Account of 151

V

Vacancies in Senate, Election to ... 4
Vice-Chancellor 3, 206
Vice-Chancellors, List of 206
Visitor of the University... 205

W

Walker Bursaries 165
Watt Exhibitions 159
Wentworth Bursaries 164
,, Fellowship 150
,, Medals 138, 166
West Medal 167
Wilson Prize 173
Wilkinson Prize 172
Women's College 255
Wood Prize... 174
Woolley Scholarships 158

Y

Yearly Examinations 12

Z

Zoology and Comparative Anatomy Examination Papers ... *Appendix*
Zoology and Comparative Anatomy Lecture Subjects 104

PREFACE.

THE UNIVERSITY OF SYDNEY was incorporated by an Act of the Colonial Legislature, which received the Royal Assent on the 1st of October, 1850. The objects set forth in the preamble are—"The advancement of religion and morality and the promotion of useful knowledge." By this Act it is empowered to confer, after examination, Degrees in Arts, Law and Medicine, and is endowed with the annual income of £5000. Since 1882, this endowment has been supplemented by annual Parliamentary grants for the general purposes of the University, the amount voted for 1896-7 being £4000, and also by grants for special purposes.

By the University Extension Act of 1884 the Senate is empowered to give instruction, and to grant such Degrees and Certificates in the nature of Degrees as it shall think fit, in all branches of knowledge, except Theology and Divinity. The same Act admits women to all University privileges equally with men.

By a Royal Charter issued 7th February, 1858, the same rank, style, and precedence are granted to Graduates of the University of Sydney as are enjoyed by Graduates of Universities within the United Kingdom. The University of Sydney is also declared in the Amended Charter granted to the University of London to be one of the institutions in connection with that University from which certificates of having pursued a due course of instruction may be received with a view to admission to Degrees.

The government of the University is vested in a Senate, consisting of sixteen elective Fellows, and not fewer than three nor more than six "*ex officio*" members, being professors of the University, in such branches of learning as the Senate may from time to time select. Under this power, the Professors of Mathematics, Chemistry, Physiology, and Law, have been constituted "*ex officio*" members of the Senate. A Chancellor and Vice-Chancellor are elected by the Senate from their own body.

Vacancies in the Senate are filled by means of a convocation of electors, consisting of the Fellows of the Senate for the time being, Professors, Public Teachers and Examiners in the Schools of the University, Principals of Incorporated Colleges within the University, Superior Officers declared to be such by By-law, Masters and Doctors in any Faculty, and Bachelors of three years' standing.

There are four Faculties in the University, viz., Arts, Law, Medicine and Science.

In the Faculty of Arts two Degrees are given—namely, Bachelor of Arts and Master of Arts. The curriculum of study for the Degree of B.A. extends over a period of three years, during which students are required to attend lectures and pass examinations. The subjects of study are the English, Latin, Greek, French and German Languages, Ancient and Modern History, Mental Philosophy and Logic, Mathematics, Chemistry, Physics, Geology and Palæontology, Biology, Physiology, &c.

In the Faculty of Law the Degrees of LL.B. and LL.D. are given. The curriculum of study for the Degree of LL.B. extends over five years. The Degree of Bachelor of Law is recognised by the Board for the admission of Barristers in New South Wales as a qualification for admission to the Bar.

In the Faculty of Medicine three Degrees are granted, viz., Bachelor of Medicine, Doctor of Medicine, and Master of Surgery. The course of study for the Degrees of M.B. and Ch.M. extends over a period of five years.

The colony of New South Wales has been declared to be one of the British possessions to which the Imperial Medical Act of 1886 applies, and the Degrees in Medicine and Surgery granted by the University of Sydney are registered upon the Colonial List of the British Medical Register, under section 13 of that Act.

The University of Sydney is recognised as one of the Institutions from which the University of London is authorised to receive certificates for Degrees in Medicine. The University of Edinburgh accepts certificates of attendance on Medical Classes in this University to the extent of three years of professional study, and the Royal College of Surgeons extends a similar

recognition to attendance on the classes of the whole course, in the case of Graduates in Medicine who present themselves for examination for the Diploma of Member of the College.

In the Faculty of Science the Degrees of Bachelor of Science and Doctor of Science are given, and Degrees are also given in the several branches of Engineering, viz., Civil Engineering, Mechanical Engineering, and Mining Engineering. The course for the Degree of B.Sc. extends over a period of three years, during which the subjects of study are Mathematics, Chemistry (theoretical and practical), Physics (theoretical and practical), Mineralogy, Geology and Palæontology, Biology, &c. Candidates for Degrees in Engineering receive instruction for a period of three years in Mathematics, Chemistry, Physics, Surveying, Geometrical Drawing, Applied Mechanics, Architecture, Mineralogy and Geology, Metallurgy and Assaying, and the different branches of Engineering.

Graduates of the University of Sydney who comply with certain requirements, may be admitted as "advanced students" in the University of Cambridge. "Advanced students" may, under special conditions, proceed to the Degree of Bachelor of Arts or Bachelor of Law in that University, or obtain a certificate testifying to their proficiency in research.

Courses of Lectures in connection with the scheme for University Extension are delivered in Sydney and other places upon application. Each course consists of six or ten lectures, and concludes with an examination. Those persons who have attended any course regularly, and passed the concluding examination, receive University Certificates to that effect. The subjects of the lectures have hitherto been English Literature, Modern History, Ancient History, Political Economy, Logic and Mental Philosophy, &c.

Senior and Junior Public Examinations are held annually in Sydney, and at other places where persons approved by the Senate can be found to superintend the examinations.

The lectures of the Professors are open to persons not members of the University, upon payment of the fee prescribed for each course.

Undergraduates and Graduates of other Universities are admitted *ad eundem statum* and *gradum* under certain regulations prescribed by the By-laws.

The object of the Sydney University is to supply the means of a liberal education to "all orders and denominations, without any distinction whatever."

An Act to provide for the establishment of Colleges in connection with different religious denominations was passed by the Legislature during the Session of 1854. Ample assistance is offered towards their endowment; and the maintenance of the fundamental principles of the University—*the association of students without respect of religious creeds, in the cultivation of secular knowledge*—is secured consistently with the most perfect independence of the College authorities within their own walls. Colleges in connection with the Church of England, the Roman Catholic and Presbyterian Churches, and a College for Women, have been established.

An account of the several Scholarships and other Prizes for proficiency which have been established out of the funds of the University, or have been founded by private benefactions, will be found in this Calendar.

The Senate has the privilege of nominating one candidate per annum to a Commission in the British Army.

Graduates in Arts of this University enjoy certain privileges (granted by Act of Parliament), exempting them from all examinations other than an Examination in Law before admission as Barristers of the Supreme Court. The Rules of the Supreme Court also provide for a shortening of the period of Studentship-at-Law, in the case of Graduates, from three years to two, one of which may be concurrent with the final year of studentship at the University. Graduates who enter into articles of clerkship with attorneys and solicitors are only required to serve for three years instead of five.

At the yearly Examinations of 1882, women were first admitted to Matriculation in pursuance of a resolution passed to that effect by the Senate on the 1st of June, 1881. The University Extension Act of 1884 provides that "the benefits and advantages of the University, and the provisions of the Acts relating thereto, shall be deemed to extend in all respects to women equally with men."

Sydney University Calendar.

1898-9.

Sydney University Calendar.

1898.

MARCH XXXI.

1	Tu	
2	W	
3	Th	
4	F	
5	S	
6	**S**	Second Sunday in Lent.
7	M	LENT TERM Begins. Senate Meets. University Examinations
8	Tu	[Begin, viz., MATRICULATION PASS Examination, ENTRANCE
9	W	[Examination for LAW, MEDICINE and SCIENCE, DEFERRED
10	Th	[ANNUAL PASS Examinations, HONOUR Examinations in the
11	F	[Faculty of Arts, and ENGINEERING Examinations. Latest
12	S	[date for receiving Competitive Prize Compositions and applications for Bursaries.
13	**S**	Third Sunday in Lent.
14	M	Examinations for Higher Degrees begin.
15	Tu	
16	W	
17	Th	
18	F	
19	S	
20	**S**	Fourth Sunday in Lent.
21	M	Lectures begin.
22	Tu	
23	W	
24	Th	
25	F	[LATION Examination on April 4th.
26	S	Latest date for receiving entries for the LAW MATRICU-
27	**S**	Fifth Sunday in Lent.
28	M	
29	Tu	
30	W	
31	Th	

Sydney University Calendar.

1898.

APRIL XXX.

1	F	
2	S	
3	**S**	Palm Sunday.
4	M	Senate Meets. LAW MATRICULATION Examination.
5	Tu	
6	W	
7	Th	
8	F	Good Friday.
9	S	
10	**S**	Easter Sunday.
11	M	
12	Tu	
13	W	
14	Th	
15	F	
16	S	
17	**S**	First Sunday after Easter.
18	M	
19	Tu	
20	W	
21	Th	
22	F	
23	S	
24	**S**	Second Sunday after Easter.
25	M	
26	Tu	
27	W	
28	Th	
29	F	
30	S	

Sydney University Calendar.

1898.

MAY XXXI.

1	**S**	Third Sunday after Easter.
2	M	Senate Meets. Last day for receiving applications
3	Tu	[for Local JUNIOR PUBLIC Examinations in June.
4	W	
5	Th	
6	F	
7	S	
8	**S**	Fourth Sunday after Easter.
9	M	
10	Tu	
11	W	
12	Th	
13	F	Last day for receiving entries for the JUNIOR PUBLIC
14	S	[Examinations in June.
15	**S**	Rogation Sunday.
16	M	
17	Tu	
18	W	
19	Th	Ascension Day.
20	F	
21	S	
22	**S**	Sunday after Ascension Day.
23	M	
24	Tu	Queen's Birthday.
25	W	
26	Th	
27	F	
28	S	LENT TERM Ends.
29	**S**	Whit Sunday.
30	M	
31	Tu	

Sydney University Calendar.

1898.

JUNE XXX.

1	W	
2	Th	
3	F	
4	S	
5	**S**	Trinity Sunday.
6	M	Senate Meets. JUNIOR PUBLIC Examinations begin.
7	Tu	
8	W	
9	Th	
10	F	
11	S	
12	**S**	First Sunday after Trinity.
13	M	TRINITY TERM Begins.
14	Tu	
15	W	
16	Th	
17	F	
18	S	
19	**S**	Second Sunday after Trinity.
20	M	Queen's Accession.
21	Tu	
22	W	
23	Th	
24	F	[LATION Examination on July 4th.
25	S	Last day for receiving entries for the LAW MATRICU-
26	**S**	Third Sunday after Trinity.
27	M	
28	Tu	Queen's Coronation.
29	W	
30	Th	

Sydney University Calendar.

1898.

JULY XXXI.

1	F	
2	S	
3	**S**	Fourth Sunday after Trinity.
4	M	Senate Meets. LAW MATRICULATION Examination.
5	Tu	
6	W	
7	Th	
8	F	
9	S	
10	**S**	Fifth Sunday after Trinity.
11	M	
12	Tu	
13	W	
14	Th	
15	F	
16	S	
17	**S**	Sixth Sunday after Trinity.
18	M	
19	Tu	
20	W	
21	Th	
22	F	
23	S	
24	**S**	Seventh Sunday after Trinity.
25	M	
26	Tu	
27	W	
28	Th	
29	F	
30	S	
31	**S**	Eighth Sunday after Trinity.

Sydney University Calendar.

1898.

AUGUST XXXI.

1	M	Senate Meets.
2	Tu	
3	W	
4	Th	
5	F	
6	S	
7	**S**	Ninth Sunday after Trinity.
8	M	
9	Tu	
10	W	
11	Th	
12	F	
13	S	
14	**S**	Tenth Sunday after Trinity.
15	M	
16	Tu	
17	W	
18	Th	
19	F	
20	S	TRINITY TERM Ends.
21	**S**	Eleventh Sunday after Trinity.
22	M	
23	Tu	
24	W	
25	Th	
26	F	
27	S	
28	**S**	Twelfth Sunday after Trinity.
29	M	
30	Tu	
31	W	

Sydney University Calendar.

1898.

SEPTEMBER XXX.

1	Th	
2	F	
3	S	
4	**S**	Thirteenth Sunday after Trinity.
5	M	Senate Meets.
6	Tu	
7	W	
8	Th	
9	F	
10	S	
11	**S**	Fourteenth Sunday after Trinity.
12	M	
13	Tu	
14	W	
15	Th	
16	F	
17	S	
18	**S**	Fifteenth Sunday after Trinity.
19	M	
20	Tu	
21	W	
22	Th	
23	F	
24	S	
25	**S**	Sixteenth Sunday after Trinity.
26	M	MICHAELMAS TERM begins.
27	Tu	
28	W	
29	Th	
30	F	

Sydney University Calendar.

1898.

OCTOBER XXXI.

1	S	
2	**S**	Seventeenth Sunday after Trinity.
3	M	Senate Meets.
4	Tu	
5	W	Latest date for receiving applications for Local SENIOR
6	Th	and MATRICULATION HONOUR
7	F	Examinations in November.
8	S	
9	**S**	Eighteenth Sunday after Trinity.
10	M	
11	Tu	
12	W	
13	Th	
14	F	
15	S	
16	**S**	Nineteenth Sunday after Trinity.
17	M	
18	Tu	
19	W	
20	Th	
21	F	Examinations on November 14th.
22	S	nation, and MATRICULATION HONOUR and SCHOLARSHIP Latest date for receiving entries for the SENIOR PUBLIC Exami-
23	**S**	Twentieth Sunday after Trinity.
24	M	
25	Tu	
26	W	
27	Th	
28	F	MATRICULATION Examination on November 7th.
29	S	Examinations in December; also for the LAW Latest date for receiving entries for the ANNUAL UNIVERSITY
30	**S**	Twenty-first Sunday after Trinity.
31	M	

Sydney University Calendar.

1898.

NOVEMBER XXX.

1	Tu	
2	W	
3	Th	
4	F	
5	S	
6	**S**	Twenty-second Sunday after Trinity.
7	M	Senate Meets. LAW MATRICULATION Examination.
8	Tu	
9	W	
10	Th	
11	F	
12	S	
13	**S**	Twenty-third Sunday after Trinity.
14	M	SENIOR PUBLIC Examination and MATRICULATION
15	Tu	[HONOUR and SCHOLARSHIP Examinations begin.
16	W	
17	Th	
18	F	
19	S	
20	**S**	Twenty-fourth Sunday after Trinity.
21	M	
22	Tu	
23	W	
24	Th	
25	F	
26	S	
27	**S**	First Sunday in Advent.
28	M	
29	Tu	
30	W	

Sydney University Calendar.

1898.

DECEMBER XXXI.

1	Th	
2	F	
3	S	Lectures cease.
4	**S**	Second Sunday in Advent.
5	M	Senate Meets. ANNUAL Examinations begin.
6	Tu	
7	W	
8	Th	
9	F	
10	S	
11	**S**	Third Sunday in Advent.
12	M	
13	Tu	
14	W	
15	Th	
16	F	
17	S	MICHAELMAS TERM ends.
18	**S**	Fourth Sunday in Advent.
19	M	
20	Tu	
21	W	
22	Th	
23	F	
24	S	
25	**S**	Christmas Day.
26	M	
27	Tu	
28	W	
29	Th	
30	F	
31	S	

Sydney University Calendar.

1899.

JANUARY XXXI.

1	**S**	Sunday after Christmas.
2	M	
3	Tu	
4	W	
5	Th	
6	F	Epiphany.
7	S	
8	**S**	First Sunday after Epiphany.
9	M	
10	Tu	
11	W	
12	Th	
13	F	
14	S	
15	**S**	Second Sunday after Epiphany.
16	M	
17	Tu	
18	W	
19	Th	
20	F	
21	S	
22	**S**	Third Sunday after Epiphany.
23	M	
24	Tu	
25	W	
26	Th	
27	F	
28	S	
29	**S**	Septuagesima Sunday.
30	M	
31	Tu	

Sydney University Calendar.

1899.

FEBRUARY XXVIII.

1	W	
2	Th	
3	F	
4	S	
5	**S**	Sexagesima Sunday.
6	M	Senate Meets.
7	Tu	
8	W	
9	Th	
10	F	
11	S	
12	**S**	Quinquagesima Sunday.
13	M	
14	Tu	Last day for receiving entries for the University
15	W	Ash Wednesday. [Examinations in March.
16	Th	
17	F	
18	S	
19	**S**	First Sunday in Lent.
20	M	
21	Tu	
22	W	
23	Th	
24	F	
25	S	
26	**S**	Second Sunday in Lent.
27	M	
28	Tu	

1899.

MARCH XXXI.

1	W	
2	Th	
3	F	
4	S	
5	**S**	Third Sunday in Lent.
6	M	Senate Meets. LENT TERM Begins. University Examinations
7	Tu	[Begin, viz., MATRICULATION PASS Examination, ENTRANCE
8	W	[Examination for LAW, MEDICINE and SCIENCE, DEFERRED
9	Th	[ANNUAL PASS Examinations, HONOUR Examinations in the
10	F	[Faculty of Arts, and ENGINEERING Examinations. Latest
11	S	[date for receiving Competitive Prize Compositions and
12	**S**	[applications for Bursaries.
13	M	Fourth Sunday in Lent.
14	Tu	Examinations for Higher Degrees begin.
15	W	
16	Th	
17	F	
18	S	
19	**S**	Fifth Sunday in Lent.
20	M	Lectures begin.
21	Tu	
22	W	
23	Th	
24	F	[LATION Examination on April 4th.
25	S	Latest date for receiving entries for the LAW MATRICU-
26	**S**	Palm Sunday.
27	M	
28	Tu	
29	W	
30	Th	
31	F	Good Friday.

Sydney University Calendar.

1899.

APRIL XXX.

1	S	
2	**S**	Easter Sunday.
3	M	Senate Meets (on nearest convenient day).
4	Tu	LAW MATRICULATION Examination.
5	W	
6	Th	
7	F	
8	S	
9	**S**	First Sunday after Easter.
10	M	
11	Tu	
12	W	
13	Th	
14	F	
15	S	
16	**S**	Second Sunday after Easter.
17	M	
18	Tu	
19	W	
20	Th	
21	F	
22	S	
23	**S**	Third Sunday after Easter.
24	M	
25	Tu	
26	W	
27	Th	
28	F	
29	S	
30	**S**	Fourth Sunday after Easter.

Sydney University Calendar.

1899.

MAY XXXI.

1	M	Senate Meets. Last day for receiving applications for
2	Tu	[Local JUNIOR PUBLIC Examinations on June 5th.
3	W	
4	Th	
5	F	
6	S	
7	**S**	Rogation Sunday.
8	M	
9	Tu	
10	W	
11	Th	Ascension Day.
12	F	Last day for receiving entries for the JUNIOR PUBLIC
13	S	[Examinations on June 5th.
14	**S**	Sunday after Ascension Day.
15	M	
16	Tu	
17	W	
18	Th	
19	F	
20	S	
21	**S**	Whit Sunday.
22	M	
23	Tu	
24	W	Queen's Birthday.
25	Th	
26	F	
27	S	LENT TERM Ends.
28	**S**	Trinity Sunday.
29	M	
30	Tu	
31	W	

1899.

JUNE XXX.

1	Th	
2	F	
3	S	
4	**S**	First Sunday after Trinity.
5	M	Senate Meets. JUNIOR PUBLIC Examinations begin.
6	Tu	
7	W	
8	Th	
9	F	
10	S	
11	**S**	Second Sunday after Trinity.
12	M	TRINITY TERM begins.
13	Tu	
14	W	
15	Th	
16	F	
17	S	
18	**S**	Third Sunday after Trinity.
19	M	
20	Tu	Queen's Accession.
21	W	
22	Th	
23	F	[MATRICULATION Examination on July 3rd.
24	S	Last day for receiving applications for the LAW
25	**S**	Fourth Sunday after Trinity.
26	M	
27	Tu	
28	W	
29	Th	
30	F	

Sydney University Calendar.

1899.

JULY XXXI.

1	S	
2	**S**	Fifth Sunday after Trinity.
3	M	Senate Meets. LAW MATRICULATION Examination.
4	Tu	
5	W	
6	Th	
7	F	
8	S	
9	**S**	Sixth Sunday after Trinity.
10	M	
11	Tu	
12	W	
13	Th	
14	F	
15	S	
16	**S**	Seventh Sunday after Trinity.
17	M	
18	Tu	
19	W	
20	Th	
21	F	
22	S	
23	**S**	Eighth Sunday after Trinity.
24	M	
25	Tu	
26	W	
27	Th	
28	F	Queen's Coronation.
29	S	
30	**S**	Ninth Sunday after Trinity.
31	M	

Sydney University Calendar.

1899.

AUGUST XXXI.

1	Tu	
2	W	
3	Th	
4	F	
5	S	
6	**S**	Tenth Sunday after Trinity.
7	M	Senate Meets.
8	Tu	
9	W	
10	Th	
11	F	
12	S	
13	**S**	Eleventh Sunday after Trinity.
14	M	
15	Tu	
16	W	
17	Th	
18	F	
19	S	TRINITY TERM Ends.
20	**S**	Twelfth Sunday after Trinity.
21	M	
22	Tu	
23	W	
24	Th	
25	F	
26	S	
27	**S**	Thirteenth Sunday after Trinity.
28	M	
29	Tu	
30	W	
31	T	

Sydney University Calendar.

1899.

SEPTEMBER XXX.

1	F	
2	S	
3	**S**	Fourteenth Sunday after Trinity.
4	M	Senate Meets.
5	Tu	
6	W	
7	Th	
8	F	
9	S	
10	**S**	Fifteenth Sunday after Trinity.
11	M	
12	Tu	
13	W	
14	Th	
15	F	
16	S	
17	**S**	Sixteenth Sunday after Trinity.
18	M	
19	Tu	
20	W	
21	Th	
22	F	
23	S	
24	**S**	Seventeenth Sunday after Trinity.
25	M	MICHAELMAS TERM begins.
26	Tu	
27	W	
28	Th	
29	F	
30	S	

Sydney University Calendar.

1899.

OCTOBER XXXI.

1	**S**	Eighteenth Sunday after Trinity.
2	M	Senate Meets.
3	Tu	
4	W	Latest date for receiving applications for Local SENIOR
5	Th	[and MATRICULATION HONOUR and SCHOLAR-
6	F	[SHIP Examinations on November 13th.
7	S	
8	**S**	Nineteenth Sunday after Trinity.
9	M	
10	Tu	
11	W	
12	Th	
13	F	
14	S	
15	**S**	Twentieth Sunday after Trinity.
16	M	
17	Tu	
18	W	
19	Th	[Examinations on November 13th.
20	F	[nation, and MATRICULATION HONOUR and SCHOLARSHIP
21	S	Latest date for receiving entries for the SENIOR PUBLIC Exami-
22	**S**	Twenty-first Sunday after Trinity.
23	M	
24	Tu	
25	W	
26	Th	[MATRICULATION Examination on November 6th.
27	F	[Examinations in December; also for the LAW
28	S	Latest date for receiving entries for the ANNUAL UNIVERSITY
29	**S**	Twenty-second Sunday after Trinity.
30	M	
31	T	

NOVEMBER XXX.

1	W	
2	Th	
3	F	
4	S	
5	**S**	Twenty-third Sunday after Trinity.
6	M	Senate Meets. LAW MATRICULATION Examination.
7	Tu	
8	W	
9	Th	
10	F	
11	S	
12	**S**	Twenty-fourth Sunday after Trinity.
13	M	SENIOR PUBLIC Examination and MATRICULATION
14	Tu	[HONOUR and SCHOLARSHIP Examinations begin.
15	W	
16	Th	
17	F	
18	S	
19	**S**	Twenty-fifth Sunday after Trinity.
20	M	
21	Tu	
22	W	
23	Th	
24	F	
25	S	
26	**S**	Twenty-sixth Sunday after Trinity.
27	M	
28	Tu	
29	W	
30	Th	

Sydney University Calendar.

1899.

DECEMBER XXXI.

1	F	
2	S	Lectures cease.
3	**S**	First Sunday in Advent.
4	M	Senate Meets. ANNUAL Examinations begin.
5	Tu	
6	W	
7	Th	
8	F	
9	S	
10	**S**	Second Sunday in Advent.
11	M	
12	Tu	
13	W	
14	Th	
15	F	
16	S	MICHAELMAS TERM ends.
17	**S**	Third Sunday in Advent.
18	M	
19	Tu	
20	W	
21	Th	
22	F	
23	S	
24	**S**	Fourth Sunday in Advent.
25	M	Christmas Day.
26	Tu	
27	W	
28	Th	
29	F	
30	S	
31	**S**	First Sunday after Christmas

THE ROYAL CHARTER OF THE UNIVERSITY, THE VARIOUS ACTS OF THE LEGISLATURE OF NEW SOUTH WALES RELATING TO THE UNIVERSITY AND COLLEGES, AND THE DEEDS OF GRANT UNDER WHICH THE UNIVERSITY HOLDS THE LANDS VESTED IN IT, WILL BE FOUND IN THE UNIVERSITY CALENDAR FOR 1893.

Royal Charter, issued under the Queen's sign manual, February 27th, 1858.

An Act to Incorporate and endow the University of Sydney, 14 Victoria, No. 31. Assented to 1st October, 1850.

An Act to amend an Act intituled "An Act to Incorporate and Endow the University of Sydney," 16 Victoria, No. 28. Assented to 21st December, 1852.

An Act to enable the University of Sydney to purchase the Sydney College, with the land attached thereto, 17 Victoria, No. 18. Assented to 5th September, 1853.

An Act to provide a Fund for Building the University of Sydney, 17 Victoria, No. 28. Assented to 24th October, 1853.

An Act to confer certain privileges on Graduates of the University of Sydney, 20 Victoria, No. 14. Assented to 3rd February, 1857.

An Act to amend the Sydney University Incorporation Act, 24 Victoria, No. 13. Assented to 26th April, 1861.

An Act to empower the Senate of the University of Sydney to confer Degrees in certain cases without Examination, and to give to Bachelors of Arts the right of voting in certain cases, 44 Victoria, No. 22. Assented to 23rd March, 1881.

An Act to enable the University of Sydney to grant Additional Degrees and Certificates in the nature of Degrees, and for other purposes, 47 Victoria. Assented to 16th May, 1884.

An Act to provide for the Establishment and Endowment of Colleges within the University of Sydney, 18 Victoria, No. 37. Assented to 2nd December, 1854.

An Act to Incorporate St. Paul's College as a College within the University of Sydney, 18 Victoria. Assented to 1st December, 1854.

An Act to enlarge the Council of St. Paul's College, 21 Victoria, Assented to 15th December, 1857.

An Act to Incorporate St. John's College as a College within the University of Sydney, 21 Victoria. Assented to 15th December, 1857.

An Act to Incorporate St. Andrew's College as a College within the University of Sydney, 31 Victoria. Assented to 12th December, 1867.

An Act to Establish and Endow a College for Women within the University of Sydney, 53 Victoria, No. 10. Assented to 21st September, 1889.

An Act to Incorporate the Prince Alfred Hospital, 30 Victoria. Assented to 3rd April, 1873.

An Act to authorise the resumption by the Crown and dedication as a site for the Prince Alfred Memorial Hospital of a portion of the land granted to the University of Sydney. 36 Victoria, No. 28. Assented to 25th April, 1873.

Three deeds of grant under which the University holds the land granted to it by the Crown. Register of grants, 23rd January, 1855, 10th July, 1866, and 26th July, 1897.

BY-LAWS OF THE UNIVERSITY.

All By-laws heretofore passed by the Senate and now in force are hereby repealed, and in lieu thereof the following By-laws shall be and are hereby declared to be the By-laws under which the University of Sydney shall henceforth be governed. Provided always, that nothing herein contained shall be deemed to revive any By-law previously repealed, or to prejudice any matter already done or commenced under any By-law hitherto in force.

CHAPTER I.—THE CHANCELLOR AND VICE-CHANCELLOR.

1.—The election to the office of Chancellor shall take place at a duly convened meeting of the Senate to be held in Lent Term. 5-7-87

2.—The Chancellor shall be elected for a period of three years (except as hereinafter provided) to be computed from the date of election, but shall be eligible for re-election. 5-7-87

3.—In the event of the office of Chancellor becoming vacant by death, resignation, or otherwise, before the expiration of the full term of office herein prescribed, the election of a successor shall be proceeded with at the next ensuing regular meeting of the Senate, and the Chancellor so appointed shall hold office until the Lent Term next after the expiration of three years from the date of such election. 5-7-87

4.—The election of Vice-Chancellor shall take place annually at a duly convened meeting of the Senate, to be held in Lent Term, except as in cases otherwise provided by the Act of Incorporation. 5-7-87

5.—The Chancellor and Vice-Chancellor shall be members *ex-officio* of every Faculty, Board, or Committee appointed by any By-law or otherwise by the Senate; and at every meeting of any such Faculty, Board, or Committee the Chancellor, or in his absence the Vice-Chancellor, or in the absence of both, the Chairman shall preside, or in his absence a member elected for that sitting. The President at such meetings shall have a vote, and in case of an equality of votes, a second or casting vote. 6-5-90

NOTE.—The dates in the margin are the dates of the approval of the various by-laws by His Excellency the Governor in Council.

CHAPTER II.—SENATE.

MEETINGS AND RULES OF PROCEDURE.

7-11-93 1.—The Senate shall meet on the first Monday in every month, or on the nearest convenient day should such first Monday be a public holiday, and may adjourn from time to time to conclude any unfinished business.

5-7-87 2.—At any time in the interval between such meetings it shall be competent for the Chancellor, or in his absence the Vice-Chancellor, in any case of emergency, to call a special meeting of the Senate, to be held as soon as conveniently may be, for the consideration of any business which he may wish to submit to them.

5-7-87 3.—Upon the written requisition of any three members the Chancellor, or in his absence the Vice-Chancellor, or in the absence of both the Registrar, shall convene a special meeting of the Senate, to be held as soon as conveniently may be after the expiration of seven days from the receipt of such requisition.

5-7-87 4.—Except in any case of emergency as aforesaid, no motion initiating a subject for discussion shall be made but in pursuance of notice given at the previous meeting, and every such notice shall be entered in a book to be kept by the Registrar for that purpose.

5-7-87 5.—The Registrar shall issue to each member of the Senate a summons with a written specification of the various matters to be considered at the next meeting of the Senate, whether such meeting be an ordinary or special one; and such summons, except in any case of emergency as aforesaid, shall be issued at least three days previous to such meeting.

5-7-87 6.—In the event of a quorum of the Senate not being present at any meeting within half an hour after the hour appointed, the members then present may appoint any convenient future day, of which at least three days' notice shall be given by the Registrar in the usual manner.

5-7-87 7.—All the proceedings of the Senate shall be entered in a journal, and at the opening of each meeting the minutes of the preceding meeting shall be read and confirmed, and the signature of the chairman then presiding shall be attached thereto.

18-7-93 8.—If any Fellow shall, without leave from the Senate, be absent from the aforesaid meetings for six consecutive calendar months, his fellowship shall, *ipso facto*, become vacant: provided that, in computing the said six consecutive months, the month of January shall not be taken into account.

ELECTION TO VACANCIES.

9.—At the first meeting of the Senate after the occurrence 5-7-87
of a vacancy among the Fellows, a day shall be fixed for a Convocation for the election of a successor, such day to be within sixty days from the date of such Senate meeting, and to be announced at least thirty days before such Convocation, by notice posted at the University and by advertisement in one or more of the daily newspapers. Due notice shall also be given of the day on which a ballot shall be taken, should such be required. Provided that no Convocation shall be held in the month of January.

10.—No person shall be eligible for election to fill any vacancy 5-7-87
among the Fellows unless his candidature shall have been communicated to the Registrar under the hands of two qualified* voters ten clear days at least before the intended Convocation, and seven clear days at least after the fixing of the day for such Convocation; and it shall be the duty of that officer to cause the name of such person and the fact of his candidature to be forthwith advertised in one or more of the daily newspapers published in Sydney, and to be posted in a conspicuous place in the University for eight clear days at least before such Convocation.

11.—The Convocation for the election of a Fellow shall be 5-7-87
held in the University,† and shall be presided over in the same manner as if it were a meeting of the Senate. Every candidate submitted for election must be proposed and seconded by legally qualified voters. If one Candidate only or one only for each vacancy be so proposed and seconded, then such candidate or candidates shall be declared by the President to be duly elected. But if more candidates are proposed and seconded than there are vacancies in the Senate to be filled at such Convocation, a show of hands shall be taken; and unless a ballot be demanded by at least two members of Convocation then present, the President shall declare the candidate or candidates in whose favour there shall be the greatest show of hands to be duly elected. Should a ballot be demanded it shall be conducted in the following manner:

(*a*) The voters then present shall choose two or more members of Convocation to act as scrutineers.

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* The legally qualified voters are Fellows of the Senate for the time being, Professors, Public Teachers and Examiners in the Schools of the University, Principals of Incorporated Colleges within the University, Superior Officers of the University declared to be such by By-law, Graduates holding the Degree of Master or Doctor, and Graduates of three years' standing, who hold the Degree of Bachelor, in accordance with the provisions of the University Extension Act of 1884.

† By a resolution of the Senate, of date July 2, 1888, *ballots* for the election of Fellows may be held at the Royal Society's Rooms, or in some other central place within the city of Sydney, to be named by the Senate, or by the Chancellor, or by the Vice-Chancellor in this absence.

(*b*) The ballot shall not be held earlier than one week from the day of nomination at Convocation, and shall be notified by notice posted in the University and by advertisement in one or more of the daily newspapers.

(*c*) The ballot shall commence at 10 a.m., and close at 2 p.m., on the day appointed.

(*d*) At the expiration of the time allotted for the ballot the scrutineers shall proceed to the examination of the voting papers, and shall report the result to the President, who shall then declare the candidate or candidates having the majority of votes to be duly elected to the vacant seat or seats in the Senate.

(*e*) In the event of an equality of votes, the election shall be decided by the casting vote of the President.

5-7-87 12.—Before the time fixed for the Convocation for the election of a Fellow, the Registrar shall prepare for the President's use a complete list of all persons entitled to vote under the provisions of the law, and a copy of such list shall be posted in a conspicuous place in the University for two days at least before the time of Convocation.

5-7-87 13.—None but legally qualified voters shall be allowed to be present during the taking of a ballot.

X-OFFICIO MEMBERS.

(24 Victoria, No. 13.)

22-9-96 14. The Senate hereby makes and declares the following selections of branches of learning, the Professors in which shall be *ex-officio* members of the Senate—that is to say, Greek, Law, Physiology and Chemistry, such selections to take effect from the date of the Governor's assent hereto, and to endure for the term of two years from that date, unless sooner revoked by the authority of the Senate, and with the approval of the Governor.

CHAPTER III.—MEETINGS OF CONVOCATION OTHER THAN FOR THE ELECTION OF FELLOWS.

25-11-87 1.—The Chancellor, or in his absence, the Vice-Chancellor, shall in pursuance of a resolution of the Senate, or upon the receipt of a requisition signed by at least twenty members of

Convocation, summon a meeting of Convocation to be holden at such time and place as he shall direct. And such meeting shall be held accordingly within twenty-eight days from the date of the requisition. And notice of such meeting shall be given by public advertisement not less than fourteen days before the day appointed for the meeting. Provided that every such requisition shall specify the subjects which it is proposed to bring before Convocation. And if in the opinion of the summoning officer the subjects so specified, or any of them, are such as ought not to be discussed in Convocation, he shall refer the matter to the Senate, which shall decide whether the meeting shall be held or not. Provided that no such meeting shall be held in the month of January.

2.—At all meetings so summoned the Chancellor, or in his absence the Vice-Chancellor, shall preside. In the absence of the Chancellor and Vice-Chancellor, the members of Convocation present shall elect one of their number to be President of that meeting. 25-11-87

3.—The presence at any meeting of twenty-five members of Convocation shall be necessary to form a quorum. And if within half an hour from the time of meeting there shall be no quorum present, the meeting shall lapse. 25-11-87

4.—At all meetings of Convocation the Registrar shall act as Secretary, and keep the minutes of all proceedings. 25-11-87

5.—Every meeting may be adjourned by the President to such day and hour as may be fixed by resolution. 25-11-87

6.—All questions submitted to the Convocation shall be decided by a majority of members present. The President shall have a deliberative as well as a casting vote. 25-11-87

7.—All resolutions of Convocation shall be signed by the President, and shall be laid by the Registrar before the Senate at its next meeting. 25-11-87

8.—All members of Convocation attending any such meeting shall appear in the habit of their Degree. 25-11-87

Chapter IV.—SUPERIOR OFFICERS.

(24 Victoria, No. 13.)

1.—The Registrar and the Solicitor to the University are hereby declared to be Superior Officers of the University, entitled to the rights and privileges conferred by the "Sydney University Incorporation Act Amendment Act of 1861." 5-7-87

CHAPTER V.—THE REGISTRAR.

5-7-87 1.—The Registrar shall keep all necessary records of the proceedings of the University, conduct all necessary correspondence, and keep such registers and books of account as may be required.

5-7-87 2.—All fees, fines, or other sums received by the Registrar in his capacity as such shall be paid into the Bank of the University, in order that the same may be applied, accounted for and audited in such manner as the Senate may from time to time appoint.

CHAPTER VI.—THE SEAL OF THE UNIVERSITY.

5-7-87 1.—The Seal of the University shall be placed in the charge of the Chancellor or Vice-Chancellor and Registrar, and shall not be affixed to any document except by order of the Senate.

CHAPTER VII.—THE FACULTIES.

5-7-87 1.—There shall be four Faculties in the University, viz.:—

1. Arts. 2. Law. 3. Medicine. 4. Science.

DEANS OF FACULTIES.

9-2-92 2.—A Dean for each of the Faculties in the University shall be appointed by the Senate from time to time for a term not exceeding two years.

6-9-92 3.—In the event of the office of Dean becoming vacant by death, resignation or otherwise, before the expiration of the full term of office herein prescribed, the appointment of a successor shall be proceeded with at the next ensuing regular meeting of the Senate; and the Dean so appointed shall hold office until the first regular meeting of the Senate in the Term next after the expiration of two years from the date of such appointment.

CHAPTER VIII.—LIMITATION OF THE TITLE OF PROFESSOR.

5-7-87 1.—The title of Professor shall be distinctive of those Public Teachers of the University upon whom the Senate shall have conferred that title, and no person in or belonging to the University, or any College within it, shall be recognised as Professor without the express authority of the Senate.

CHAPTER IX.—PROFESSORIAL BOARD.

27-9-92 1.—The Professors in the four Faculties, with the Chancellor and Vice-Chancellor, shall form a Board to be called "The Professorial Board."

2.—Subject to the By-laws of the University, the Professorial Board shall manage and superintend the discipline of all students in the University, and shall have power to determine all matters concerning the studies and examinations which affect the students of more than one Faculty. 27-9-92

3.—For these purposes the Professorial Board shall make such rules as it may think fit, provided that these rules be not repugnant to any existing By-law; and shall have power to impose any penalties, in accordance with Academic usage, on any student for breach of such rule, or misconduct of any kind. All Public Teachers in the University shall be authorised to inflict a fine for breach of discipline, not exceeding two pounds, provided that every Public Teacher who inflicts any such fine shall immediately report the circumstances in writing to the Professorial Board. 10-7-94

4.—Any member of the University affected by any decision of the Board, or any member of the Board, may appeal therefrom to the Senate, and thereupon the Senate may review such decision, and either confirm, vary, or annul the same. 27-9-92

5.—It shall also be the duty of the Professorial Board from time to time to consider the By-laws which deal with the discipline of the University, and the By-laws which deal with the studies of students of more than one Faculty; and when the Board is of opinion that any such By-laws require amendment, it shall send up recommendations to the Senate to that effect. 27-9-92

6.—A precis of the proceedings of the Board shall be laid upon the table of the Senate once in each Term, or forthwith in matters of special importance, and the Senate shall have power of its own motion to review any decision of the said Board. 27-9-92

CHAIRMANSHIP OF BOARDS.

7.—The Chairman of the Professorial Board shall be elected at its first meeting in each year, such election to be by ballot if required by any member. The Chairman of every other Board shall be the Dean of the Faculty with which it is connected. 18-7-93

CONVENING AND QUORUM OF BOARDS.

8.—Every meeting of any Board or Faculty shall be convened by written notice from the Registrar, by direction of and on a day named by the Chancellor, Vice-Chancellor, or Chairman, and on the requisition of any two members, addressed to the 18-7-93

Registrar, a meeting shall be convened in like manner. At any meeting of the Professorial Board five shall form a quorum, and at any other meeting three shall form a quorum, unless otherwise provided. In case of an equality of votes, that of the presiding Chairman included, such Chairman shall have a casting vote.

REGISTRAR TO ATTEND.

5-7-87 9.—It shall be the duty of the Registrar, if required, to attend the meetings of the several Boards and record their proceedings, to collect all fines imposed by the Professorial Board, and generally to assist in carrying out the directions and rules of every Board.

CHAPTER X.—MATRICULATION.

7-10-94 1.—Candidates for any of the Degrees granted by the University shall be required to Matriculate before entering upon the prescribed course.

7-10-94 2.—Candidates before being admitted to Matriculation shall have passed one of the Examinations required by the By-laws for admission to the prescribed courses in the different Faculties, or shall have been admitted *ad eundem statum*.

27-9-92 3.—Undergraduates of other Universities may, at the discretion of the Professorial Board, be admitted *ad eundem statum* in this University without examination. Provided always that they shall give sufficient evidence of their alleged *status* and of good conduct.

5-7-87 4.—Any person desirous of attending University lectures may do so without Matriculation, upon payment of such fees as the Senate may from time to time direct.

CHAPTER XI—TERMS.

5-7-87 1.—The Academic year shall contain three terms, that is to say:—

LENT TERM—Commencing on the tenth Monday in the year and terminating with the Saturday before the twenty-second Monday in the year, with a recess at Easter not exceeding nine days.

TRINITY TERM—Commencing on the twenty-fourth Monday in the year and terminating with the Saturday before the thirty-fourth Monday in the year.

MICHAELMAS TERM—Commencing on the thirty-ninth Monday in the year and terminating with the Saturday before the fifty-first Monday in the year.

CHAPTER XII.—LECTURES.

1. Lectures shall commence on the first day of Term, except in Lent Term, in which they shall commence on the third Monday of Term. In Michaelmas Term the lectures shall cease on the Saturday before the forty-ninth Monday in the year. 5-7-87

2.—Lectures of an hour each shall be given by the Professors and other teachers at such times and in such order as the Senate may from time to time direct. 5-7-87

3.—Before the admission of a student to any course of lectures, he shall pay to the Registrar of the University the fee appointed by the Senate. 5-7-87

4.—Full and complete tables of lectures and subjects of examinations shall be printed annually in the Calendar, and posted at the University from time to time. 5-7-87

5.—Each Professor and Lecturer shall keep a daily record or class roll of the lectures delivered by him, showing the number and names of the students present at each lecture. These class rolls shall be laid on the table at the end of each Term. 18-7-93

6.—Any undergraduate not holding a scholarship in the University, nor being a member of a college established under the provisions of the Act 18 Victoria, No. 37, may be exempted from attendance upon any or all of the prescribed lectures, upon producing evidence which shall satisfy the Faculty to which he belongs that there are sufficient reasons for such exemption. Provided that no such exemption shall be granted for more than one year at any time. 27-9-92

7.—No such exemption shall be granted until the Examiners shall have specially certified to the Faculty that the abilities and attainments of the applicant are such as to enable him, in their opinion, to keep up with the usual course of study at the University without attendance upon lectures. Undergraduates admitted *ad eundem statum*, and who are not required to pass the Matriculation Examination, shall nevertheless be required to pass a special examination, to be certified by the Examiners as above, before obtaining exemption from attendance upon lectures. 27-9-92

1-10-88 8.—Notwithstanding the provisions of By-laws 6 and 7, matriculated students, who are students in a Training Institution for teachers organised under the Department of Public Instruction, may be admitted to the First Year Examination in the Faculty of Arts, without having attended the University lectures, upon presenting a certificate from the Under Secretary for Public Instruction to the effect that they have attended the course of instruction in such Training Institution for one year after matriculating. Students of a Training Institution who have passed the First Year Examination may be admitted to the Second Year Examination in the Faculty of Arts without having attended the University lectures of the second year, upon presenting a similar certificate to the effect that they have attended a second course of instruction in such Training Institution for one year after passing their First Year Examination. All such students having passed the Second Year Examination shall have the status of students commencing the Third Year in the Faculty of Arts.

Chapter XIII.—YEARLY EXAMINATIONS.

5-7-87 1. In the Faculties of Arts, Law and Science, the yearly B.A. and B.Sc. Examinations shall be held during the last week of Michaelmas Term, with the exception of the Honour Examinations and Professional Engineering Examinations, which may be held at the beginning of Lent Term.

9-10-94 2.—No undergraduate not exempted under Section 6, Chap. XII., from attendance upon lectures shall be admitted to these examinations who without sufficient cause shall have absented himself more than three times during any one term from any prescribed course of lectures. At every Yearly Examination students must pass the prescribed Examinations in the subjects of lectures before they can proceed with their course.

11-9-93 3.—Students who fail to pass, or neglect to attend their annual examinations in any subject or subjects, may be required by their respective Faculties, upon the report of the Examiners, to attend again the lectures on such subject or subjects before again presenting themselves for examination.

10-7-94 4.—Every undergraduate exempted from attendance upon lectures under Section 6, Chap. XII., shall, before being admitted to any yearly examination, pay to the Registrar a fee of two pounds.

18-7-93 5.—Undergraduates who have passed the Yearly Examinations may, at the discretion of the Dean, and upon application

receive certificates to that effect, signed by the Dean of the Faculty in which they are pursuing their studies and by the Registrar.

6.—At each examination honour papers shall be set where necessary, and a list of the honour subjects shall be annually published in the calendar. 5-7-87

7.—The names of those candidates who obtain honours shall be arranged in order of merit. 5-7-87

8.—Examiners shall be appointed from time to time by the Senate to conduct the examinations provided for under these By-laws. 5-7-87

CHAPTER XIV.—SCHOLARSHIPS.

1.—Scholarships shall be awarded after examination as the Senate may from time to time appoint. 5-7-87

2.—No Scholarship shall be awarded except to such candidates as exhibit a degree of proficiency which shall be satisfactory to the examiners. Scholars shall be required to proceed with their studies in the respective Faculties in which their Scholarships are awarded. 18-7-93

3.—The examination for Scholarships shall be concurrent with the Matriculation and Yearly Examinations, additional papers and questions being set when required. 5-7-87

CHAPTER XV.—FACULTY OF ARTS.

1.—The Faculty of Arts shall consist of the Professors of Classics, Mathematics, Modern Literature, History, and Logic and Mental Philosophy, together with the Lecturers in the same subjects. 6-5-90

2.—The Faculty shall meet for the purpose of considering and reporting to the Senate upon such subjects as have relation to the studies, lectures, examinations, and degrees in Arts, and such questions as may be referred to it by the Senate, and shall have the general direction and superintendence over the teaching in Arts, subject to the By-laws, and to such resolutions as the Senate may think fit to pass in relation thereto. 27-9-92

3.—The Professors in the Faculty of Arts, together with such other persons as may from time to time be appointed by the Senate, shall form a Board of Examiners for conducting the Examinations in the Faculty of Arts; and of this Board the Dean of the Faculty, or in his absence the Professor next in seniority, shall be Chairman. 5-7-87

5-7-87 4.—The Board of Examiners shall from time to time, and in accordance with the provisions of the By-laws for the time being, frame rules and appoint times and places for the several Examinations in the Faculty of Arts.

5-7-87 5.—At the conclusion of each Examination the Board shall transmit to the Senate a report of the result, signed by the Chairman and by at least two other members.

EXAMINATION FOR MATRICULATION IN THE FACULTY OF ARTS.

9-10-94 6. Candidates for the Degree of Bachelor of Arts shall be required at the commencement of their course to pass the Matriculation Examination for the Faculty of Arts.

5-7-87 7.—The Matriculation Examination shall take place at the commencement of Lent Term, but the examiners in special cases, with the sanction of the Chancellor or Vice-Chancellor, are authorised to hold such examinations at such other times as may be deemed expedient.

5-7-87 8.—The examinations shall be conducted by means of written or printed papers, but the examiners shall not be precluded from putting *viva voce* questions.

27-9-92 9.—The names of all candidates who have passed the Matriculation Examination shall be arranged and published in such order as the Board of Examiners shall determine.

12-4-98 10.—Any person who shall have passed one of the qualifying Examinations, and shall have paid a fee of two pounds to the Registrar, may be admitted as a matriculated student.

The qualifying Examinations are:—

(*a*) The Matriculation Examination.

(*b*) The Entrance Examination for the Faculties of Law, Medicine and Science.

(*c*) The Senior Public Examination, provided that the candidate shall have passed at one Examination in the subjects prescribed for the Matriculation Examination.

(*d*) The Junior Public Examination, provided that the candidate shall have passed at one Examination in the subjects prescribed for the Matriculation Examination, and shall have been placed in the first or second class in Latin and one of the three languages—Greek, French, German; or in the first or second class in Arithmetic, Algebra, and Geometry.

11.—The Matriculation Examination shall be in the following subjects:— 22-9-91

I. Latin.—Translation into English of passages from set authors and of passages at sight, and of simple English sentences into Latin.
II. Arithmetic.
III. Algebra.—To quadratic equations involving one unknown quantity.
IV. Geometry.—Euclid, Books I., II. and III.
V. One of the following languages, in which the examination shall be similar to that in Latin, viz.:—
Greek, French, German.

In this examination proficiency in writing English shall be taken into account.

BACHELOR OF ARTS.

12.—Candidates for the Degree of Bachelor of Arts shall, during their First Year, attend the University lectures on the following subjects:— 28-12-87

I. English.
II. Latin.
III. One of the following languages:—
Greek, French, German.
IV. Mathematics.
V. Elementary Physics
VI. Elementary Chemistry. } In successive Terms.
VII. Physiography.

13.—Students of the First Year shall be required to pass an examination in the subjects in which they have attended lectures under By-law 12, provided that in the case of Physics, Chemistry, and Physiography, students who shall have given satisfactory proof to the Lecturer of their intelligent attention to the lectures, shall not be required to pass the Annual Examinations in these subjects. 28-12-87

14.—Candidates for the Degree of Bachelor of Arts shall, during their Second Year, attend the University lectures upon the following subjects:— 6-5-90

I. Two of the following languages:—

Latin,	English,	German.
Greek,	French.	

II. Any two of the following subjects:—

A third language,	Biology,
Mathematics,	Geology,
Chemistry,	History,
Physics,	Physiology,

Logic.

Provided that those students who take up three languages shall select Latin or Greek as one of them.

28-12-87 15.—Students of the second year shall be required to pass an examination in the subjects of the lectures which they have attended under By-law 14.

12-4-98 16.—Candidates for the Degree of B.A. shall, during their Third Year, attend lectures on the following subjects:—

I. One of the following languages:—

Latin,	English,	German,
Greek,	French,	

II. Any two of the following:—

A second language,	Chemistry,
A third language,	Geology,
History,	Biology,
Mathematics,	Physiology,
Physics,	Logic and Mental Philosophy,

Jurisprudence and Roman Law,
Constitutional Law and International Law.

Provided that those students who take Jurisprudence and Roman Law, and Constitutional Law and International Law, may take History, Mathematics, or Logic and Mental Philosophy instead of a language.

28-12-87 17.—To obtain the Degree of B.A. candidates shall pass an examination in the subjects of the lectures which they have attended under By-law 16.

12-4-98 18.—The work of students attending lectures shall be tested by means of written and oral class examinations, class exercises, or essays, and the results of such tests shall be reported to the Senate.

12-4-98 19.—In determining the results of the Annual Examinations, the Examiners shall take into account the results of the tests described in Section 18.

20.—The fee for the Degree of B.A. shall be three pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the examination the fee shall not be returned to him. For any re-examination for the same Degree he shall pay a fee of two pounds. 18-4-94

21.—The examination shall be conducted in the first instance by means of printed papers, and at the termination of such examination each candidate shall undergo a *vivâ voce* examination if the Examiners think fit. 5-7-87

22.—Students proceeding to the Degree of B.A. who have passed the First Year Examination, and who have thereat been placed in the First Class in the Honour list in Classics (Latin and Greek) or in Mathematics, may elect to attend lectures during the Second Year in that subject only in which they have been so placed in the Honour list; and if they obtain First or Second Class Honours in that subject at their Second Year Examination, they shall be held to have passed that examination. 21-4-96

23.—Students proceeding to the degree of B.A. who have passed the Second Year Examination, and who have thereat been placed in the First or Second Class in the Honour list, either in Classics (Latin and Greek) or in Mathematics, may elect to attend lectures during their Third Year in that subject only in which they have been so placed in the Honour list; and if they obtain First or Second Class Honours in that subject at their B.A. Examination, they shall be held to have passed that examination. 21-4-96

24.—The candidate for Honours who shall have most distinguished himself at the B.A. Examination in Classics, Mathematics, or Logic and Mental Philosophy, shall, if he possess sufficient merit, receive a bronze medal. 11-9-93

MASTER OF ARTS.

25.—There shall be a yearly examination for the Degree of M.A. during Lent Term, or at such other times as the examiners, with the sanction of the Chancellor or Vice-Chancellor, may appoint. 5-7-87

26.—Every candidate for this Degree must have previously obtained the Degree of B.A., and two years must have elapsed since the time of his examination for such Degree. He will also be required to furnish evidence of having completed his twenty-first year. 5-7-87

5-7-87 27.—The fee for the Degree of M.A. shall be five pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the examination the fee shall not be returned to him, but he shall be admissible to any subsequent examination for the same Degree without the payment of an additional fee.

11-9-93 28.—Candidates for the Degree of M.A. shall elect to be examined in one or more of the following branches of knowledge:—

I. Classical Philology and History.
II. Mathematics and Natural Philosophy.
III. Logic, Moral, Mental, and Political Philosophy.
IV. Modern Literature and Language.
V. Modern History.

The candidate most distinguished in each branch at the examination shall, if he possess sufficient merit, receive a bronze medal.

5-7-87 29.—The Senate may, at its discretion, admit to examination for the Degree of Master of Arts any person who shall have obtained at least two years previously the Degree of Bachelor of Arts, or equivalent first Degree in Arts in any other University approved by the Senate. Every candidate for admission under this By-law must make application in writing to the Registrar and supply satisfactory evidence of his qualification as aforesaid, and that he is a person of good fame and character; and upon the approval of his application shall pay to the Registrar a fee of two pounds for the entry of his name in the University books, in addition to the prescribed fee for his Degree. Every candidate, before he is admitted to this Degree, shall be required to furnish evidence of having completed his twenty-first year.

Chapter XVI.—FACULTY OF LAW.

26-4-97 1.—The Professor or Professors and Lecturers in the subjects of the curriculum in Law, together with such Fellows of the Senate as are members of the Legal Profession, shall constitute the Faculty of Law.

26-4-97 2.—The Faculty shall meet for the purpose of considering and reporting to the Senate upon such subjects as have relation to the studies, lectures, examinations and Degrees in Law and such questions as may be referred to it by the Senate; and

shall have the general direction and superintendence over the teaching in Law, subject to such resolutions as the Senate may think fit to pass in relation thereto.

3.—The Dean of the Faculty of Law shall act as Chairman at all meetings of the Faculty; but in his absence the members then present shall elect a Chairman from amongst themselves. The Chairman at such meetings shall have a vote, and in case of an equality of votes, a second or casting vote. 26-4-97

4.—There shall be two Degrees granted in the Faculty of Law, viz.:—Bachelor of Laws (LL.B.) and Doctor of Laws (LL.D.) 26-4-97

5.—Candidates for the Degree of Bachelor of Laws (LL.B.) shall, before admission to the Law School, produce evidence either (1) of having graduated in Arts; or (2) of having completed two years in the Faculty of Arts, and passed the Second Year Examination in Arts; or (3) of having passed the Senior Public Examination, or an examination equivalent thereto, in the following subjects:—(*a*) Latin; (*b*) either Greek, French, or German; and (*c*) in three of the following subjects:—Arithmetic, Algebra, Geometry, and Trigonometry. 26-4-97

6.—Thereafter students shall attend the various courses of lectures prescribed in the subjects mentioned in Sections 10 and 11. Such attendance shall (1) in the case of students who have passed the Senior Public Examination, or an examination equivalent thereto, extend over a period of not less than five years; (2) in the case of students who have completed two years in Arts, and passed the Second Year Examination, extend over a period of not less than three years; and (3) in the case of students who have already graduated in Arts, extend over a period of not less than two years. Students must also pass the examinations referred to in Section 8, and comply with such regulations as may be from time to time prescribed by the Faculty of Law and approved by the Senate. 26-4-97

7.—The order in which the various courses of lectures shall be taken shall be such as may be from time to time prescribed by the regulations of the Faculty. Provided that such order may in the case of any individual student be varied with the written consent of the Dean of the Faculty. 26-4-97

8.—There shall be two examinations for the Degree of Bachelor of Laws, called respectively the Intermediate and the Final LL.B. Examination. The Intermediate and Final LL.B. 26-4-97

Examinations shall be held at the same time as the Annual Examinations in other Faculties. Students who have not acquitted themselves satisfactorily in such Class Examinations or exercises (including attendance at Court) as may be prescribed by the Faculty of Law, may be refused admission to these Examinations.

26-4-97 9.—The names of candidates who have passed the Intermediate LL.B. Examination shall be published in order of merit. The names of the candidates who have passed the Final Examination shall be published in three groups, comprising respectively (1) those who have obtained first-class Honours; (2) those who have obtained second-class Honours; and (3) those who have passed. Provided that a candidate who does not pass his Intermediate Examination within two years of his commencing his course in Law shall not be eligible for any Prize or Scholarship awarded for proficiency in that Examination; and provided also that a candidate who does not pass his Final Examination within three years of passing his Intermediate Examination shall not be eligible for any Prize or Scholarship awarded for proficiency in the subjects of that examination.

26-4-97 10.—At the Intermediate Examination candidates shall be examined in—

I. Jurisprudence.
II. Roman Law.
III. Constitutional Law.
IV. International Law.

26-4-97 11.—At the Final Examination candidates shall be examined in—

I. The Law of Property and Principles of Conveyancing.
II. The Law of Status, Civil Obligations and Crimes.
III. Equity, Probate, Bankruptcy and Company Law, and Procedure in those Jurisdictions; and
IV. Procedure in Civil and Criminal Cases before the Supreme Court in its Common Law Jurisdiction and before Courts of Inferior Jurisdiction, together with Evidence and Pleading.

26-4-97 12.—Students shall be exempt from attending lectures and passing examinations in any of the prescribed subjects which may have formed part of their course for the Degree of Bachelor of Arts, but from no others.

13.—The Degree of LL.D. shall not be conferred until after the expiration of two years from the granting of the LL.B. Degree. 26-4-97

14.—Candidates for the Degree of Doctor of Laws shall be examined in the following subjects:— 26-4-97

I. Jurisprudence.

II. Roman Law.

III. English Law, including the Legislation of the Colony of New South Wales.

IV. International Law, and the Conflict of Laws.

There shall be one examination for the Degree of Doctor of Laws called the LL.D. Examination. Such Examination shall take place in the month of March in each year.

15.—The candidates who distinguish themselves most highly at the Degree examinations respectively shall, if of sufficient merit, receive a bronze medal. 26-4-97

16.—The fee for the Degree of Bachelor of Laws shall be £10, and that for the Degree of Doctor of Laws, £20. These fees shall be paid to the Registrar before the examination, and shall not in any case be returned to the candidate. 26-4-97

17.—Candidates who fail to pass the examination for any Degree shall be allowed to present themselves for a second examination for the same degree without additional fee; but for any further examination that may be required they shall pay half the ordinary Degree fee. 26-4-97

18.—Students at Law and Articled Clerks and other persons may be admitted to such lectures and examinations in Law as they may desire; and in the event of their passing in the subjects of any course, they shall be entitled to receive certificates to that effect. 26-4-97

CHAPTER XVII.—FACULTY OF MEDICINE.

1.—The Chancellor and Vice-Chancellor, the Fellows of the Senate who are legally qualified members of the Medical Profession, the Professors and Lecturers in the subjects of the Medical curriculum, and the Examiners in Medicine appointed by the Senate, shall constitute the Faculty of Medicine. 19-3-89

2.—The Dean shall exercise a general superintendence over the administrative business connected with the Faculty, and it shall be the duty of the Registrar to summon meetings of the 19-3-89

Faculty at such times as may be required by the Dean, provided that upon the written requisition of any three members of the Faculty, the Dean, or in his absence the Registrar, shall convene a special meeting. No question shall be decided at any meeting of the Faculty unless there be present at least five members. In the absence of the Chancellor and Vice-Chancellor the Dean shall act as Chairman at all meetings of the Faculty, but in his absence the members then present shall elect a Chairman from amongst themselves. The Chairman at any such meeting shall have a vote, and in case of an equality of votes, a second or casting vote. It shall be the duty of the Registrar to attend all meetings, and to record the proceedings.

19-3-89 3. The Faculty shall meet for the purpose of considering and reporting to the Senate upon such subjects as have relation to the studies, lectures, examinations and degrees in Medicine, and such questions as may be referred to it by the Senate.

19-3-89 4.—Courses of Instruction shall be given as directed by the Senate, and, except where otherwise specified, each shall consist either of a long course of one hundred hours' instruction, extending throughout two Terms, or of a short course of fifty hours' instruction, extending throughout one Term; and, where possible, the long courses shall be given during Lent and Trinity Terms, and the short courses during Michaelmas Term.

26-4-97 5.—Written Class Examinations shall be held during each course of instruction in Lent and Trinity Terms. Students shall not absent themselves from these examinations except upon a medical certificate, and at the end of each course a report of the result, signed by the responsible teacher, shall be presented to the Senate by the Dean. Students who fail to pass the Class Examinations may, at the discretion of the Board of Examiners, be refused admission to the Annual Examination.

19-3-89 6.—There shall be three Degrees granted in the Faculty of Medicine, viz.—Doctor of Medicine (M.D.), Bachelor of Medicine (M.B.), and Master of Surgery (Ch.M.)

18-7-93 7.—Candidates for a Degree in Medicine shall, before admission to the Medical School, produce evidence of having graduated in Arts or in Science, or of having attended the lectures of the First Year of the Arts course and passed the First Year Examination in Arts, or of having passed the Senior Public Examination, or an examination equivalent to the Senior Public Examination, in the following subjects, viz, Latin, and

one of the three languages—Greek, French, German, and in three of the sections in Group III., of the subjects for which senior candidates may enter, viz , Arithmetic, Algebra, Geometry, Trigonometry, Elementary Surveying and Astronomy, Mechanics, Applied Mechanics.

8.—Candidates for the Degrees of Bachelor of Medicine and Master of Surgery shall attend the following courses of instruction, and present the following certificates:— 26-4-97

I. In the First Year—

Inorganic Chemistry and Practical Chemistry.
Physics and Practical Physics.
Biology and Practical Biology.

II. In the Second Year—During Lent and Trinity Terms—

Descriptive Anatomy (Junior Course).
Physiology (Junior Course).

During Trinity and Michaelmas Terms—

Practical Physiology (Histology and Experimental Physiology).

During Michaelmas Term—

Organic Chemistry.
Descriptive Anatomy (Senior Course).

III. In the Third Year—

During Lent Term—

Practical Physiology (Physiological Practical Chemistry).

During Lent and Trinity Terms—

Materia Medica and Therapeutics (seventy-five lectures).
Regional Anatomy.

During Michaelmas Term—

Physiology (Senior Course).

IV. In the Fourth Year—

During Lent and Trinity Terms—

Pathology.
Surgery.
Operative Surgery and Surgical Anatomy—a course of twenty-five hours' instruction.
Clinical Surgery.
Tutorial Surgery.

During Michaelmas Term—
Practical Pathology.
Clinical Surgery.
Tutorial Medicine.

V. In the Fifth Year—

During Lent and Trinity Terms—
Medicine.
Midwifery (fifty lectures).
Gynæcology (twenty-five lectures).
Applied Logic (twenty lectures).
Clinical Medicine (twice weekly).
Tutorial Medicine.

During Trinity and Michaelmas Terms—
Medical Jurisprudence and Public Health.

During Michaelmas Term—
Psychological Medicine, including Clinical Instruction, and at least twelve systematic lectures.
Ophthalmic Medicine and Surgery, including Clinical instruction, and at least twelve systematic lectures.
Clinical Medicine (twice weekly).

Provided that the courses of instruction in Ophthalmic Medicine and Surgery and Psychological Medicine may be taken by the student in either the Fourth or the Fifth Year of study, as may from time to time be provided by the teaching regulations of the University. Provided further that the course of instruction in Applied Logic may be taken by the student in any year of study.

Before admission to the Final Examination, candidates shall also be required to present the following certificates at least ten clear days before the date of the examination :—

(i.) Of Hospital Practice during the Fourth and Fifth Years.

(ii.) Of attendance on a class of Practical Pharmacy approved by the Faculty of Medicine, or a certificate showing that the student has been engaged during at least twenty-five attendances of two hours each, in compounding and dispensing drugs in a laboratory or a dispensary or other place for compounding medicines approved by the Faculty of Medicine.

(iii.) Of having acted during not less than nine months as Clinical Clerk in the Medical Wards, not less than six

months as Dresser in the Surgical Wards, and not less than three months in each of the following capacities in a recognised Hospital, viz.: Clinical Clerk and Dresser in the Gynæcological In-patients' Department, student in attendance upon the Surgical Out-patients' Department, student in attendance upon the Medical Out-patients' Department, student in attendance upon the Gynæcological Out-Patients' Department.

(iv.) Of attendance on Post-mortem Examinations during at least one Term during the Fourth and Fifth Years of the curriculum.

(v.) Of attendance on at least twelve cases of Practical Midwifery.

(vi.) Of proficiency in Vaccination, signed by a legally qualified Medical Practitioner.

(vii.) Of proficiency in the administration of Anæsthetics.

(viii.) Of having attended a course of twenty lectures on Applied Logic, and of having passed a satisfactory Class Examination in the subjects thereof.

9.—For the Degrees of Bachelor of Medicine and Master of Surgery there shall be five examinations, viz., one at the end of each year of study. 26-4-97

The examination at the end of the First Year shall include Inorganic Chemistry, Physics and Biology.

The examination at the end of the Second Year shall include Organic Chemistry and an Intermediate Examination in Anatomy and Physiology.

The examination at the end of the Third Year shall include the entire subjects of Anatomy, Physiology and Materia Medica and Therapeutics.

Before admission to the Third Examination, candidates shall be required to present certificates of having dissected during at least six Terms, and of having completed the dissection of every part of the body at least once.

The examination at the end of the Fourth Year shall include Pathology and Operative Surgery and Surgical Anatomy.

The examination at the end of the Fifth Year shall include Medicine, Clinical Medicine, Surgery, Clinical Surgery, Midwifery, Medical Jurisprudence and Public Health, Psychological Medicine and Ophthalmic Medicine and Surgery.

Provided that the examination in Ophthalmic Medicine and Surgery shall form a part of either the Fourth Year or the Fifth Year Examination, according as the student has attended the course in those subjects in his Fourth or Fifth Year of study.

6-9-92 10.—Before admission to the Final Examination each candidate shall furnish a declaration of having completed his twenty-first year, and also a certificate of good fame and character, signed by two competent persons.

19-3-89 11.—At each examination candidates shall be required to give proof of their knowledge by written answers to the questions set, to be followed by a practical or a *viva voce* examination in all subjects whatsoever.

19-3-89 12.—Candidates who have passed all the examinations to the satisfaction of the examiners shall be recommended to the Senate for admission to the Degree of Bachelor of Medicine, and to the Degree of Master of Surgery if they so elect.

11-9-93 13.—Honours at graduation shall depend upon the proficiency shown in the examinations, in accordance with regulations adopted by the Senate from time to time, and the candidate who shall have been most distinguished shall receive a bronze medal, provided that he shall have obtained first-class Honours.

19-3-89 14.—Accredited certificates of attendance on courses of instruction from other Universities and Schools of Medicine recognised by the University of Sydney may, on the report of the Dean, be accepted by the Senate as proof of the attendance on courses of instruction *pro tanto* required by these By-laws. Provided always that no person shall be recommended to the Senate for admission to the Degrees of Bachelor of Medicine or of Master of Surgery by examination unless he shall present certificates of having attended within the University of Sydney, during each of at least six Terms, not less than two courses of instruction in subjects included in the Medical curriculum of the University. In all such cases a Degree in Arts or in Science, or some certificate of general education satisfactory to the Senate, will be required. Every candidate making application under this By-law must present a certificate of good fame and character, signed by two competent persons.

19-3-89 15.—Bachelors of Medicine and Masters of Surgery of this University shall not possess any right to assume the title of Doctor of Medicine.

16.—The Degree of Doctor of Medicine shall not be conferred until after the expiration of two Academic years from the granting of the Degree of Bachelor of Medicine. 19-3-89

17.—Candidates for the Degree of Doctor of Medicine must produce evidence that, after having obtained the Degree of Bachelor of Medicine, they have spent at least two years in Medical or Surgical practice, or that they have been engaged for a like period and in a manner approved by the Faculty in the scientific study of any subject included in the Medical curriculum of the University of Sydney. 19-3-89

18.—Candidates shall be required to pass an examination conducted by means of set papers and by *vivâ voce* interrogations in *one* division of one of the two following groups, viz.:— 9-10-94

(i.) Medicine, Surgery, Midwifery, and Gynæcology.
The examination in each case shall include examination of, and report on, the cases of patients in a hospital, and examination and demonstration of specimens or preparations, normal or morbid.

(ii.) The other subjects included in the Medical curriculum of the University.

They shall further be required to present, and if called upon to defend, a thesis on some subject included in the Medical curriculum of the University. Five printed copies of the thesis on paper five and a-half inches wide and eight and three quarters of an inch deep must be transmitted to the Registrar at least two months before the date fixed for the examination.

19.—The candidate who shall at this examination most distinguish himself shall, if of sufficient merit, receive a bronze medal. 11-9-93

20.—The Degree of Master of Surgery shall not be conferred on any person who has not already been admitted a Bachelor of Medicine. 19-3-89

21.—The fees for the Degrees of Doctor of Medicine, Bachelor of Medicine, and Master of Surgery, shall be ten pounds respectively. The fees shall be paid to the Registrar before the examination, and shall not in any case be returned to the candidate. 19-3-89

22.—Candidates who fail to pass the Examination for any Degree shall be allowed to present themselves for a second 19-3-89

examination for the same Degree without fee, but for every further examination that may be required they shall pay the sum of five pounds.

6-9-92 23.—Undergraduates in Medicine who have passed the subjects of the Second and Third Medical Examinations, and have, in addition, attended an advanced course of and passed an advanced examination in one of the following divisions, viz.:—(*a*) Chemistry, (*b*) Physics, (*c*) Biology (*d*) Geology, may, on the report of the Dean of the Faculty of Science, be admitted by the Senate to the Degree of Bachelor of Science.

Chapter XVIII.—FACULTY OF SCIENCE.

8-10-89 1.—The Faculty of Science shall consist of the Professors of Biology, Chemistry, Engineering, Geology, Mathematics, Physics and Physiology, and other Professors and independent Lecturers in the subjects required for the Degrees in Science.

8-10-89 2.—The Dean shall exercise a general superintendence over the administrative business connected with the Faculty, and it shall be the duty of the Registrar to summon meetings of the Faculty at such times as may be required by the Dean, provided that upon the written requisition of any three members of the Faculty, the Dean, or, in his absence, the Registrar shall convene a special meeting. No question shall be decided at any meeting of the Faculty unless there be present at least five members. The Dean shall act as Chairman at all meetings of the Faculty, but in his absence the members then present shall elect a Chairman from amongst themselves. The Chairman at any such meeting shall have a vote, and in case of an equality of votes, a second or casting vote. It shall be the duty of the Registrar to attend all meetings and to record the proceedings.

8-10-89 3.—The Faculty shall meet for the purpose of considering and reporting to the Senate upon such subjects as have relation to the studies, lectures, examinations and degrees in Science, and such questions as may be referred to it by the Senate.

8-10-89 4.—There shall be four Degrees in Science, viz., Bachelor of Science (B.Sc.), Doctor of Science (D.Sc.), Bachelor of Engineering (B.E.), and Master of Engineering (M.E.)

26-4-97 5.—Candidates for the Degree of Bachelor of Science shall, before admission to the Curriculum of Science, produce evidence of having graduated in Arts; or of having attended the lectures of the First Year of the Arts course, and passed the First Year

Examination in Arts; or of having passed the Senior Public Examination in the following subjects, viz., Latin, one of the three languages—Greek, French, or German, and three of the following subjects, viz., Arithmetic, Algebra, Geometry, Trigonometry, Elementary Surveying and Astronomy, Mechanics, Applied Mechanics; or of having passed an examination equivalent to the Senior Public Examination in the following subjects, viz., Latin, one of three languages—Greek, French, or German, and in three of the four subjects—Arithmetic, Algebra, Geometry, Trigonometry; and shall, during the First Year, attend the courses of instruction upon, and pass the examinations in, the following subjects, viz.:—

I. Biology and Practical Biology.

II. Chemistry and Practical Chemistry.

III. Mathematics.

IV. Physics and Practical Physics.

V. Physiography.

Provided that students shall only be required to attend the lectures upon, and to pass the annual examination in, such portions of the Mathematical course for the First Year as they have not already passed at the above-mentioned examinations.

6.—Candidates for the degree of Bachelor of Science shall, in the Second Year, attend the courses of instruction upon, and pass the examinations in, three of the following subjects, viz:— 8-10-89

I. Botany and Zoology.

II. Chemistry (with two terms laboratory practice).

III. Geology.

IV. Mathematics.

V. Physics (with two terms laboratory practice).

VI. Physiology (with two terms laboratory practice).

7.—Candidates for the Degree of Bachelor of Science shall, in the Third Year, attend the courses of instruction upon, and pass the examinations in, two of the following subjects:— 12-4-98

I. Biology. II. Chemistry. III. Geology.
IV. Mathematics. V. Physics. VI. Physiology.

Students proceeding to the Degree of Bachelor of Science who have passed the Second Year examination, and who have

thereat been placed in the First Class in Honours in one subject, and in the First or Second Class in Honours in another subject, may elect to attend lectures and practical work during their Third Year in one only of those subjects in which they have been so placed in the Honours List, and if they obtain First or Second Class Honours at the B.Sc. Examination they shall be held to have passed that Examination.

11-9-93 8.—The candidate who shall at this examination most distinguish himself shall, if of sufficient merit, receive a bronze medal.

8-10-89 9.—The examination for the Degree or B.Sc. shall take place once a year.

8-10-89 10.—No candidate shall be admitted to this examination unless he produce a certificate from the Dean of the Faculty of Science that he is of nine terms' standing, and that he has passed all the examinations required since his admission to the University.

18-4-94 11.—The fee for the Degree of B.Sc. shall be three pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the examination the fee shall not be returned to him. For any re-examination for the same Degree he shall pay a fee of two pounds.

18-7-93 12.—The Annual Examinations shall be conducted in the first instance by means of printed papers, practical exercises, and reference to specimens when necessary, and at the termination of such examinations each candidate shall undergo a *vivâ voce* examination if the examiners think fit. At least one written Class Examination shall be held during each Term of the first two years, except in the mathematical subjects. Students shall not absent themselves from these examinations except upon a medical certificate. Students who fail to pass the Class Examinations may, at the discretion of the Board of Examiners, be refused admission to the Annual Examination.

8-10-89 13.—At the Annual Examinations honour papers shall be set where necessary. Students may elect to take up any one or more subjects.

8-10-89 14,—The Examination for the Degree of Doctor of Science (D.Sc.) shall take place once a year. This Degree shall not be conferred until after the expiration of three Academic years from the granting of the B.Sc. Degree.

15.—Every candidate for the Degree of Doctor of Science must produce evidence that he has been employed in scientific study and research for at least three Academic years since obtaining the B.Sc. Degree. He shall be required to pass a theoretical and practical examination in one of the following branches of Science, viz., Botany, Chemistry, Geology, Palæontology, Physics, Physiology and Zoology. He shall also be required to present, for the approval of the examiners, a paper embodying the result of an original investigation or scientific research. Five printed copies of this paper must be transmitted to the Registrar at least two months before the date fixed for the examination. The candidate must also submit sufficient evidence of the authenticity of his paper to the examiners, who may, if they think fit, examine him in the contents thereof. 8-10-89

16.—The candidate who shall at this examination most distinguish himself shall, if of sufficient merit, receive a bronze medal. 11-9-93

17.—The fee for the Degree of D.Sc. shall be ten pounds. No candidate shall be admitted to the examination unless he have previously paid this fee to the Registrar. If a candidate fail to pass the examination the fee shall not be returned to him, but he shall be admissible to one further examination for the same Degree without the payment of an additional fee. For each subsequent examination that may be required he shall pay the sum of five pounds. 8-10-89

DEPARTMENT OF ENGINEERING.

18.—Candidates for the Degree of Bachelor of Engineering shall, before admission to the curriculum of Engineering, produce evidence of having graduated in Arts or in Science; or of having attended the lectures of the First Year of the Arts course, and passed the First Year Examination in Arts; or of having passed the Senior Public Examination in the following subjects, viz., Latin, one of the three languages—Greek, French or German; and four of the following subjects, viz., Arithmetic, Algebra, Geometry, Trigonometry, Elementary Surveying and Astronomy, Mechanics, Applied Mechanics, or of having passed an examination equivalent to the Senior Public Examination, in the following subjects, viz., Latin, one of the three languages—Greek, French or German, and in the four sections—Arithmetic, Algebra, Geometry, Trigonometry; and shall, during the First Year, attend the courses of instruction upon, and pass the examinations in, the following subjects— 21-4-96

I. Chemistry—Inorganic (with two terms' laboratory practice).
II. Descriptive Geometry and Drawing.
III. Mathematics.
IV. Applied Mechanics (with laboratory practice).
V. Physics (with one term laboratory practice).
VI. Physical Geography and Geology.

Provided that students shall only be required to attend the lectures upon, and to pass the Annual Examination in, such portions of the Mathematical course of the First Year as they have not already passed at the above-mentioned examinations. Provided also that students of the Technical Branch of the Department of Public Instruction whose certificates of attendance and examination in that branch are accepted by the Senate as an equivalent to a portion of the curriculum prescribed for candidates for the Degree of Bachelor of Mining Engineering, shall be considered to have passed the Entrance Examination, if they satisfy the Examiners in the following subjects, viz.: in two of the four languages—Latin, Greek, French, German; and in four of the following subjects, viz.: Arithmetic, Algebra, Geometry, Trigonometry, Elementary Surveying and Astronomy, Mechanics, Applied Mechanics.

9-2-92 19.—Candidates for the Degree of Bachelor of Engineering in Civil and Mechanical Engineering shall, during the Second Year, attend the courses of instruction upon, and pass the examinations in, the following subjects:—

I. Applied Mechanics (with laboratory practice).
II. Civil Engineering.
III. Drawing.
IV. Geology.
V. Mathematics.
VI. Physics (with one term laboratory practice).
VII. Surveying.

9-2-92 20.—Candidates for the Degree of Bachelor of Engineering in Civil and Mechanical Engineering shall, during the Third Year, attend the courses of instruction upon, and pass the examinations in, the following subjects:—

I. Drawing and Design.
II. Materials and Structures (with laboratory practice).
III. Mathematics.
IV. Surveying.

And one of the following :—

a. Civil Engineering and Architecture.

b. Mechanical Engineering and Machine Construction.

Every candidate is required to prepare and submit to the Board of Examiners an original set of working drawings and specifications for machinery or works. Provided that the course of lectures and examination in the subject of Architecture may be taken either in the Second Year or in the Third Year, as may from time to time be provided by the teaching regulations of the University. 11-9-93

21.—Candidates for the Degree of Bachelor of Engineering in Mining and Metallurgy, shall, during the First Year, attend the courses of instruction upon, and pass the examinations in, the following subjects, viz. :— 13-12-92

I. Chemistry, Inorganic (with laboratory practice).
II. Descriptive Geometry and Drawing.
III. Mathematics.
IV. Mechanics and Mechanical Drawing.
V. Physics (with laboratory practice).
VI. Physical Geography and Geology.

22.—Candidates for the Degree of Bachelor of Engineering in Mining and Metallurgy shall, during the Second Year, attend the courses of instruction upon, and pass the examinations in, the following subjects :— 30-7-94

I. Applied Mechanics (with laboratory practice).
II. Chemistry (including Quantitative Analysis).
III. Civil Engineering.
IV. Geology (with laboratory practice).
V. Mechanical Drawing.
VI. Surveying.

23.—Candidates for the Degree of Bachelor of Engineering in Mining and Metallurgy shall, during the Third Year, attend the courses of instruction upon, and pass the examinations in, the following subjects :— 13-12-92

I. Civil Engineering.
II. Materials and Structures.
III. Metallurgy and Assaying.
IV. Mineralogy.
V. Mining.

9-2-92 *24.—Candidates for the Degree of Bachelor of Engineering in Electrical Engineering shall, during the Second Year, attend the courses of instruction upon, and pass the examinations in, the following subjects:—

I. Applied Mechanics (with laboratory practice).
II. Mechanical Drawing.
III. Mathematics.
IV. Physics (with two terms' laboratory practice).
V. Surveying.

9-2-92 25.—Candidates for the Degree of Bachelor of Engineering in Electrical Engineering shall, during the Third Year, attend the courses of instruction upon, and pass the examinations in, the following subjects:—

I. Electrical Engineering.
II. Electric Theory (with laboratory practice).
III. Dynamo and Motor Drawing and Design.
IV. Mathematics.

Every candidate is required to prepare and submit to the Board of Examiners an original set of working drawings and specifications for an electric light or power scheme, or for an electric railway.

8-10-89 26.—At the Annual Examination honour papers shall be set where necessary. Students may elect to take up any one or more subjects.

8-10-89 27.—A Candidate shall not be admitted to the Degree of Bachelor of Engineering unless he shall produce a certificate from the Dean of the Faculty of Science that he is of nine terms' standing, that he has passed all the examinations, and has satisfactorily complied with all the other conditions required of him since his admission to the University.

11-9-93 28.—The Candidate who shall most distinguish himself in the Honour division of the Third Annual Examination shall, if of sufficient merit, receive a bronze medal.

8-10-89 29.—The Examination for the Degree of Master of Engineering shall take place once a year. This Degree shall not be conferred until after the expiration of three Academic years from the granting of the B.E. Degree.

*The University is not at present in a position to carry out in full the by-laws for the curriculum in Electrical Engineering.

30.—Every candidate shall be required to produce to the Board of Examiners satisfactory certificates or other evidence of having been engaged during three years in the practice of one of the four branches of Engineering specified in By-law 31, one year at least of which must have been spent in acquiring a practical knowledge of the branch or branches selected, under the direction of an Engineer or Architect practising the branch or branches in which he wishes to be examined. 9-2-92

31.—Candidates for the Degree of Master of Engineering shall have taken Honours in the Professional subjects of the Examination for the Degree of B.E.; or must attain the standard for Honours at some subsequent B.E. Examination, and shall be required to pass examinations in one of the following divisions or branches:— 13-12-92

I. Engineering Construction in Iron, Steel, Timber, Masonry and Concrete.
II. Hydraulic and Sanitary Engineering.
III. Railway Engineering, including Railway Location, Permanent Way, Locomotives and Rolling Stock and Railway Appliances.
IV. Architecture, Building Construction and Sanitation.
V. Mechanical Engineering and Machine Construction.
VI. Mining and Metallurgy.
VII. Electrical Engineering.

Candidates must give at least twelve months' notice of their intention to proceed to the Master's Degree.

Candidates shall be required to prepare a complete set of working drawings and specifications of such works or machinery as the examiners may require in the particular division or branch of Engineering selected.

32.—The diplomas for the Degrees of Bachelor and Master of Engineering shall specify the branch or branches of Engineering for which they are granted. 8-10-98

33.—The fees for the Degrees of Bachelor and Master of Engineering shall be ten pounds respectively; no candidate shall be admitted to either examination unless he shall have previously paid this fee to the Registrar. If a candidate fail to pass the examination, the fee shall not be returned to him, but he shall be admissible to one subsequent examination for the same Degree without the payment of an additional fee. 8-10-89

8-10-89 34.—Graduates in Engineering in any branch may, upon passing the Degree Examination in any other branch or branches, and producing satisfactory evidence of practical work therein, receive a certificate for such additional branch or branches.

8-10-89 35.—The fee for such additional examination for the Degrees of Bachelor and of Master of Engineering shall be ten pounds.

11-9-93 36.—The candidate who shall most distinguish himself in the examination for the Degree of Master of Engineering shall, if of sufficient merit, receive a bronze medal.

CHAPTER XIX.—ADMISSION *AD EUNDEM GRADUM*.

5-7-87 1.—Admission *ad eundem gradum* in this University may, at the discretion of the Senate, be granted without examination to Graduates of the following approved Universities, that is to say, the Universities of Oxford, Cambridge, London and Durham, the Victoria University, the Universities of St. Andrews, Edinburgh, Glasgow, Aberdeen and Dublin, the Queen's University of Ireland, and the Royal University of Ireland, lately established in its place; and the Universities of Melbourne, New Zealand and Adelaide; and may also be granted to Graduates of such other Universities as the Senate may from time to time determine; provided always that they shall give to the Registrar, to be submitted to the Senate, sufficient evidence of their alleged Degrees respectively, and of their good fame and character. Upon the approval of his application each candidate shall pay to the Registrar a fee of two pounds for the entry of his name on the University books, in addition to the prescribed fee for his Degree.

CHAPTER XX.—REGISTER OF GRADUATES.

5-7-87 1.—A Register of Graduates of the University shall be kept by the Registrar in such manner as the Senate shall from time to time direct.

5-7-87 2.—A Register of the Members of Convocation shall be kept by the Registrar in such manner as the Senate shall from time to time direct, and such Register shall be conclusive evidence that any person whose name shall appear thereon at the time of his claiming a vote at a Convocation is so entitled to vote.

CHAPTER XXI.—SUBSTITUTES FOR OFFICERS.

5-7-87 1.—Any act required by the By-laws to be performed by any officer of the University may, during the absence or other incapacity of such officer, unless otherwise provided, be performed by a person appointed by the Senate to act in his place.

CHAPTER XXII.—ACADEMIC COSTUME.

1.—The Academic costume shall be for— 12-9-92

The Chancellor and Vice-Chancellor—a robe and cap similar to those worn by the Chancellor of the University of Oxford. In undress, the silk gown worn by other members of the Senate, black velvet cap and gold tassel.

A Member of the Senate—the habit of his Degree, or a black silk gown of the description worn by Graduates holding the Degree of Doctor, with tippet of scarlet cloth, edged with white fur, and lined with blue silk, black velvet trencher cap.

Doctor of Laws, Medicine or Science—the gown worn by graduates holding the Degree of Doctor in the Universities of Oxford or Cambridge, black cloth trencher cap.

Doctor of Laws—hood of scarlet cloth, lined with blue silk.

Doctor of Medicine—hood of scarlet cloth, lined with purple silk.

Doctor of Science—hood of scarlet cloth, lined with amber-coloured satin.

Master of Arts—the ordinary Master's gown of Oxford or Cambridge, of silk or bombazine with black silk hood lined with blue silk, black cloth trencher cap.

Master of Surgery—the ordinary Master's gown of Oxford or Cambridge, of silk or bombazine, with hood of scarlet cloth lined with French grey, black cloth trencher cap.

Master of Engineering—a Master of Arts gown, with black silk hood, lined with light maroon-coloured silk, black cloth trencher cap.

Bachelor of Laws or Medicine—the black gown worn by civilians in Oxford or Cambridge holding Degrees, black cloth trencher cap.

Bachelor of Laws—hood of black silk, edged with blue silk.

Bachelor of Medicine—hood of black silk, edged with purple silk.

Bachelor of Arts, Science, or Engineering—a plain black stuff gown, black cloth trencher cap.

Bachelor of Arts—hood similar to that worn by the B.A. at Cambridge.

Bachelor of Science—hood of black stuff, edged with amber-coloured silk.

Bachelor of Engineering—hood of black stuff, edged with light maroon-coloured silk.

An Officer not being a Graduate—a black silk gown of the description worn by civilians not holding Degrees, black cloth trencher cap.

Undergraduate—a plain black stuff gown, black cloth trencher cap.

Scholar—plain black stuff gown, with a velvet bar and shoulder strap, black cloth trencher cap.

5-7-87 2.—Members of the University shall on all public occasions, when convened for Academic purposes, appear in their Academic costume.

5-7-87 3.—The Undergraduates shall appear in Academic costume when attending lectures and on all public occasions in the University; and, whenever they meet the Fellows, Professors or other Superior Officers of the University, shall respectfully 6-5-90 salute them. Provided that students in any Faculty shall be permitted, if deemed expedient by the Faculty, to wear at certain courses of instruction, in lieu of the ordinary Academic dress, a distinguishing badge to be prescribed by such Faculty.

Chapter XXIII.—PUBLIC EXAMINATIONS.

5-7-87 1.—Two Public Examinations shall be held every year, the one to be called the Junior Public Examination and the other to be called the Senior Public Examination, and shall be open to all candidates, male or female, who may present themselves.

5-7-87 2.—The Public Examinations shall be held at such times and at such places as the Senate may from time to time appoint.

5-7-87 3.—The subjects of the Junior Public Examination shall be the English Language and Literature, History, Geography, the Latin, Greek, French and German Languages, Arithmetic, Algebra, Geometry, Natural Science, and such other branches of learning as the Senate may from time to time determine.

4.—The subjects of the Senior Public Examination shall be those mentioned in the foregoing section, together with higher Mathematics, Drawing, Music, Natural Philosophy, and such other branches of learning as the Senate may from time to time determine. 5-7-87

5.—Every candidate who shall pass either of these examinations, or such portions of either of them as may be required by the Rules or Orders of the Senate in force for the time being, shall receive a certificate to that effect, specifying the subjects in which he shall have passed, signed by the Dean of the Faculty of Arts and by the Registrar. 5-7-87

6.—No person shall be admitted to either of the Public Examinations until he shall have paid such fees as may be required by the Rules or Orders of the Senate in force for the time being. 5-7-87

7.—The Professors and Assistant Professors not engaged in tuition except publicly within the University, together with such other persons as the Senate may from time to time appoint, shall form a Board for conducting the Public Examinations; and of this Board the Chairman shall be elected at its first meeting in the year. 18-7-93

8.—At the conclusion of each examination the Board shall publish the result and transmit to the Senate a copy of it, signed by the Chairman, and at least one other member. 27-9-92

9.—Subject to these By-laws, the Public Examinations shall be conducted according to such Rules or Orders as the Senate may from time to time establish. 5-7-87

CHAPTER XXIV.—EVENING LECTURES.

1.—Courses of Evening Lectures, embracing all the subjects necessary for the Degree of Bachelor of Arts, shall be given at such times and in such order as the Senate may from time to time direct. 30-7-94

2.—Any person desirous of attending a course of Evening Lectures may be allowed to do so upon payment of such fees as the Senate may from time to time direct. 30-7-94

3.—Students who desire to qualify themselves for graduation by attendance upon Evening Lectures shall be required to pursue the course of study and pass the examinations prescribed in Chapter XV. of the By-laws for candidates for the Degree of Bachelor of Arts. 30-7-94

(*a*) Provided that any Evening Student, if he so desires, may distribute the lectures and examinations of the First Year as prescribed in sections 12 and 13 of Chapter XV., over two years, taking not less than two of the following subjects in each year, viz., (i.) Latin, (ii.) One of the following languages—Greek, French, or German, (iii.) Mathematics, (iv.) English; and subject to his having previously passed the Matriculation Examination in any subject taken up (except English). Provided also that Evening Students may be permitted by the Faculty to take the lectures and examinations upon any of the three Scientific subjects of the First Year at a later period of their course.

(*b*) Provided also that any Evening Student, if he so desires, may distribute the lectures and examinations of the Second Year, as prescribed in sections 14 and 15 of Chapter XV., over two years, taking not less than two of the subjects so prescribed in each year.

30-7-94 4.—In all cases not provided for in the preceding By-laws of this Chapter, Evening Students shall be subject to the same By-laws, Rules and Regulations as other students.

Chapter XXV.—UNIVERSITY EXTENSION.

18-4-94 1.—There shall be a Board, consisting of not more than eighteen members, of whom four at least shall be members of the Senate, and four at least shall be members of the Teaching Staff, and not less than two shall be persons not being members of the Senate or of the Teaching Staff. The Board shall be appointed annually by the Senate, at its monthly meeting in December, and shall be held to be duly constituted upon the appointment of twelve persons to be members thereof, and the Senate may fill vacancies and appoint additional members from time to time if it shall think fit during the year, but so that the total number of members of the Board shall not exceed eighteen at any time. Membership of the Board shall continue from the time of appointment until the next annual appointment of the Board, when all memberships shall lapse, but all retiring members shall be eligible for re-election.

12-9-92 2.—The Board shall at its first meeting after its appointment in each year elect a Chairman for the year, and may

recommend to the Senate the appointment of a Secretary, the tenure of whose office and the amount of whose salary (if any) shall be determined by the Senate. The Chairman shall convene meetings of the Board, and three members shall form a quorum.

3.—All action taken by the Board shall be subject to the By-laws, and to any directions which may be given by the Senate. 12-9-92

4.—The Board shall from time to time recommend to the Senate the names of certain persons to be authorised for employment as University Extension Lecturers, and the Senate shall at its discretion authorise the employment of such persons to deliver lectures under the direction of the Board. 12-9-92

5.—The Board may appoint any persons whose employment as Lecturers has been authorised by the Senate to deliver such courses of lectures, and to hold such classes and examinations on such subjects, and at such times and places as the Board may see fit. 12-9-92

6.—The Board shall determine the tenure of office of the Lecturers, the duties to be performed by them, the fees and charges to be paid for the lectures, classes, and examinations, and the mode and time of payment of the fees and charges. 12-9-92

7.—The payments to be made to the Lecturers shall be determined by the Board in accordance with regulations as to the rate of payment to be laid down by the Senate. 12-9-92

8.—The Board shall make all other arrangements requisite for the delivery of lectures and the holding of classes and examinations, and may award such certificates as it shall think fit. 12-9-92

9.—The fees received, together with any Government grant, donations, and such sums as may from time to time be assigned for the purpose by the Senate, shall be the fund for the payment of Lecturers and other expenses. The fund shall be deposited in a bank in the name of the University Extension Board, and all payments from the fund shall be made by cheques signed by the Chairman or two other members of the Board and by the Secretary. 12-9-92

10.—The Board shall, in the month of December in each year, lay before the Senate a report of its proceedings of that year, with a statement of its finances. 12-9-92

CHAPTER XXVI.—TENURE OF OFFICE OF LECTURERS.

29-6-91 1.—All appointments of Public Teachers in the schools of the University, other than Professors, shall be terminable by a notice of not less than six calendar months, which may be given by the Senate at any time, but which, if given by the Teacher, must expire on the 31st December This By-law shall not apply to any case in which the Senate shall direct that the appointment shall be for a limited period.

9-10-94 2.—Any salaried officer of the University becoming a candidate for election to the Legislative Assembly shall thereby vacate his office.

CHAPTER XXVII.—FINANCE.

11-9-93 1.—The general supervision of the financial affairs of the University shall, subject to the direction and control of the Senate, be entrusted to a Finance Committee, consisting of the Chancellor, the Vice-Chancellor and four elected Fellows of the Senate, of which number three shall constitute a quorum.

7-6-92 2.—The elected Members of the Committee shall be chosen annually by the Senate, and shall remain in office until their successors shall have been appointed. All casual vacancies shall be notified by the Registrar at the next meeting of the Senate, and shall be filled by the Senate as soon thereafter as conveniently may be.

7-6-92 3.—The Finance Committee shall meet once a month, and at such other times as the Senate shall have directed, or when it shall be summoned by the Registrar under the directions of the Chancellor or Vice-Chancellor.

7-6-92 4.—The Registrar shall attend all meetings of the Committee, and shall keep due records and minutes of their proceedings, and shall act generally as executive officer of the Committee. And the University Solicitor may be required by the Committee to attend any of its meetings with reference to the investments or other matters requiring legal advice or assistance.

7-6-92 5.—It shall be the duty of the Finance Committee to submit to the Senate, towards the end of each Academic Year, an estimate of the expected revenue for the next ensuing year, together with a statement of the proposed expenditure as already authorised by the Senate or apprehended to be necessary, such estimates and expenditure to be arranged under as many heads

as shall be convenient. And the Senate shall, as soon after as may be, consider such estimates and pass votes for expenditure during such coming year, which votes shall not be exceeded unless upon special grounds and on the report of the Finance Committee that sufficient funds are available for the expenditure.

6.—The Finance Committee shall, as soon as practicable after the close of each Academic Year, submit to the Senate a report and a duly audited statement of the accounts and transactions during the past year. 7-6-92

7.—The Registrar and Accountant shall present to the Finance Committee in each month a statement showing, with such details and particulars as the Committee shall have required, the full state and condition of the University's financial affairs at that time, and the Registrar shall then inform the Committee of all financial matters proper to be considered at that meeting, and shall produce the Bank Pass Books of the University made up to the preceding day. 7-6-92

8.—The Finance Committee shall once in each month present a report setting forth a pay sheet for the disbursements required for that or the next month, as occasion may arise, in accordance with the general estimates and votes for expenditure for the current year, or with any specific order previously made by the Senate, and also setting forth any other demands which the Committee shall, after enquiry and examination, see reason to submit for allowance and payment in that month. 7-6-92

9.—The Finance Committee shall also in each month present to the Senate a report showing the general state and condition of the University's financial affairs, and setting forth all receipts and disbursements since the last preceding report of like character, and shall therein distinguish all loans and repayment of loans from other disbursements and receipts, and the Committee shall, at such meeting and other meetings, promptly report any default in the payment of interest on any investment or in the payment of any principal money which may be due to the University. 7-6-92

10.—No expenditure of funds of the University, otherwise than by way of investment on loan upon the authority of the Finance Committee, with the approval of the Chancellor or Vice-Chancellor, shall be made unless the same shall have been authorised by the Senate. 7-6-92

7-6-92 11.—All moneys received on behalf of the University shall be forthwith paid by the Registrar to the credit of the University at its Bank of deposit, on General or Special Account, as the case may require.

7-6-92 12.—All disbursements of money belonging to the University, whether the same shall be by way of payment or of investment, shall be by cheque on the University's Bank, signed by two members of the Senate and countersigned by the Registrar. And in case the seal of the University shall be required to any deed or instrument relating to investments, or to the return of moneys lent from the capital moneys of the University, the same may be affixed by the Chancellor or Vice-Chancellor.

7-6-92 13.—The investment of moneys shall be confined within the following classes of securities :—

(*a*) Deposit with the Government of the Colony at interest, if allowed by the Government for the time being.

(*b*) Purchase of Debentures or Inscribed Stock, or Treasury Bills, or other form of security issued by the Government of any of the Australian Colonies.

(*c*) Debentures or other Loan issues of Municipal or other public bodies within this Colony, having statutory powers to borrow moneys within limits then open, or of any incorporated body or society having such authority and within such limits.

(*d*) Mortgages of Land and Premises held in fee simple to the extent of two-thirds the estimated value, with sufficient insurance on destructible improvements or articles included in such estimates.

(*e*) Mortgages of Leasehold Lands and Premises held under leases which will have not less than thirty years to run at the date of expiration of such mortgages, to an extent not exceeding three-fifths of like approved estimates, and with like insurance on destructible improvements or articles.

(*f*) Deposits at interest in any Bank of the Colony.

(*g*) Purchase of Freehold or Leasehold Lands, with or without improvements, provided that no such investment shall be made without the special authority after special notice of a meeting of the Senate, at which two-thirds of the members shall be present at the time of authorising the same.

REGULATIONS.

DISCIPLINE.

REGULATIONS PASSED BY THE PROFESSORIAL BOARD.

It shall be the duty of the Chairman of the Professorial Board to exercise a general supervision over the discipline of the University.

Every fine shall be paid to the Registrar within forty-eight hours from the time of its imposition. If not so paid, the fine shall be doubled; and if the double fine be not paid within one week from the time when the original fine was imposed, the Registrar shall report the fact to the Professorial Board, in order that suitable means may be taken against the offender for his contumacy.

The Dean of each Faculty shall call upon every student in his Faculty who shall have absented himself from more than ten per cent. of any prescribed course of lectures in any one term, to show sufficient cause for such absence. The Dean shall at his discretion either decide that the cause shown is sufficient, or submit the matter to the Professorial Board for decision. Such students as fail to show sufficient cause for such absence are, under Section 2 of Chapter XIII. of the By-laws, excluded from admission to the Yearly Examinations.

Matriculated students who have lost their places in their own proper year, either by non-attendance at the prescribed courses of lectures, or by failing to pass the required examinations, are not allowed to compete for honours, scholarships, or prizes at subsequent Yearly, Professional, or Degree Examinations unless by express permission of the Professorial Board.

No student in the Faculty of Medicine who has not been specially exempted shall receive a certificate of attendance upon any course of instruction who shall not have been present at sixty per cent. at least of the meetings of the course.

THE UNIVERSITY LIBRARY.

For books allowed to be taken out of the Library.

1.—No person shall be allowed to take books out of the Library but Fellows of the Senate, Professors, and other Public Teachers in the University, Officers of the University, or other persons who shall have obtained this privilege under a special resolution of the Senate, and Graduates having their names on the books of the University, and being resident in Sydney or its suburbs.

2.—No books shall be taken out of the Library except with the sanction of the Librarian, who shall enter in the book kept for the purpose the name of the borrower, the title of the book borrowed, and the date of the loan, and this entry shall be signed at the time by the borrower.

3.—No person shall be allowed to have in his possession at one time more than ten volumes belonging to the Library, but the Library Committee may dispense with this order in any particular case if they shall be of opinion that sufficient reasons have been assigned for such dispensation; such dispensation, however, shall continue in force no longer than to the end of the current quarter, but upon fresh application may be renewed by the same authority.

4. Every one who shall borrow or take any book out of the Library shall return it thither again on demand of the Librarian at any time after the expiration of seven days, and without such demand on or before the next of the four following Quarter Days, viz.:—March 31st, June 30th, September 30th, December 31st, under penalty of two shillings for every folio or quarto, and one shilling for every book of less size; all penalties to be repeated every fortnight till the book be returned, or others of the same edition and equal value be placed in their room, such fortnight being first reckoned from the day on which the Library is re-opened after the Quarter Day. If any of the Quarter Days should fall on a Sunday, or on any other day on which the Library is closed by Rule 20, the day appointed for returning the books shall be the following day.

5.—No book shall be taken out of the Library on the days appointed for the return of books.

6.—Every Professor shall have the privilege of obtaining books for each student attending his lectures, and being a member of the University. Each order for the volumes so obtained shall bear the titles of the books, and be dated and subscribed as follows:—

For M.N.,

C.D., Professor.

The books so obtained shall not be taken out of the Library till the day after that on which the Library is re-opened for the Quarter, and they shall be returned at any time after the expiration of seven days, if demanded by the Librarian, and, if not so demanded, not later than the day before the next Quarter Day. The Professor shall be responsible for the books so obtained, and for the penalties under Rule 4; and no student shall have in his possession at one time more than five volumes.

7.—A list of the books omitted to be returned at the end of any Quarter, together with the names of the borrowers, shall be posted up in some conspicuous place in the Library.

8.—No person from whom any fine is due to the Library shall be allowed to take out books until such fine has been paid.

9.—If any book be injured or defaced by writing while in the possession of any person taking it out of the Library, he shall be required to replace it by another book of the same edition and of equal value. Persons taking books out of the Library are required to report, without delay, to the Librarian any injury which they may observe in them.

For books not to be taken out of the Library without a note countersigned by the Chancellor or Vice-Chancellor.

10.—Certain printed books, of which a list shall be prepared under the authority of the Library Committee, and kept by the Librarian, shall not be taken out except by a note countersigned by the Chancellor or Vice-Chancellor, nor until the day after that on which the note is presented; and no such note shall be given to any Undergraduate member of the University, nor shall any person have more than five volumes of such books out of the Library at one time. A register shall be kept of all such books taken out of the Library, and of the date on which they are returned; and after the books are returned the plates in them shall forthwith be collated, and the collation be registered; and

until such collation shall have been made, the books shall not be accessible to persons using the Library, nor shall the countersigned note be given up to the persons by whom the books are returned, but in lieu of it an acknowledgment signed by the Librarian or his deputy; and the name of the person by whom the acknowledgment is signed shall also be registered.

11.—The penalties for not returning such books at the Quarter Days shall be double of the penalties prescribed in Rule 4.

For MSS. and Books not allowed to be taken out of the Library.

12.—The Library Committee may cause MSS., books containing collections of prints or drawings, and other documents and books of a nature or value to render such precaution expedient, to be locked up in cases or compartments by themselves. These shall not be taken out of the Library on any pretence whatever; and access to them shall not be allowed, unless the Librarian or some one deputed by him be present. The Librarian himself shall have charge of the keys.

13.—The Library Committee may direct that certain printed books, of which a List shall be kept by the Librarian, shall not be removed from the Library.

14.—Persons desirous of referring to any particular MSS. or scarce printed books shall apply to the Librarian, who, if he see cause, may allow such MSS. or books to be consulted, but not in the compartment in which the MSS. or scarce printed books are kept.

15.—Parts of periodicals, works in progress, pamphlets, &c., until such time as is proper for binding them, shall be kept under such a system of management that they may be produced, if required, after a few minutes' notice, on application being made to the Librarian, by means of an ordinary Library note, so that persons in whose literary researches such works are necessary may consult them in the Library with the consent of the Librarian.

For admission to the Library.

16.—Except on the day when the Library is re-opened for any quarter, those Undergraduates who have obtained a Professor's order for books shall be admitted to the Library for the purpose of selecting their books, or otherwise consulting the Library, during the hour from one to two.

Admission of persons not Members of the University for the purpose of Study and Research.

17.—The Chancellor or Vice-Chancellor may grant an order of admission to the Library for the purpose of study and research to any person who shall produce to him a recommendation from any Fellow of the Senate, or Professor, or any member of the University who shall have been admitted to the degree of M.A. or any higher Degree, stating "that the person recommended is well known to him," and "that he is a fit and proper person to obtain such order." The name of the member of the Senate or the Professor upon whose recommendation any such order of admission shall be granted shall be placed after the name of the person receiving the permission in a list to be suspended at the entrance of the Library.

18.—Such persons shall be permitted to use the Library whilst open, except on any days on which the Library is first open for the Quarter, or on any day on which the Library is closed for the Quarter. This admission order shall have effect only until the expiration of the Quarter in which it shall have been granted, and it shall not entitle the holder to have access to lock-up cases.

For Opening and Closing the Library.

19.—For the purpose of allowing the Librarian sufficient time to inspect the books, the Library shall be closed for the first fortnight in the month of January, and also for the two days (excepting Sunday) next after each of the other Quarter Days.

20.—The Library shall be closed on Sundays and Public Holidays.

21.—The Library shall be open on Saturdays from ten till one, and other days from ten till three.

FISHER BEQUEST.

In 1885 the sum of £30,000, or thereabouts, was bequeathed to the University by Thomas Fisher, Esq., "to be applied and expended by the Senate for the time being of the University in establishing and maintaining a Library for the use of the University, for which purpose they may erect a building, and may purchase books, and do anything that may be thought desirable for effectuating the purposes aforesaid."

Under these conditions the Senate has determined to apply the sum of £20,000 and its accumulations from February, 1888, to the erection of a Library building at and for the University, such building to be designated the Fisher Library; but before expenditure of the amount so dedicated to petition the Government to provide a corresponding amount for the erection of buildings annexed to the Library, comprising Reading Rooms and Common Rooms for Students, a small Museum for the Nicholson Antiquities, and additional Lecture Rooms, together with a Refectory for Students. The balance of the principal money up to £10,000 is invested as a perpetual endowment fund for keeping up and adding to the Library.

MUSEUM OF ANTIQUITIES.

Committee of Management—Professor SCOTT, M.A.; Professor WOOD, M.A.; and Professor DAVID, B.A.

REGULATIONS.

1.—The Bedell shall have charge of that portion of the Building devoted to the Museum, and during the absence of the Curator shall be responsible for the due care of the collection.

2.—The Museum shall be open for the admission of visitors every Saturday from the 1st May to the 31st October from two to five p.m.; and from the 1st November to the 30th April from two to six p.m. Visitors may also be admitted at any other convenient time when accompanied by a Member of the Senate, or by any Professor or Superior Officer of the University, or by the Curator or the Bedell in charge of the Museum.

3.—All visitors to the Museum shall be required to give their names and addresses, which shall be entered in a book to be kept for that purpose.

4.—Children under 15 years of age shall not be admitted unless accompanied by older friends.

MACLEAY MUSEUM.

Committee of Management—The Challis Professor of Biology, the Professor of Geology and Physical Geography.

Curator—G. MASTERS.

In the year 1874 the Hon. Sir W. Macleay, M.L.C., undertook to present to the University of Sydney his collection of Natural History, together with an endowment for the stipend of

a Curator, as soon as a suitable building should have been provided for their reception. The conditions attached to this donation were—

1. That the present Curator should be continued in office;
2. That the endowment of £6,000 for the salary of a Curator should be used for this and no other purpose; and
3. That the Museum should be made easily accessible to students of Natural History and members of the Linnean Society of New South Wales.

Under these conditions the Senate gratefully accepted Mr. Macleay's gift; and the Parliament having made liberal provision for the buildings required, the collections have been removed to the University.

MUSEUM OF NORMAL AND MORBID ANATOMY.

Committee of Management—The Dean of the Faculty of Medicine, The Challis Professor of Anatomy, the Lecturer on Pathology.

Curator—S. JAMIESON, B.A., M.B., Ch.M.

REGULATIONS.

1.—The Museum shall be called the Museum of Normal and Morbid Anatomy, and shall be established for the benefit of all the Medical Departments of the University.

2.—The Museum shall be under the control of a Committee of Management, to be appointed by the Senate at its first meeting in Lent Term.

3.—The Committee shall consist of the Dean of the Faculty of Medicine for the time being, together with two members of the Medical Teaching Staff to be chosen by the Senate.

4.—The working Curator shall be under the control of the Committee of Management; and in the second Thursday of each Term he shall transmit to the Dean, for the Senate, a report, to be written in a separate book kept for that purpose, of all the work he has done since the last report.

5.—Requisitions for the expenditure of money in connection with the Museum shall be submitted by the Committee of Management to the Finance Committee of the Senate for its approval.

UNIVERSITY EXTENSION LECTURES.

SEE ALSO BY-LAWS, CHAP. XXV.

UNIVERSITY EXTENSION BOARD, 1898:—Professor Anderson, M.A.; H. C. L. Anderson, M.A.; His Honour Judge Backhouse, M.A.; Hon. W. P. Cullen, M.A., LL.D.; Professor David, B.A.; H. Goodere; Rev. Jas. Hill, M.A.; P. Sydney Jones, M.D.; A. W. Jose; Professor MacCallum, M.A.; Professor Scott, M.A.; E. B. Taylor; R. Teece; Professor Wilson, M.B.; Professor Wood, M.A. Secretary, A. W. Jose.

REGULATIONS REFERRING TO LECTURE COURSES.

1.—The Board is prepared to receive and consider applications for courses of University Extension Lectures to be delivered in Sydney, or in any suburb of Sydney or country town.

Applications may be made either by a public institution, such as a School of Arts, or by a Home Reading Circle, or by a Committee specially formed for the purpose. They should be addressed to the Secretary of the University Extension Board, the University, Sydney, who will forward a list of available Lecturers and subjects, and give any other information that may be desired. The Board will, as far as possible, consult the wishes of the applicants in the selection of Lecturer and subject, and in fixing the dates of the lectures and the intervals between them. Courses have usually consisted of ten or six lectures, delivered at intervals of a week.

2.—Applicants must undertake to become responsible for the local management and local expenses of the lectures, and for the payment of the charges made by the Board.

The local management undertaken by the applicants will include providing a suitable lecture room, furnished, if possible, with desks or tables for the convenience of students taking notes; advertising the lectures; arranging for the sale of tickets; and providing a room with suitable appliances and supervision for the concluding examination.

The charge payable to the Board has been fixed at £30 for a course of ten lectures, and at £18 for a course of six. But if the lectures are delivered in country towns the charge may be reduced to £20 for a course of ten lectures and £12 for a course of six. The arrangements for the sale of tickets for the course (including the fixing of their price) will be left in the hands of the Local Committee, who may use the proceeds to defray the

expenses which have been incurred. It is left to the option of the Local centre to raise the requisite amount by the sale of tickets, by subscription, or by a combination of these methods; but the amount payable, or a satisfactory guarantee for its payment, must be lodged with the Secretary of the Board before the course begins.

3.—Every person who attends the course will be supplied with a syllabus containing an analysis of each lecture and a list of books recommended for study and reference. The Board will issue to Local Secretaries all copies of syllabus. At each lecture the Lecturer will set questions to be answered in writing by the students. These written answers should reach the Lecturer at least a day before the following lecture. Each lecture will be of an hour's length, and will be followed by a conversation class, at which the Lecturer will comment on and return the written answers of students, invite and answer questions, and discuss and explain difficulties.

4.—Immediately after the last lecture of the course, the Lecturer will send to the Secretary of the Board a report of the attendance, together with a record (in the form of numerical marks or otherwise) of the written work of the students, and a list of those students who have regularly attended the lectures and conversation classes, and have satisfied him by their work during the course.

The course will conclude with an examination, to which those only who are included in the Lecturer's list will be admitted. The examination will be conducted, in consultation with the Lecturer, by a Professor or other Examiner appointed by the Board; and certificates will be awarded on the result of the examination.

GENERAL REGULATIONS.

MATRICULATION EXAMINATION.

CANDIDATES for MATRICULATION are required to pass a satisfactory Examination in Latin, Arithmetic, Algebra, Geometry, and one of the following subjects—Greek, French, German. Proficiency in writing English is also taken into account. The Matriculation Pass Examination for candidates intending to enter the University in March, 1899, will begin on Monday, MARCH 6th, 1899. The Examination for Matriculation Honours and Scholarships will commence on NOVEMBER 14th, 1898.

COMPULSORY SUBJECTS—PASS.

1.—*Latin*—Translation into English of passages from set authors and of Latin passages at sight, and translation of simple English sentences into Latin. Candidates are expected to show an accurate knowledge of Latin accidence. Subject set for March, 1899: Livy, Book XXVI. (Nicholls, Angus and Robertson). March, 1900: Cicero pro Murena (Heitland, Cambridge).

2.—*Arithmetic.*

3.—*Algebra*—To quadratic equations involving one unknown quantity.

4.—*Geometry*—Euclid, Books I., II. and III.

OPTIONAL SUBJECT—PASS.

1.—*Greek*—An examination similar to that in Latin. Subject set for March, 1899: Xenophon, Cyropædeia, Book VII. (Holden, Cambridge, or Goodwin, Macmillan), or Thucydides, Book II., chapters 1 to 65 (Marchant, Macmillan). March, 1900: Xenophon, Anabasis, Book II. (Pretor, Cambridge); or Demosthenes, de Pace, 2nd and 3rd Philippics, and De Chersoneso (Abbott and Matheson, Oxford).

2.—*French*—An examination similar to that in Latin. Subject set for March, 1899: Racine, Athalie (Hachette). March, 1900: Balzac, Ursule Mirouët (Whittaker).

3.—*German*—An examination similar to that in Latin. Subject set for March, 1899: Gutzkow, Zopf und Schwert (Pitt Press). March, 1900: Auerbach, Schwarzwälder Dorfgeschichten (Whittaker).

Students who wish to take up, in their University course, a language which they have not offered at the Matriculation Examination, are reminded that the courses of lectures will begin on the assumption that the Matriculation standard of proficiency in that language has been attained.

HONOURS AT MATRICULATION, NOVEMBER, 1898.

THE Examination for Matriculation Scholarships and Honours, for candidates intending to enter the University in March, 1899, will take place in NOVEMBER, 1898, concurrently with the Senior Public Examination. All candidates for the Senior Public Examination may compete for Matriculation Scholarships and Honours upon giving due notice of their desire to do so. Those who wish to compete for Scholarships and Honours in special subjects, without entering for the Senior Public Examination, may do so upon payment of the Matriculation fee of two pounds; and if they have not already passed an examination which qualifies for Matriculation, they may attend the Pass Matriculation Examination in the following March, without paying an additional fee.

CLASSICS.—Translation from specified books, with questions on language and subject matter. Translation at sight from Latin and Greek into English, and from English into Latin and Greek. Ancient history and general questions.*

Nov., 1898. *Latin.*—Livy, Book XXVI. (Nicholls, Angus and Robertson). Horace, Odes, Book III. (Wickham, Clarendon Press, or Page, Macmillan).

Greek.—Thucydides, Book II., chapters 1-65 (Marchant, Macmillan). Sophocles, Electra (Jebb, Rivingtons, or Campbell and Abbott, Oxford).

*Under this head questions may be set on any subjects connected with Classical Study.

Nov., 1899. *Latin.*—Cicero pro Murena (Heitland, Cambridge). Virgil, Æneid, Book II. (Sidgwick, Cambridge).

Greek.—Demosthenes, De Pace, 2nd and 3rd Philippics, and De Chersoneso (Abbott and Matheson, Oxford). Homer, Iliad, Book I. and Book II. to line 483 (Monro, Oxford).

FRENCH AND GERMAN.—An examination similar to that in Classics. General questions.*

Nov., 1898. *French.*—Racine, Athalie (Hachette). La Fontaine, Select Fables (Macmillan).

Nov., 1898. *German*—Gutzkow, Zopf und Schwert (Pitt Press). Uhland, Ballads and Romances (Macmillan).

Nov., 1899. *French.*—Victor Hugo, Hernani (Rivingtons), Balzac, Ursule Mirouët (Whittaker).

German.—Select Letters of Mendelssohn (Pitt Press), Auerbach, Schwarzwälder Dorfgeschichten (Whittaker).

MATHEMATICS.—The Honour papers in Mathematics will be (i.) Algebra; (ii.) Geometry; (iii.) Trigonometry. The papers will be similar in general character to those hitherto set in the Senior Public Examination and the Entrance Examination for Law, Medicine and Science.

ENTRANCE EXAMINATION FOR THE FACULTIES OF LAW, MEDICINE AND SCIENCE.

An Entrance Examination for the Faculties of Law, Medicine and Science is held in March, concurrently with the Matriculation Pass Examination. This examination qualifies for direct admission to the courses of Law, Medicine and Science in the case of those who do not graduate in Arts or pass through the portions of the Arts course prescribed by the By-laws of the several Faculties. Candidates are required to satisfy the Examiners in the following subjects:—

1. Latin.

* Under this head questions may be set on Grammar, Philology, History, Literature, or other subjects connected with the study of Modern Languages.

2. Greek, French or German.
3. Three of the following subjects, or *four* in the case of candidates for a degree in the Department of Engineering:—
   (*a*) Arithmetic.
   (*b*) Algebra.
   (*c*) Geometry.
   (*d*) Trigonometry.

The standard required in the individual subjects is the same as that of the Senior Public Examination, held in November, which also qualifies those who pass in the prescribed subjects for admission to the several Faculties. Those who take the Senior Public Examination may pass in *any* three or four (as the case may be) of the sections in Group III.—Mathematics.

The details of the MARCH EXAMINATION are as follows:—

Latin.—Translation from specified books, with questions on language and subject matter. Translation at sight from Latin into English, and from English into Latin. Subjects for March, 1899: Livy, Book XXVI. (Nicholls, Angus and Robertson); Horace, Odes, Book III. (Wickham, Clarendon Press, or Page, Macmillan). March, 1900: Cicero pro Murena (Heitland, Cambridge); Virgil, Æneid, Book II. (Sidgwick, Cambridge).

Greek.—An examination similar to that in Latin. Subjects for March, 1899: Thucydides, Book II., chapters 1-65 (Marchant, Macmillan); Sophocles, Electra (Jebb, Rivington, or Campbell and Abbott, Oxford). March, 1900: Demosthenes, De Pace, 2nd and 3rd Philippics, and De Chersoneso (Abbott and Matheson, Oxford); Homer, Iliad, Book I., and Book II. to line 483 (Monro, Oxford).

French—An examination similar to that in Latin. Subjects for March, 1899: Racine, Athalie (Hachette); La Fontaine, Select Fables (Macmillan). March, 1900: Victor Hugo, Hernani (Rivingtons), Balzac, Ursule Mirouët (Whittaker).

German—An examination similar to that in Latin. Subjects for March, 1899: Gutzkow, Zopf und Schwert (Pitt Press); Uhland, Ballads and Romances (Macmillan). March, 1900: Select Letters of Mendelssohn (Pitt Press), Auerbach, Schwarzwälder Dorfgeschichten (Whittaker).

Arithmetic.—Including the Elements of Mensuration.

Algebra.—Including the three Progressions, the binomial theorem for a positive index, and the properties and use of logarithms.

Geometry.—The first four books of Euclid, the sixth book, and the first twenty-one propositions of the eleventh book with easy deductions. A satisfactory knowledge of the first four books shall entitle a candidate to pass in this section.

Trigonometry.—

Copies of the papers set in the ENTRANCE EXAMINATION will be found in the *Appendix*.

TIME TABLES OF LECTURES.

FACULTY

TIME TABLE

N.B.—The numbers in the left-hand column

Reference Number.	Subject.	Lent Term.				
		Mon.	Tu	W.	Th.	Fri.
	FIRST YEAR.					
7	French (Junior A)	..	9	..	9	..
1	§Latin	9	..	9	..	9
4	Greek (Preliminary)	..	9	..	9	..
14	Mathematics	10	10	10	10	10
7	French (Junior B)	..	11	..	11	..
9	German (Junior)	11	..	..	..	11
11	English	..	..	11	..	..
23	Chemistry	12	12	..	12	12
19	Physics	..	..	..	..	..
31	Physiography	..	..	..	..	..
28	*Chemistry (Practical) for Honours	2-5	..	2-5	..	2-5
	SECOND YEAR.					
14	Mathematics	9	9	9	9	9
10	German (Senior)	..	9	..	9	9
20	Physics	..	10	..	10	..
12	English	¶1	10	..	1	10
15	Logic and Mental Philosophy	10	..	10	10	..
2	Latin	11	¶2	11	..	11
5	Greek (Junior)	..	11	..	11	..
32	‡Geology	..	11	..	11	..
34-38-39	Biology, with Laboratory Practice	11	11	11	11	11
24	Chemistry (Metals) with one term Practical	..	..	..	..	..
8	French (Senior)	12	¶1	12	..	12
17	History	..	12	..	12	9
44	Physiology	12	12	12	12	12
22	Practical Physics	..	2-5	..	2-5	..
	THIRD YEAR.					
33	‡Geology	..	9	..	9	..
10	German (Senior)	..	9	..	9	9
13	English	9	9	¶9	..	9
3	Latin	10	..	10	¶12	10
6	Greek (Senior)	..	10	..	2	..
18	History	..	11	..	9	11
14	Mathematics	11	11	11	11	11
16	Logic and Mental Philosophy	11	..	11	11	..
35-40	Biology, with Laboratory Practice	11	11	11	11	11
24-25	Chemistry, with one term Practical	..	..	..	..	..
8	French (Senior)	12	¶1	12	..	12
44-46	Physiology	12	12	12	12	12
21-22	Physics	†2-5	..	†2-5	..	†2-5

*Or at times to be arranged. †Laboratory practice. ‡Practical work each week as arranged. Excursions every third or fourth Saturday as arranged. ¶Honours Lecture. §One hour additionl of Honours during two terms.

OF ARTS.

FOR 1898.

refer to the Synopses of Lectures on pp. 72-124.

Reference Number.	Trinity Term.					Michaelmas Term.				
	Mon.	Tues.	Wed.	Thur.	Fri.	Mon.	Tues.	Wed.	Thu.	Fri.
7	..	9	..	9	..	..	9	..	9	..
1	9	..	9	..	9	9	..	9	..	9
4	..	9	..	9	..	..	9	..	9	..
14	10	10	10	10	10	10	10	10	10	10
7	..	11	..	..	11	..	11	..	..	11
9	11	..	..	11	..	11	..	..	11	..
11	..	..	11	..	..	..	..	11	..	..
23	..	..	..	..	..	..	..	..	..	..
19	12	12	..	12	12	..	..	..	..	..
31	..	..	..	..	..	12	12	..	12	12
28	..	..	..	..	..	..	..	..	..	..
14	9	9	9	9	9	9	9	9	9	9
10	..	9	..	9	9	..	9	..	9	9
20	..	10	..	10	..	..	10	..	10	..
12	¶1	..	1	..	10	¶12	10	9	..	10
15	10	..	10	10	..	10	..	10	10	..
2	11	¶2	11	..	11	11	¶2	11	..	11
5	..	11	..	11	..	..	11	..	11	..
32	..	11	..	11	..	..	11	..	11	..
34-38-39	..	2	11	2	..	..	..	..	..	..
24	11	11	..	11	11	..	..	..	..	..
8	12	¶1	12	..	12	12	¶1	12	..	12
17	..	12	..	12	9	..	12	..	12	9
44	12	12	12	12	12	..	..	..	..	..
22	..	2-5	..	2-5	..	..	..	..	..	..
33	..	9	..	9	..	..	9	..	9	..
10	..	9	..	9	9	..	9	..	9	9
13	9	9	¶9	..	9	9	9	¶9	..	9
3	10	..	10	¶12	..	10	..	10	¶12	10
6	..	10	..	2	9	..	10	..	2	9
18	..	11	..	9	11	..	11	..	11	11
14	11	11	11	11	11	11	11	11	11	11
16	11	..	11	11	..	11	..	11	11	..
35-40	..	2	11	2	..	..	..	..	..	..
24-25	‡11	11	..	11	11	11	11	..	11	11
8	12	¶1	12	..	12	12	¶1	12	..	12
44	12	12	12	12	12	..	..	..	..	..
21-22	†2-5	..	†2-5	..	†2-5	..	12	..	12	..

†Laboratory Practice. ‡Students of the third year can take either the Trinity or Michaelmas Term Course. ¶ Honours Lecture.

FACULTY

TIME TABLE

N.B.—The numbers in the left-hand column

Reference Number.	Subject.	Lent Term. M.	Tu.	W.	Th.	F.
	‖THIRD YEAR.					
65	(*a*) Jurisprudence & Roman Law	12-30	..	12-30	..	1-30
66	(*a*) Constitutional Law and International Law	..	12-30	..	12-30	12-30
	FOURTH YEAR.					
67	(*a*) Law of Status, Civil Obligations, and Crimes	..	4-30	..	4-30	..
68	(*b*) Law of Procedure, Evidence, and Pleading	4-30	..	4-30	..	4-30
	FIFTH YEAR.					
69	(*b*) The Law of Property, & Principles of Conveyancing† ..	..	5-15	..	5-15	..
70	(*b*) Equity, Probate, Bankruptcy, and Company Law.. ..	..	4-15	..	4-15	..

‖ The first two years of the course are the same as in the Faculty of Arts.

Note.—Graduates in Arts who have not taken Law Subjects in their Third Year, and who propose to proceed to the Degree of LL.B. in two years, are required to take the courses marked (*a*) in their First Year, and those marked (*b*) in their Second Year.

† Certain additional lectures will be delivered on this subject, at such times as may be arranged.

OF LAW.

FOR 1898.

refer to the Synopses of Lectures on pp. 72-124.

Reference Number.	Trinity Term.					Michaelmas Term.				
	M.	Tu.	W.	Th.	F.	M.	Tu.	W.	Th.	F.
65	12-30	..	12-30	..	1-30	12-30	..	12-30	..	1-30
66	..	12-30	..	12-30	12-30	..	12-30	..	12-30	12-30
67	4-30	..	4-30	..	4-30	..	4-30	..	4-30	..
68	..	4-15	..	4-15	..	4-30	..	4-30	..	4-30
69	..	5-15	..	5-15	..	..	5-15	..	5-15	..
70	4-15	..	4-15	..	4-15	..	4-15	..	4-15	..

FACULTY OF

TIME TABLE

N.B.—The numbers in the left-hand column

Reference Number.	Subject.	Lent Term.				
		M.	Tu.	W.	Th.	Fri.
	FIRST YEAR.					
34-35	Biology	11	11	11	11	11
23-24	Chemistry (Inorganic)	12	12	..	12	12
19	Physics	..	..	..	..	..
39-40	Practical Biology	2-4	..	2-4	..	2-4
28	Practical Chemistry	..	..	..	..	..
22	*Practical Physics (Class A)	9-11	..	9-11	..	9-11
22	*Practical Physics (Class B)	..	..	..	..	..
	SECOND YEAR.					
41	Descriptive Anatomy	9	9	9	9	9
45	*Practical Physiology	..	..	..	..	..
44	Physiology (Junior)	12	12	12	12	12
25	Organic Chemistry	..	..	..	..	..
	THIRD YEAR.					
45	Practical Physiology	10-12	..	10-12	..	10-12
47	Materia Medica and Therapeutics	9	9	9	9	9
42	Regional Anatomy	12	12	12	12	12
44	Physiology (Senior)	..	..	..	..	..
	FOURTH YEAR.					
51	Pathology	11·45	11.45	11.45	11.45	11.45
49	Surgery	1·15	1.15	1.15	1.15	1.15
49	§ Operative Surgery	..	2.15	..	..	2.15
51	Practical Pathology	..	..	..	..	..
	Hospital, with Clinical and Tutorial Surgery	..	..	..	..	..
	FIFTH YEAR.					
50A	Midwifery	9	9	9	9	9
50B	Gynæcology (during first six weeks of Term)	..	..	..	..	..
52	Medical Jurisprudence & Public Health (last four weeks of Trinity Term)	..	..	..	..	..
48	Medicine	1	1	1	1	1
54	§ Ophthalmic Medicine and Surgery	2	..	2	..	..
53	§ Psychological Medicine	..	..	..	..	..
	§ Applied Logic	..	..	..	..	..
	Hospital, with Clinical and Tutorial Medicine	..	..	..	..	..

§ Until the Course is completed.

* Divided into two classes, A and B. Class A meets three times a week in Trinity Term, and twice a week in Michaelmas Term; and class B twice a week in Trinity Term, and three times a week in Michaelmas Term.

MEDICINE.

FOR 1898.

refer to the Synopses of Lectures on pp. 72-124.

Reference Number.	Trinity Term.					Michaelmas Term.				
	M.	Tu.	W.	Th.	Fri.	M.	Tu.	W.	Th.	Fri.
34-35	..	2	11	2	..	..	..	..	..	..
23-24	11	11	..	11	11	..	..	..	..	..
19	12	12	..	12	12	..	11	..	11	..
39-40	..	..	..	..	..	..	2-4	..	2-4	..
28	2-5	..	2-5	..	2-5	..	..	..	..	..
22	..	..	..	..	..	..	..	..	..	..
22	..	..	..	..	..	9-11	..	9-11	..	9-11
41	9	9	9	9	9	12	12	12	12	12
45	10-12	10-12	10-12	10-12	10-12	9-11	9-11	9-11	9-11	9-11
44	12	12	12	12	12	..	..	..	..	..
25	..	..	..	..	..	11	11	..	11	11
45	..	..	..	..	..	..	..	..	..	..
47	9	9	9	9	9	..	..	..	..	..
42	12	12	12	12	12	..	..	..	..	..
44	..	..	..	..	..	12	12	12	12	12
51	11.45	11.45	11.45	11.45	11.45	..	..	..	..	..
49	1.15	1.15	1.15	1.15	1.15	..	..	..	..	..
49	..	2.15	..	..	2.15	..	..	..	..	..
51	..	..	..	..	..	11.30	11.30	11.30	11.30	11.30
	..	..	..	..	..	..	..	..	..	..
50A	..	..	..	..	..	..	..	..	..	..
50B	9	9	9	9	9	..	..	..	..	..
52	9	9	9	9	9	9	9	9	9	9
48	1	1	1	1	1	..	..	..	..	..
54	..	..	..	..	..	..	..	..	..	..
53	..	..	..	..	..	..	2	..	2	..
	..	..	..	..	..	..	..	..	..	..
	..	..	..	..	..	..	..	..	..	..

FACULTY

TIME TABLE OF

N.B.—The numbers in the left-hand column

Reference Number.	Subject.	Lent Term. M.	Tu.	W.	Th.	F.
	FIRST YEAR.					
14	Mathematics	10	10	10	10	10
34-35	Biology	11	11	11	11	11
23-24	Chemistry (Inorganic)	12	12	..	12	12
19	Physics	..	..	..	..	..
39-40	Practical Biology	2-4	..	2-4	..	2-4
28	Practical Chemistry	..	..	..	..	..
22	Practical Physics	..	..	..	..	..
31	Physiography	..	..	..	..	..
	SECOND YEAR.					
14	Mathematics	9	9	9	9	9
20	Physics	..	10	..	10	..
36-38	Biology	..	10	..	10	..
25	Chemistry (Organic)	..	..	..	..	..
32	*Geology	..	11	..	11	..
45	Practical Physiology	..	..	..	..	..
44	Physiology	12	12	12	12	12
36-38	Practical Biology	..	2-5	..	2-5	..
22	Practical Physics	..	2-5	..	2-5	..
28	Practical Chemistry	2-5	..	2-5	..	2-5
	THIRD YEAR.					
33	*Geology and Palæontology ..	..	9	..	9	..
37	Biology	10	..	10	..	10
45	Practical Physiology	10-12	..	10-12	..	10-12
14	Mathematics	11	11	11	11	11
30	Mineralogy	..	..	..	..	..
26	Chemistry	..	..	11	..	..
44	Physiology	..	..	..	..	..
21	¶Physics	..	2	..	..	..
37	Practical Biology	2-5	..	2-5	..	2-5
28	¶Practical Chemistry	2-5	..	2-5	..	2-5

* Practical Work each week, as arranged. Excursions every third or fourth Saturday as arranged. ¶ Practical work at times to be arranged, but with a minimum of 15 hours per week.

OF SCIENCE.

LECTURES FOR 1898.

refer to the Synopses of Lectures on pp.72 -124.

Reference Number.	Trinity Term.					Michaelmas Term.				
	M.	Tu.	W.	Th.	F.	M.	Tu.	W.	Th.	F.
14	10	10	10	10	10	10	10	10	10	10
34-35	..	2	11	2	..	..	..	..	..	..
23-24	11	11	..	11	11	..	..	..	..	..
19	12	12	..	12	12	..	11	..	11	..
39-40	..	..	..	..	..	..	2-4	..	2-4	..
28	2-5	..	2-5	..	2-5	..	..	..	..	..
22	..	..	..	..	..	2-5	..	2-5	..	..
31	..	..	..	..	..	12	12	..	12	12
14	9	9	9	9	9	9	9	9	9	9
20	..	10	..	10	..	..	10	..	10	..
36-38	..	10	..	10	..	..	..	..	..	..
25	..	..	..	..	..	11	11	..	11	11
32	..	11	..	11	..	..	11	..	11	..
45	10-12	..	10-12	..	10-12	2-4	..	2-4	..	2-4
44	12	12	12	12	12	..	..	..	..	..
36-38	..	2-5	..	2-5	..	..	..	..	..	..
22	..	2-5	..	2-5	..	..	2-5	..	2-5	..
28	2-5	..	2-5	..	2-5	..	..	..	..	..
33	..	9	..	9	..	..	9	..	9	..
37	10	..	10	..	10	10	..	10	..	10
45	2-4	..	2-4	..	2-4	2-4	..	2-4	..	2-4
14	11	11	11	11	11	11	11	11	11	11
30	..	12	..	12	..	‡9-11	..	‡9-11	..	‡9-11
26	..	..	11	..	..	..	..	..	..	..
44	..	..	..	..	..	12	12	12	12	12
21	..	2	..	..	..	..	..	..	..	..
37	2-5	..	2-5	..	2-5	2-5	..	2-5	..	2-5
28	2-5	..	2-5	..	2-5	2-5	..	2-5	..	2-5

‡ Practical work.

DEPARTMENT OF
CIVIL AND
TIME TABLE

N.B.—The numbers in the left-hand column

Reference Number.	Subject.	Lent Term. M.	Tu.	W.	Th.	F.
	FIRST YEAR.					
14	Mathematics	10	10	10	10	10
56	Descriptive Geometry & Drawing	..	11	..	11	..
55	Applied Mechanics	11	..	11	..	11
23-24	Chemistry (Inorganic)	12	12	..	12	12
19	Physics	..	..	..	..	..
31	Physiography	..	..	..	..	..
28	Practical Chemistry	2-5	..	2-5	..	2-5
22	Practical Physics	..	..	..	..	..
61	Mechanical Drawing	..	2-5	..	2-5	..
	SECOND YEAR.					
14	Mathematics	9	9	9	9	9
57	Applied Mechanics	10	..	10	..	10
20-22	Physics and Practical Physics	..	10	..	10	..
32	†Geology	..	11	..	11	..
62	Surveying	..	12	..	12	..
61	Mechanical Drawing	2-5	..	2-5	..	2-5
	THIRD YEAR.					
14	Mathematics	11	11	11	11	11
59	Civil Engineering—Materials and Structures	..	12	..	12	..
58	Civil Engineering	12	..	12	..	12
61	Mechanical Drawing and Design	2-5	2-5	2-5	2-5	2-5
60	Mechanical Engineering, &c.	..	..	..	..	..
63	Architecture—Building Construction	..	..	..	..	..
63	Architecture—History of	..	..	..	..	..
30-31	‡Mineralogy (Optional)	..	..	..	..	..
62	Surveying	..	..	..	..	..

† Practical work each week, as arranged. Excursions every third or fourth Saturday, as arranged. ‡ At times to be arranged.

ENGINEERING.

MECHANICAL.

FOR 1898.

refer to the Synopses of Lectures on pp. 72-124.

Reference Number.	Trinity Term.					Michaelmas Term.				
	M.	Tu.	W.	Th.	F.	M.	Tu.	W.	Th.	F.
14	10	10	10	10	10	10	10	10	10	10
56	..	..	11	..	9	..	..	..	..	..
55	..	..	..	..	..	..	..	..	..	..
23-24	11	11	..	11	11	..	..	..	..	..
19	12	12	..	12	12	..	11	..	11	..
31	..	..	..	..	..	12	12	..	12	12
28	..	..	..	..	..	2-5	..	2-5	..	2-5
22	2-5	..	2-5	..	..	..	..	..	..	..
61	..	2-5	..	2-5	..	..	2-5	..	2-5	..
14	9	9	9	9	9	9	9	9	9	9
57	11	..	11	..	11	..	..	..	..	..
20-22	..	10 *2-5	..	10 *2-5	..	..	10	..	10	..
32	..	11	..	11	..	..	11	..	11	..
62	10	..	10	..	10	..	..	..	..	..
61	2-5	..	2-5	..	2-5	2-5	..	2-5	..	2-5
14	11	11	11	11	11	11	11	11	11	11
59	..	10	10	10	..	..	..	..	..	..
58	12	..	12	..	12	..	..	..	..	..
61	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5
60	..	..	..	..	..	..	..	..	..	..
63	..	..	..	..	..	..	3	..	..	3
63	..	..	..	..	..	..	4	..	..	4
30-31	..	..	..	..	..	..	..	..	..	..
62	..	..	..	..	..	..	12	12	..	12

* Laboratory practice

DEPARTMENT OF

MINING AND

TIME TABLE

N.B.—The numbers in the left-hand column

Reference Number.	Subject.	Lent Term.				
		M.	Tu.	W.	Th.	F.
	FIRST YEAR.					
14	Mathematics	10	10	10	10	10
56	Descriptive Geometry and Drawing	..	11	..	11	..
55	Applied Mechanics	11	..	11	..	11
23-24	Chemistry (Inorganic)	12	12	..	12	12
31	Physiography	..	..	..	..	..
19	Physics	..	..	..	..	..
28	Practical Chemistry	2-5	..	2-5	..	2-5
22	Practical Physics	..	..	..	..	..
61	Mechanical Drawing	..	2-5	..	2-5	..
	SECOND YEAR.					
14	Mathematics	9	9	9	9	9
32	†Geology, &c.	..	11	..	11	..
57	Applied Mechanics	10	..	10	..	10
61	*Drawing	..	..	..	..	..
62	Surveying	..	12	..	12	..
58	Civil Engineering	12	..	12	..	12
30	Mineralogy	..	..	..	..	..
28	Chemistry (Quantitative Analysis)	2-5	2-5	2-5	2-5	2-5
	THIRD YEAR.					
28	Assaying	9-4	9-4	9-4	9-4	9-4
62	Surveying	..	..	..	..	..
58	Civil Engineering	12	..	12	..	12
59	Materials and Structures	..	12	..	12	..
64	Mining	4	..	4	..	4
27	Metallurgy	..	4	..	4	..
61	‡Drawing	..	..	..	..	..

* At times to be arranged. † Practical work as arranged. ‡ On Saturdays from 9-1.

ENGINEERING.

METALLURGY.

FOR 1898.

refer to the Synopses of Lectures on pp. 72-124.

REFERENCE NUMBER.	TRINITY TERM.					MICHAELMAS TERM.				
	M.	Tu.	W.	Th.	F.	M.	Tu.	W.	Th.	F.
14	10	10	10	10	10	10	10	10	10	10
56	..	..	11	..	9	..	..	..	..	..
55	..	..	..	..	..	..	..	..	..	..
23-24	11	11	..	11	11	..	..	..	..	..
31	..	..	..	..	..	12	12	..	12	12
19	12	12	..	12	12	..	11	..	11	..
28	..	2-5	..	2-5	..	2-5	..	2-5	..	2-5
22	2-5	..	2-5	..	..	..	..	..	..	..
61	..	..	..	..	2-5	..	2-5	..	2-5	..
14	9	9	9	9	9	9	9	9	9	9
32	..	11	..	11	..	..	11	..	11	..
57	11	..	11	..	11	9-11	..	9-11	..	9-11
61	..	..	..	..	..	..	..	..	..	..
62	10	..	10	..	10	..	..	..	..	..
58	12	..	12	..	12	..	..	..	..	..
30	..	12	..	12	..	11-1	..	11-1	..	11-1
28	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5
28	9-4	9-4	9-4	9-4	9-4	..	10-5	..	10-5	..
62	..	..	..	..	..	..	..	11	..	..
58	..	..	..	..	..	..	..	..	..	..
59	..	..	..	..	..	..	..	..	..	..
64	4	..	4	..	..	..	..	..	..	..
27	..	4	..	4	4	..	..	..	..	..
61	..	..	..	..	..	..	..	..	..	..

FACULTY OF ARTS.—EVENING LECTURES.

*TIME TABLE FOR 1898.

N.B.—The numbers in the left-hand column refer to the Synopses of Lectures on pp. 72-124.

Reference Number.	Subject.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
	FIRST YEAR.					
1	Latin	7	..	..	8	8
4	Greek, as arranged	..	..	..	..	..
7	French (Junior)	..	8	8	..	..
14	Mathematics	8	7	..	..	7
11	English	9	..	..	..	..
	‖ Physics	..	6	..	..	..
	‖ Physiography	..	..	..	6	..
	SECOND YEAR.					
16	Logic and Mental Philosophy	..	7	8	7	..
2	Latin	8	..	..	..	7 & 9
5	Greek, as arranged	..	..	..	..	..
17	History	7	8	..	8	..
8	French (Senior)	..	9	7	..	8
14	Mathematics, as arranged	..	..	..	..	..
12	English	7	..	9	9	..
	‖ Physics	..	6	..	..	..
	‖ Physiography	..	..	..	6	..
	THIRD YEAR.					
3	Latin	9	..	..	9	9
6	Greek	..	9	7	..	..
14	Mathematics, as arranged	..	..	..	..	..
8	French (Senior)	..	9	7	..	8
13	English	8	..	9	..	7
16	Logic and Mental Philosophy	..	7	8	7	..
17	History	7	8	..	8	..

* This time table is subject to alteration.
‖ Chemistry and Physics and Physiography are taken in alternate years.

LECTURE SUBJECTS FOR 1898.

LECTURES.

THE following regulations have been passed by the Senate:—

NON-MATRICULATED STUDENTS.

It shall be open to any non-matriculated student, who has attended the full courses of lectures upon any subject, to compete for honours or pass in the regular examinations upon his subject, and to have his name published and recorded in the regular class lists, with a distinguishing mark; but he shall be incapable of holding any scholarship or receiving any prize of those already established for students proceeding to a Degree.

Each such student shall be entitled to receive a certificate of attendance upon the lectures or laboratory practice in the subjects which he has selected, and proficiency therein, as ascertained by the regular and ordinary examinations within the University.

The above regulations do not apply to the lectures and examinations in the Faculty of Medicine.

The following regulation has been adopted by the Faculty of Science:—"There shall be only one standard for Honours in Scientific subjects, viz., that adopted in the Faculty of Science."

N.B.—The numbers refer to the Time Tables of Lectures on pages 60-72.

CLASSICS AND MODERN LANGUAGES.

Subjects selected for Lectures and Examinations:—

LATIN—1898.

1.—*First Year, Pass.*—Cicero pro Milone, and pro Archia; Virgil, Æneid XI., XII. *Add. for Honours.*—Cicero de Claris Oratoribus; Virgil, Æneid VII., VIII., IX., X. Roman History to the Tribunate of Tib. Gracchus.

2.—*Second Year, Pass.*—Sallust, Jugurtha; Horace, Odes II., III. and IV. *Add. for Honours.*—Tyrrell's Cicero's Letters, Vol. I.; Catullus (selections); Terence, Phormio. *Pass and Honours.*—Roman History from the Tribunate of Tib. Gracchus to the battle of Actium.

3.--*Third Year, Pass.*—Tacitus, Annals I. and II.; Juvenal (selections); Pliny, Selected Letters (Clarendon Press). *Add. for Honours.*—Tacitus, Annals III., IV., V., VI.; Lucretius (selections); Lucan (selections). *Pass and Honours.*—Roman History from the battle of Actium to the death of Marcus Aurelius.

LATIN.—1899.

First Year, Pass.—Cicero pro Sestio; Virgil, Æneid V., VI. *Add. for Honours.*—Tacitus, Agricola and Dialogus de Oratoribus; Virgil, Æneid I., II., III., IV. Roman History to the Tribunate of Tib. Gracchus.

Second Year, Pass.—Cicero in his Letters (Tyrrell); Horace, Satires (selections). *Add. for Honours.*—Cicero, Philippics, I. to VII.; Plautus, Captivi and Trinummus. *Pass and Honours.*—Roman History from the Tribunate of Tib. Gracchus to the battle of Actium.

Third Year, Pass.—Tacitus, Histories III. and IV.; Lucretius, Book V.; Martial, Select Epigrams, Stephenson, Books, I. to X. *Add. for Honours.*—Tacitus, Histories I., II., V.; Lucretius I. and II.; Horace, Epistles. *Pass and Honours.*—Roman History from the battle of Actium to the death of Marcus Aurelius.

GREEK.

There will be three classes in Greek—Preliminary, Junior, and Senior.

Students of the First Year may attend either the Preliminary or the Junior Class; but candidates for Honours in the First Year must attend the Junior Class.

Students of the Second Year may attend either the Junior or the Senior Class; but those who have attended the Junior Class in their First Year, and candidates for Honours in the Second Year, must attend the Senior Class.

Students of the Third Year must attend the Senior Class.

Students of all years will be required to translate at sight from Greek into English. Those who attend the Preliminary Class, and candidates for Honours in all years, will be required to translate at sight from English into Greek.

GREEK—1898.

4.—*Preliminary Class.*—Demosthenes, De Pace, 2nd and 3rd Philippics, and De Chersoneso (*Abbott & Matheson*, Oxford); Euripides, Heracleidæ (*Jerram*, Oxford).

5.—*Junior Class.*—Thucydides, Books I. and II.; Sophocles, Oedipus Tyrannus and Philoctetes; Greek History to B.C. 404.

6.—*Senior Class.*—Aristotle, Politics (selections); Æschylus, Prometheus Vinctus; Sophocles, Oedipus Tyrannus; History of Greek Moral and Political Theory.

Additional for Third Year Honours.—Aristotle, Politics (the whole); Euripides, Ion and Phoenissae; Aristophanes, Clouds and Frogs (*Merry*, Oxford).

GREEK—1899.

Preliminary Class.—Herodotus, Book VIII. (*Shuckburgh*, Cambridge); Euripides, Alcestis (*Jerram*, Oxford).

Junior Class.—Thucydides, Books IV. and V.; Æschylus, Prometheus Vinctus; Sophocles, Ajax; Greek History to B.C. 404.

Senior Class.—Plato, Republic (selections); Homer, Iliad (selections); History of Greek Literature.

For Third Year Honours.—Plato, Republic; and Homer, Iliad (the whole); History of Greek Literature.

CLASSICS.

BOOKS RECOMMENDED*—

Lewis and Short's Latin Dictionary (Clarendon Press).
Roby's Latin Grammar (Macmillan).
Gildersleeve and Lodge's Latin Grammar.
Liddell and Scott's Greek Lexicon.
Goodwin's or Hadley and Allen's Greek Grammar.
Comparative Grammar of Greek and Latin, by Victor Henry, translated by R. T. Elliott: or, Giles' Manual of Comparative Philology for Classical Students (Macmillan).

Elementary—

Roby's Smaller Latin Grammar; The New Latin Primer, Postgate and Vince (Cassell); The Revised Latin Primer, Kennedy (Longmans); or any other Latin Grammar of similar character.
Rutherford's First Greek Grammar.
A Sidgwick's First Greek Writer.
Thompson Syntax of Attic Greek.
Gow's Companion to School Classics (Macmillan). (A handbook of Greek and Roman Antiquities).

* Students are strongly recommended to order as early as possible all books that will be needed in the course of the year.

ANCIENT HISTORY—

Mommsen's History of Rome, translated by Dickson (Bentley).
Mommsen, the Provinces under the Roman Empire.
Merrivale's History of the Romans under the Empire.
Shuckburgh's History of Rome (Macmillan).
How and Leigh's History of Rome (Longmans).
Pelham's Outlines of Roman History.
Cape's Early Roman Empire, and Age of the Antonines (Epochs of Ancient History, Longmans).
Strachan-Davidson, Cicero. Warde Fowler, Julius Cæsar.
Grote's History of Greece.
Students' History of Greece, by Smith (Murray), or Oman's History of Greece (Rivingtons).
Cox, The Greeks and Persians; Cox, The Athenian Empire; Sankey, The Spartan and Theban Supremacies (Epochs of Ancient History, Longmans).
Abbott, Pericles.

ANCIENT ATLAS—

Atlas Antiquus, *Kiepert* (Berlin).

GREEK AND ROMAN LITERATURE—

History of Ancient Greek Literature, *Murray* or *Mahaffy*.
Teuffel's History of Roman Literature, translated by *Warre* (Bell).
History of Roman Literature, *Cruttwell*, or History of Latin Literature, *Simcox*.
Studies of the Greek Poets, first and second series, *Symonds*.
Roman Poets of the Republic, *Sellar*.
Roman Poets of the Augustan Age, *Sellar*.
Mackail's Latin Literature.
Classical Writers' Series, ed. *J. R. Green* (Macmillan); Sophocles, *Campbell*; Euripides, *Mahaffy*; Demosthenes, *Butcher*.
Guide to Greek Tragedy, *Campbell* (Percival).

Editions of Latin Authors.

FOR PASS STUDENTS:

Cicero, 2nd Philippic, *J. E. B. Mayor* (Macmillan); pro Milone, *Reid* (Cambridge), or *Colson* (Macmillan); pro Sestio, *Holden* (Macmillan), pro Murena, *Heitland* (Cambridge); in Catilinam, *Wilkins* (Macmillan); pro Lege Manilia, *Wilkins* (Macmillan); pro Roscio Amerino, *Donkin* (Macmillan); pro Archia, *Reid* (Cambridge); Selected Letters, *Tyrrell* (Macmillan).
Horace, Odes, *Wickham*, Smaller edition, or *Page* (Macmillan); Satires, *Palmer* (Macmillan); Epistles, *Wilkins* (Macmillan); Verse Translation, *Conington* (Bell).
Juvenal, *Pearson and Strong* (Oxford), or *Hardy* (Macmillan).
Livy (text, in 8 parts, sold separately) *Madvig*; Books XXI., XXII. (text and notes), *Capes* (Macmillan); Book XXVI, *Nicholls* (Angus & Robertson, Sydney); Book XXVII., *Stephenson* (Pitt Press).
Lucretius, Book V., *Duff* (Cambridge).

Pliny, Selected Letters, *Prichard & Bernard* (Clarendon Press).
Sallust, *Capes* (Oxford), or Catilina, *Cook* (Macmillan).
Martial, Select Epigrams, *Stephenson* (Macmillan).
Tacitus, Annals, Books I. to IV., *Furneaux's* abridged edition: Histories, Books I., II., III., IV., V., *Godley* (Macmillan); or *Simcox* (Rivington).
Virgil, *abridgment of Conington* (Bell), or *Sidgwick* (each book sold separately, Cambridge), or Æneid, I.-VI., *Page* (Macmillan).

FOR STUDENTS READING FOR HONOURS—

Cicero, de Finibus (Critical edition, Latin Notes), *Madvig*; Letters (select), *Watson* (Oxford); Letters, *Tyrrell* (Longmans); Philippics, *King* (Oxford); de Oratore, *Wilkins* (Oxford); de Claris Oratoribus (text and German Notes), *Jahn* or *Piderit*, or *Kellogg* (Ginn & Co.); Orator, *Sandys* (Cambridge).
Catullus, *Ellis* (Oxford), or *Simpson* (Macmillan).
Horace, Odes, Satires and Epistles, *Orelli* (Latin Notes), or *Wickham* (Oxford); or Satires, *Palmer* (Macmillan); Epistles, *Wilkins* (Macmillan).
Juvenal, *Mayor* (Macmillan).
Lucan, *Haskins* (Bell).
Lucretius, *Munro* (Bell).
Persius, *Conington* (Oxford).
Plautus, Captivi *Sonnenschein*, or *Hallidie* (Macmillan); Trinummus, *Wagner* or *Lindsay*; Text, *Ritschl.*
Quintilian, Book X., *Peterson* (Clarendon Press).
Tacitus, Annals, I.-VI., *Furneaux*, larger edition (Oxford); Histories, *Spooner* (Macmillan); Germania and Agricola *Church and Brodribb* (Macmillan), or *Kritz* (Latin Notes): Dialogus de Oratoribus, *Gudeman* (Ginn & Co.), or *Peterson* (Oxford).
Terence, *Wagner* (Bell); Phormio, *Bond and Walpole* (Macmillan).
Virgil, *Conington* (Bell).

Editions of Greek Authors.

Æschylus, Agamemnon, Choephori and Eumenides, *Sidgwick* (Oxford); Prometheus Vinctus, *Prickard* (Oxford), or *Glazebrook* (Longmans).
Aristophanes, Clouds, Birds, Acharnians, Frogs, and Knights, *Merry* (Oxford).
Aristotle, Ethics (text), *Bywater* (Oxford); (notes), *Stewart* (Oxford); Ethics (text and notes), *Grant* (Longmans).
Aristotle, Politics (text), *Bekker* (Berlin); (commentary), *Newman* (Oxford); (translation and notes), *Jowett* (Oxford); (text and translation of Books I., III., and IV.), *Bolland and Lang* (Longmans).
Aristotle, Poetics, *Butcher* (Macmillian).
Demosthenes, Orations against Philip, *Abbott and Matheson* (Oxford); (Vol. I. contains Phil. I. and Olynth. I. to III. Vol. II. contains De Pace, Phil. II., De Chers., and Phil. III.). De Corona, *Holmes* (Rivingtons); De Falsa Legatione, *Shilleto* (Cambridge).

Euripides Ion., Helena, Iph. in Taur., Heracleidæ, *Jerram* (Oxford), Iph. in Aul., *Headlam* (Cambridge); Hippolytus, *Hadley* (Cambridge); Medea, *Heberden* (Oxford); or *Glazebrook* (Rivingtons); Alcestis, *Jerram* (Oxford), or *Earle* (Macmillan); Bacchae, *Tyrrell* (Macmillan); Hecuba, *Hadley*, (Cambridge); Orestes, *Wedd* (Cambridge); Troades, *Tyrrell* (Dublin); Phoenissae, *Paley* (Bell).

Herodotus (text), *Dietsch* (Trubner); Book V., *Shuckburgh* (Cambridge); Book VI., *Strachan* (Macmillan); VII., *Butler* (Macmillan); VIII., 1-90, *Shuckburgh* (Cambridge); IX., *Abbott* (Oxford). Translation and notes. *Rawlinson* (Murray).

Homer, Iliad, *Monro* (Oxford); or *Leaf* (Macmillan); The Story of Achilles from Homer's Iliad (Iliad Books, 1, 9, 11 and 16 to 24), by *Pratt and Leaf* (Macmillan); Odyssey, *Merry* (Oxford). Introduction to Homer, *Jebb* (Maclehose, Glasgow); Homer and the Epic, *A. Lang* (Longmans); Companion to the Iliad, *Leaf* (Macmillan); Homeric Grammar, *Monro* (Oxford).

Pindar, Olympian and Pythian Odes, *Gildersleeve* (Macmillan); Nemean and Isthmian Odes, *Fennell* (Cambridge).

Plato, Protagoras, *Wayte* (Bell); Gorgias, *Thompson* (Bell), or *Lodge* (Ginn); Apologia, Meno, *St. George Stock* (Oxford); Apologia, Crito, *Adam* (Cambridge); Laches, *Tatham* (Macmillan); Phædo, *Archer-Hind* (Macmillan); Republic (text), *Baiter*; Companion to Plato's Republic, *Bosanquet* (Rivington and Percival); Theaetetus, *Campbell*; Ion and Hippias Major, *G. Smith* (Rivington). Translations of, and introductions to, all the Dialogues, *Jowett* (Oxford).

Sophocles in single plays, *Jebb* (Rivingtons), or *Campbell and Abbott* (Oxford).

Thucydides (text), *Stahl* (Tauchnitz); (text and notes), *Classen* (German), or *Poppo* (Ed. Minor, Latin); Book II., *Marchant* (Macmillan); Books IV. and V., *Graves* (Macmillan); Book VII., *Holden* (Cambridge); Books VI., VII., *Frost* (Macmillan); Book VIII., *Tucker* (Macmillan); (Translation and Notes), *Jowett* (Oxford).

Lyric and Elegiac Poets, *Anthologia Lyrica* (Trubner).

FRENCH.

Students in Arts may take the Junior French course in their First Year, and the Senior French course in their Second Year; but students who have already passed in the Senior course in their Second Year may, if the time table permit, take a second Senior Course in their Third Year, along with such additional work as may be prescribed.

FRENCH—1898.

7.—*Junior Course, Pass.*—Composition: Roulier; Ponsard, Le Lion Amoureux (*Hachette*); Balzac, Ursule Mirouët (*Whittaker*);

Scribe, La Camaraderie (*Hachette*). *Add. for Honours.*—Lamartine, Jocelyn (*Hachette*); Lemercier, Fredegonde et Brunehaut (*Pitt Press*); French Historical Grammar.

8.—*Senior Course, Pass.*—Composition: Roulier; Literature of 19th Century; Lamartine, Jocelyn; Lemercier, Fredegonde et Brunehaut; Sainte-Beuve Causeries du Lundi, Vol. II.—(*Garnier*); Scribe et Legouvé, Adrienne Lecouvreur (*Hachette*); Michaud, Histoire de la première croisade (*Hachette*). *Add. for Third Year Students.*—O. Feuillet, Roman d'un jeune homme pauvre (*Hachette*). *Add. for Honours.*—Literature of 16th Century; Darmesteter et Hatzfeld Le XVI.^{e} siècle; Montaigne, Extraits, ed. Julleville (*Delagrave*).

FRENCH—1899.

Junior Course, Pass.—Composition: Roulier; Corneille, Horace (*Hachette*); La Fontaine, Fables (*Bell*); Molière Fourberies de Scapin (*Hachette*). *Add. for Honours.*—French Historical Grammar; La Bruyère, Caracterès (*Hachette*); Molière, Les Fâcheux (*Bibliotheque Nationale, Paris*).

Senior Course, Pass.—Composition: Roulier; Literature of the 17th Century, Racine, Athalie (*Clar. Press*); Boileau, Satires (*Hachette*); Molière, Misanthrope (*Hachette* or *Clar. Press*); La Fayette, Princesse de Clèves (*Marpon et Flammarion*); La Bruyère, Caracterès (*Hachette*). *Add. for Third Year Students.*—Sévigné, Lettres Choisies (*Hachette*). *Add. for Honours.*—Early French Literature; Toynbee, Specimens of Old French (*Clar. Press*).

GERMAN.

Regulations similar to those in force for the French classes hold good for the German classes, with the further proviso that, if the time table permit, students who have not taken the Junior course in German in their First Year may take it in their Second, and the Senior course in their Third Year.

GERMAN—1898.

9.—*Junior Course, Pass.*—Composition: Buchheim's Materials; Freytag, Soll und Haben (*Whittaker*); Mendelssohn's Letters (*Pitt Press*). *Add. for Honours.* — Heine, Romantische Schule; Chamisso, Gedichte (*Reklam*); German Historical Grammar.

10.—*Senior Course, Pass.*—Composition: Buchheim's Materials; Literature of the 19th Century; Goethe, Faust, Part II.; Heine, Romantische Schule; Chamisso, Gedichte; Freytag, Die Journalisten (*Whittaker*). *Add. for Third Year Students.*—Immer-

mann, Der Oberhof (*Pitt Press*). *Add. for Honours.*—Literature of the 16th Century; Hans Sachs, Vol. II. Goedeke and Tittmann (*Brockhaus*); A. Gryphius, Dramatische Werke, Goedeke and Tittmann.

GERMAN—1899.

Junior Course, Pass.—Composition: Buchheim's Materials; Kleist, Prinz von Homburg (*Reklam*); Heine, Lieder und Gedichte (*Macmillan*). *Add. for Honours.*—Schiller, Braut von Messina (*Nutt*); Heinrich Stilling's Jugend, etc. (*Spemann*); German Historical Grammar.

Senior Course, Pass.—Composition: Buchheim's Materials; Lessing, Hamb. Dramaturgie (*Hachette*); Goethe, Hermann und Dorothea (*Pitt Press*); Schiller, Braut von Messina (*Nutt*); Heinrich Stilling's Jugend, etc. (*Spemann*). *Add. for Third Year Students.*—Schiller and Goethe, Correspondance (*Hachette*). *Add. for Honours.*—Early German Literature; Bachmann, Mittelhochdeutsches Lesebuch (*Höhr, Zurich*).

ENGLISH—1898.

11.—*First Year.*—Lectures on English Language, Composition and Style. Sweet's Selections from Chaucer (Second Middle English Primer. *Clarendon Press*). Shakespeare, Richard II. (*Clarendon Press*).

12.—*Second Year.*—History of Literature from Chaucer to Milton, with special reference to the Elizabethan Drama. *Set Books:* Selections from Chaucer's Canterbury Tales, ed. Corson (*Macmillan*). More, History of King Richard III. (*Pitt Press*). Marlowe, Edward II. (*Clarendon Press*). Shakespeare, Henry VI., Parts I., II. and III. (*Cassell's National Library*); Richard III. (*Clarendon Press*). Bacon, Henry VII. (*Pitt Press*). Ford. Perkin Warbeck, ed. Pickburn and Brereton (*Geo. Robertson*), *Add. for Honours.*—Cook's First Book in Old English (*Ginn & Co.*). Corson's Selections from Chaucer's Canterbury Tales (whole book). Pollard's Miracle Plays (*Clarendon Press*).

13.—*Third Year.*—History of Literature in the 19th Century. Special books to be named hereafter. Lectures on the Foreign Influences that have affected English Literature. Shakespeare's Histories. *Add. for Honours.*—Caedmon's Exodus and Daniel (Vol. II., Library of A. S. Poetry. *Ginn & Co.*). Cynewulf's Elene (Vol. VI., Library of A. S. Poetry. *Ginn & Co.*). Old and Middle English Reader (Maclean, *Macmillan*).

ENGLISH—1899.

First Year.—Lectures on English Language, Composition and Style. Chaucer, Prologue to the Canterbury Tales (*Clarendon Press*). Shakespeare, Hamlet (*Clarendon Press*).

Second Year.—History of Literature from Chaucer to Milton, with special reference to the Stuart Drama. *Set Books:* Selections from Chaucer's Canterbury Tales, ed. Corson (*Macmillan*). Life of Doctor Faustus, Mediæval Tales (*Morley's Universal Library*). Marlowe, Faustus (*Clarendon Press*). Shakespeare's Plutarch, ed. Skeat (*Macmillan*). Shakespeare's Coriolanus and Julius Cæsar (*Clarendon Press*). Antony and Cleopatra (*Macmillan*). Ben Jonson, Timber (*Ginn & Co.*)

Additional for Honours.—Cook, First Book of Old English; Corson's Selections from Chaucer's Canterbury Tales (whole book). Skeat: Specimens of English Literature, from the Ploughman's Crede (*Clarendon Press*).

Third Year.—History of Literature from Dryden to Burke. Lectures on the Foreign Influences that have affected English Literature. *Set Books:* Shakespeare's Tragedies. Dryden, Select Poems (*Clarendon Press*). Swift, Selections, Vol. I. (*Clarendon Press*). Goldsmith, Vicar of Wakefield. Collins, Poems. Burke, Speeches (*Macmillan*).

Additional for Honours.—Beowulf (*Ginn & Co.*). Maclean, Old and Middle English Reader (*Macmillan*).

14. MATHEMATICS.*

Engineering and Science students during their First Year must attend either the lectures prescribed for Class A or B of the First Year in Arts; and during their Second and Third Years must attend the prescribed lectures in Statics and Dynamics, Differential Calculus, Integral Calculus and Spherical Trigonometry.

All students attending lectures must present themselves at the class examinations as under—

AT THE END OF LENT TERM.

First Year in Arts and Science	Geometry.
Second Year in Arts	Logarithms and Trigonometry.
Second Year in Science	Differential Calculus.
Third Year in Arts..	(i.) Differential Calculus. (ii.) Spherical Trigonometry.

* The lecture subjects for evening students in Mathematics are the same as those prescribed for day students of corresponding standing in the University.

AT THE END OF TRINITY TERM.

First Year in Arts and Science	Algebra.
Second Year in Science	Integral Calculus.
Third Year in Arts	(i.) Integral Calculus. (ii.) Astronomy.

Students who pass in a class examination will not be re-examined in the same subject at the Yearly Examination in December. Those who fail to pass will be re-examined, except in cases of bad failure, when the Faculty may refuse the Student permission to present himself in December.

The Deferred Examination, hitherto held in March, will be abolished as far as Mathematics is concerned, unless in very exceptional cases.

In no case will a third examination be allowed in any subject.

FIRST YEAR IN ARTS.

The students of the First Year in Arts may attend any one of the three courses specified below.

FIRST YEAR—CLASS A.

Mondays, Tuesdays, Wednesdays and Thursdays, at 10 a.m. throughout the year, as follows:—

LENT TERM.—*Geometry* (*Tu.*, *Th.*)—Euclid Books I.-IV., VI. and XI., with exercises and other theorems and problems relating to rectilinear figures and circles, poles and polars for the circle, anharmonic ratio, the sphere, cylinder, cone and regular polyhedra. *Algebra* (*M.*, *W.*)—Surds, indices, complex quantities, scales of notation, permutations and combinations, binomial, multinomial, and exponential theorems, logarithms, interest, annuities, series, continued fractions, inequalities, properties of numbers, probabilities, determinants.

TRINITY TERM.—*Geometrical Conics* (*Tu.*, *Th.*)—Parabola, ellipse, hyperbola, focus, and directrix, tangent and normal, conjugate diameters, poles and polars, asymptotes, orthogonal projection. *Trigonometry* (*M.*, *W.*)—Measurement of angles, formulæ, identities, equations, logarithmic tables, solution of triangles, heights and distances, properties of triangles, Demoivre's theorem, expansion of sine and cosine in series and in factors, summation of series, proportional differences.

MICHAELMAS TERM.—*Analytical Geometry* (*Tu.*, *Th.*)—Co-ordinates rectilinear and polar, the straight line, the circle,

parabola, ellipse, hyperbola, tangent, normal, eccentric angle, diameters, asymptotes. *Differential Calculus* (*M.*, *W.*)—Limits, differentiation, successive differentiation, Taylor's theorem, tangent and normal, maxima and minima.

FIRST YEAR—CLASS B.

Tuesdays, Thursdays and Fridays, at 10 a.m. throughout the year, as follows:—

LENT TERM.—*Algebra* (*F.*)—Up to quadratic equations of two and three unknown quantities, and corresponding problems. *Geometry* (*Tu.*, *Th.*)—Euclid, Books I.-IV., VI. and XI., with exercises and other theorems and problems relating to rectilinear figures and circles.

TRINITY TERM.—*Algebra and Trigonometry* (*Tu.*, *Th.*)—*Algebra*—Up to the binomial theorem. *Trigonometry*—Measurement of angles, trigonometrical ratios, formulæ for one or two angles, easy equations and identities. *Geometrical Conics* (*F.*)—Parabola, ellipse, focus and directrix, tangent and normal.

MICHAELMAS TERM.—*Trigonometry* (*M.*, *W.*)—Logarithms and logarithmic series, triangles, heights and distances. *Analytical Geometry* (*F.*)—Coordinates rectilinear and polar, the straight line, the circle.

FIRST YEAR—CLASS C.

Mondays, Wednesdays and Fridays, at 10 a.m , throughout the year, as follows:—

LENT TERM.—*Geometry* (*M.*, *W.*)—Euclid, Book IV., with definitions of Books V. and VI., and propositions 1-4, 7-13, 19, 20, 23, 24, 33 of Book VI., easy exercises, geometrical constructions, and mensuration of lines and surfaces. *Algebra* (*F.*)—Up to quadratic equations of two and three unknown quantities, and corresponding problems.

TRINITY TERM.—*Algebra* (*M.*, *W.*,)—Surds, fractional indices, ratio, proportion, variation, the three progressions. *Trigonometry* (*Fri.*)—Measurement of angles, trigonometrical ratios, formulæ for one and two angles, easy equations and identities.

MICHAELMAS TERM.—*Trigonometry* (*Tu.*, *Th.*, *F.*)—Formulæ relating to triangles, numerical solution of triangles in simple cases without logarithms.

SECOND YEAR IN ARTS.

Students of the Second Year in Arts may attend any one of the three courses specified below.

SECOND YEAR—CLASS A.

Mondays, Tuesdays, Wednesdays and Thursdays, at 9 a.m., throughout the year, as follows:—

LENT TERM.—*Analytical Geometry* (*M.*, *W.*)—Poles and polars, asymptotes, general equation of the second degree, similar conics, confocal conics, reciprocal polars, orthogonal and conical projection, anharmonic ratio, abridged notation. *Differential Calculus* (*Tu.*, *Th.*)—Differentiation, Taylor's and Maclaurin's theorems, successive and partial differentiation, indeterminate forms.

TRINITY TERM.—*Differential Calculus* (*M.*, *W.*)—Change of variables, maxima and minima, elimination of functions, curves, tangents, asymptotes, curvature, evolutes, involutes, singular points, curve tracing. *Statics* (*Tu.*, *Th.*)—Components and resultants, moments, conditions of equilibrium, stability, friction, elastic strings, elementary machines, virtual displacements.

MICHAELMAS TERM.—*Dynamics* (*M.*, *W.*)—Uniform velocity, uniform acceleration, laws of motion, projectiles, collision, motion on a curve, the cycloid, the pendulum, harmonic vibration, Central forces, moments of inertia, translation and rotation of rigid bodies. *Integral Calculus* (*Tu.*, *Th.*)—Integration, reduction formulæ, lengths of curves, areas of curves, volumes of solids, involutes, evolutes, definite integrals, differentiation of an integral, mean values and probability.

SECOND YEAR—CLASS B.

Tuesdays, Thursdays, and Fridays, at 9 a.m., throughout the year, as follows:—

LENT TERM.—*Differential Calculus* (*Tu.*, *Th.*, *Fri.*)—Limits, Differentiation, Taylor's theorem, maxima and minima, curve tracing.

TRINITY TERM.—*Integral Calculus* (*Tu.*, *Th.*)—Integration, areas, lengths of curves, surfaces and volumes of solids of revolution.

TRINITY TERM.—(*F.*), and MICHAELMAS TERM (*Tu.*, *Th.*, *F.*)—*Statics and Dynamics*—Components and resultants, moments, couples, centre of gravity, friction, elementary machines, uniform velocity and acceleration, laws of motion, collision, projectiles, harmonic vibration, energy, moments of inertia, translation and rotation of rigid bodies.

SECOND YEAR—CLASS C.

Mondays, Wednesdays and Fridays throughout the year, as follows:—

LENT TERM.—*Logarithms and Trigonometry* (*M.*, *W.*, *F.*)—Preliminary theorems, use of tables, arithmetical applications, interest, discount, annuities, solution of triangles, heights and distances, properties of triangles.

TRINITY TERM.—*Statics* (*M.*, *W.*, *F.*)—Components and resultants, moments, couples, centre of gravity, elementary machines.

MICHAELMAS TERM.—*Hydrostatics* (*M.*, *W.*, *F.*)—Fluid pressure, floating bodies, specific gravity, pressure of a gas, pressure of the atmosphere, elementary machines.

THIRD YEAR IN ARTS.

Students of the Third Year may attend either of the two courses specified below.

THIRD YEAR—CLASS A.

At 11 a.m. daily throughout the year, as follows:—

LENT TERM.—*Integral Calculus and Differential Equations* (*Tu.*, *Th.*)—*Integral Calculus* as in the Second Year. Differential equations of the first order and degree, homogeneous equations, linear equations, exact equations, singular solutions. *Solid Geometry* (*M.*, *W.*, *F.*)—Coordinates, rectilinear and polar, the plane, the sphere, the paraboloid, the ellipsoid, the hyperboloid of one and two sheets, tangent planes, diameters, circular sections, and generating lines, curves, surfaces, curvature, osculation and torsion, geodesics, vectors.

TRINITY TERM.—*Newton and Spherical Trigonometry* (*Tu.*, *Th.*)—The first three sections of the Principia. *Spherical Trigonometry.*—Spherical triangles, formulæ, identities, properties of triangles, areas, spherical excess, approximate formulæ, regular solids. *Analytical Statics, Dynamics of a particle, and Rigid Dynamics* (*M.*, *W.*, *F.*)—Systems of forces in three dimensions, central axis, virtual displacements, strings. *Dynamics of a particle and Rigid Dynamics*—Velocity and acceleration along and perpendicular to the tangent and the radius vector, small oscillations, rectilinear, parabolic and elliptic motion, central forces, Kepler's laws, moments of inertia, motion of a rigid body.

MICHAELMAS TERM.—*Astronomy* (*Tu.*, *Th.*)—Instruments, motion of heavenly bodies, transits, latitude, longitude, time, the seasons, eclipses, parallax, aberration, refraction. (*M.*, *W.*, *F.*)—As in Trinity Term.

THIRD YEAR—CLASS B.

Lectures at 11 a.m. daily throughout the year.

Candidates must attend lectures and pass the corresponding examinations in at least four of the following six subjects:—

LENT TERM.—*Spherical Trigonometry* (*Tu.*, *Th.*)—Spherical triangles, formulæ, solution of triangles, properties of triangles, spherical excess, approximate formulæ, regular solids. *Differential Calculus* (*M.*, *W.*, *F.*)—Limits, differentiation, Taylor's theorem, indeterminate forms, maxima and minima, tangent and normal, asymptotes, curve tracing.

TRINITY TERM.—*Integral Calculus* (*Tu.*, *Th.*)—Integration, definite and indefinite, known forms, areas and lengths of plane curves, surfaces and contents of solids of revolution. *Astronomy* (*M.*, *W.*, *F.*)—Instruments, motion of heavenly bodies, transits, longitude, latitude, time, parallax, aberration, refraction.

MICHAELMAS TERM.—*Analytical Geometry* (*Tu.*, *Th.*)—Coordinates, rectilinear and polar, the straight line, circle, parabola, ellipse, hyperbola, tangent, normal, eccentric angle, diameters, asymptotes, pencils and ranges. *Dynamics* (*M.*, *W.*, *F.*)—Velocity, acceleration, laws of motion, collision, projectiles, harmonic vibration, conservation of areas, energy, moments of inertia.

For any one or more of the above, candidates may substitute a subject or subjects from the list as given above for Class A.

BOOKS RECOMMENDED.

FOR MATRICULATION.

Pass.—Any ordinary treatises on Arithmetic and on Algebra; Hall and Stevens' Euclid. *Honours.*—Todhunter's Algebra or C. Smith's Algebra, or Hall and Knight's Algebra; Todhunter's Trigonometry or Lock's Trigonometry.

FOR FIRST YEAR STUDENTS.

Pass.—Lock's Elementary Trigonometry. *Honours.*—Richardson and Ramsey's Modern Plane Geometry; Taylor's Geometry of Conics; C. Smith's Conic Sections.

FOR SECOND YEAR STUDENTS.

Pass.—Loney's Elements of Statics; Besant's Elementary Hydrostatics. *Honours.*—Edwards' Differential Calculus; Loney's Elementary Dynamics; Worthington's Dynamics of Rotation.

FOR THIRD YEAR STUDENTS.

Edwards' Integral Calculus; Todhunter's Spherical Trigonometry; McClelland and Preston's Spherical Trigonometry; Godfray's Astronomy; Besant's Dynamics; Routh's Analytical Statics; Murray's Introductory Course in Differential Equations (*Longmans*); Aldis's Solid Geometry; Smith's Solid Geometry; Frost's "Newton;" Aldis's Rigid Dynamics.

LOGIC AND MENTAL PHILOSOPHY.

The course of study in Logic and Mental Philosophy for students in the Faculty of Arts extends over two years.

15.—The following subjects will be discussed in the Lectures to Second Year students:—

LOGIC (*a*) Province and Definition of Logic; Principles and Limits of Formal Logic; Terms, Propositions, and Syllogisms; Functions and value of the Syllogism; Fallacies connected with the use of Terms, Propositions, Syllogisms.

(*b*) Nature of Inductive Inference: Relation of Induction to Deduction, with a general account of the various methods of Scientific Investigation and Proof.

PSYCHOLOGY: Definition, Subject-matter, and Method of Psychology; Classification of Mental Phenomenal. Detailed Account of the various Modes and Stages of Mental Activity.

BOOKS RECOMMENDED.—Jevons' Elementary Lessons in Logic, or Minto's Logic, Inductive and Deductive.

ADD. FOR HONOURS.—Mill's Logic; Höffding's Psychology; Bosanquet's Essentials of Logic.

The following works are recommended for reference:—Ray's Deductive Logic; Fowler's Inductive Logic; Keyne's Formal Logic; Baldwin's Elementary Psychology and Education; Adams' Herbartian Psychology; Clark Murray's Handbook of Psychology; Sully's The Human Mind. For Honour Students—Bosanquet's Logic; Baldwin's Handbook of Psychology; Ladd's Physiological Psychology.

16. The following subjects will be discussed in the lectures to Third Year students:—

(*a*) A course of lectures will be delivered on the development of Greek philosophy, with a special examination of the philosophy of Plato.

(*b*) Historical and critical survey of the leading problems of philosophy in modern times, with a special examination of the form in which they were presented by Kant.

(*c*) A course of lectures will be delivered on Theories of the State, and the Grounds of Political Obligation.

BOOKS RECOMMENDED.—Schwegler's History of Philosophy; Mackenzie's Manual of Ethics.

ADD. FOR HONOURS.—Plato's Republic; Green's Prolegomena to Ethics; Spencer's Principles of Ethics.

The following works are recommended for reference:—Sidgwick's History of Ethics; Muirhead's Elements of Ethics; Erdmann's History of Philosophy; Hegel's History of Philosophy; Watson's Selections from Kant; Watson's Kant and his English Critics; Green's Ground of Political Obligation (Works, Vol. II.); W. Wilson's The State; MacCunn's Ethics of Citizenship.

HIGHER COURSE—LECTURES TO GRADUATES.

Special courses of lectures will be delivered periodically on subjects prescribed for the Degree of M.A. in the School of Mental Philosophy.

HISTORY.

The course in History will extend over two years.

17. The following will be the subjects of study for Second Year students:—

PASS.—The History of England to 1603.

BOOKS RECOMMENDED.—Green's Short History of the English people; Anglo-Saxon Chronicle (references); Stubbs's Select Charters (introduction and references); Simon de Montfort and his cause (English History from contemporary writers); Fortescue's Governance of England; More's Utopia; Gibbins's Industry in England; Beesley's Queen Elizabeth; Seebohm's Protestant Revolution; Freeman's Growth of the English Constitution.

HONOURS.—Honours will be awarded on the following work:

(1) Papers on the Pass work as described above.

(2) A further paper on the same period.

BOOKS RECOMMENDED in addition to those named above.—Stubbs's Constitutional History; Hallam's Constitutional History.

(3) A paper on the History of Europe from 800 to 1250.

BOOKS RECOMMENDED.—Bryce's Holy Roman Empire; Milman's Latin Christianity; Archer and Kingsford's Crusades; Morison's St. Bernard.

(4) Essays to be written in the course of the year.

18. The following will be the subjects of study for Third Year students:—

PASS.—The History of England from 1603 to the present time.

BOOKS RECOMMENDED.—Green's Short History of the English people; Gardiner's Puritan Revolution; Gardiner's Constitutional Documents (introduction and references); Harrison's Cromwell; Traill's Strafford; Seeley's Expansion of England; Gibbins's Industry in England; Toynbee's Industrial Revolution; Hobson's Problems of Poverty; Milton's Areopagitica; Burke's Thoughts on the Present Discontent; Carlyle's Past and Present.

HONOURS.—Honours will be awarded on the following work:

(1) Papers on the Pass work as described above.

(2) A further paper on the same period.

BOOKS RECOMMENDED in addition to those named above.—Bagehot's English Constitution; Dicey's Law of the Constitution; MacCunn's Ethics of Citizenship.

(3) A paper on the History of England to 1603.

(4) A paper on the History of Europe from 800 to 1250.

(5) A paper on the History of Europe from 1789 to the present time.

BOOKS RECOMMENDED.—Rousseau's Social Contract; Burke's Reflections on the French Revolution; Syme's French Revolution; Seeley's Napoleon; Fyffe's Modern Europe; Dickinson's Revolutions and Reactions in Modern France; Cesareso's Liberation of Italy; Mazzini's Essays.

(6) Essays to be written in the course of the year.

PHYSICS.

19—FOR FIRST YEAR STUDENTS.

Text Book.—Everett's or Balfour Stewart's Elementary Physics. Students are recommended to read through the book as soon as possible, or at least to read through the part treating of the subject with which each lecture deals *before* the lecture takes place. In the lectures it will be assumed that this has been done.

For students in the Faculties of Medicine and Science the text book recommended is "Physics," by C. G. Knott (W. and R. Chambers).

The course consists of about thirty lectures.

Candidates for Honours and Scholarships are required to attend the Laboratory for two afternoons a week during one term.

The following Syllabus is intended only as a general guide to the range of subjects dealt with, and will be modified, if necessary.

1. Sketch of the Historv of Physical Science. Axioms of Experimental Philosophy. Units and Measurements.

2. Elementary Dynamics.

3. Conservation of Mass, Conservation of Energy, and Theory of Gravitation.

4. The Physical States of Matter. Characteristics of Solids, Liquids and Gases

5. Density. Laws of Hydrostatics. Specific Gravity. Motion of Fluids.

6. Capillary and Allied Phenomena. Dilatency.

7. The Tides.

8. Heat and Temperature. Proof that Heat is a form of Energy. Construction and Theory of the Thermometer.

9. Calorimetry; Latent and Specific Heats.

10. Gaseous Laws: The Barometer: and the Isothermal Diagram.

11. Air Thermometer. Provisional Absolute Scale. Evaporation and Condensation. The Heat Engine. Sketch of Thermo-dynamics.

12. Laws of Cooling. Radiation. Prevost's Law. Radiant Energy.

13. Characteristics of Wave Motion. Effects of a Prism Study of the Spectrum.

14. Interference as a justification of the Undulatory Theory. Rectilinear Propagation of Light.

15. Application to Mirrors. Images. Refraction. Lenses.

16. Optical Instruments. Polarised Light.

17. Fluorescence. Phosphorescence. Colours of Thin Plates. Scattering of Light.

18. Elementary Theory of Sound.

19. Musical Instruments, &c.

20. Electrostatics. Fundamental Experiments. Induction.

21. Condensers. Electrical Machines. Energy of Electrification.

22. Electrostatic Measuring Instruments. Meaning of Potential and Capacity. Specific Inductive Capacity.

23. Study of the Electrostatic Field. The Electric Current.
24. Batteries. Resistance. Ohm's Law.
25. Magnetism.
26. Galvanometer, Electro-magnet, &c.
27. Measurement of Current, Electromotive Force, and Resistance.
28. Induction of Currents, and Instruments based on it.
29. Dynamo Machines and the Electric Light.
30. Transmission of Power. Telegraphs and Telephones.
31. Electro Optics. Maxwell's Electro-Magnetic Theory.
32. Constitution of Matter.

The course in Michaelmas Term for First Year students consists of twenty lectures, chiefly on the principles of optical, magnetic and electric measurements, and generally the subjects of the previous Term's lectures are treated more precisely.

20.—For Students in the Second Year of Science.

Properties of matter, elementary theory of elasticity, capillarity and matters connected therewith, elementary dynamics, including the pendulum, theory of moments of inertia, experimental basis of the theory of heat, elementary principles of thermodynamics, principles of electric and magnetic theory and electric and magnetic measurements, practical work on the simpler physical measurements.

21.—For Students in the Third Year of Science.

Physical optics and accoustics. Electricity and Magnetism. Advanced physical measurements.

The examination will include the subjects of the Second Year.

Faculty of Arts—Pass.

The course of lectures as prescribed for students in the Second Year of the Faculty of Science is divided into two parts, either of which may be taken by Pass Students in the Second and Third Years in the Faculty of Arts.

Part I.—During Lent Term, and the first half of the Trinity Term, is on the Properties of Matter and Heat, including Elementary Thermodynamics.

Part II.—During the latter half of the Trinity Term and the Michaelmas Term, on Electricity and Magnetism.

Pass Students in the Third Year of the Faculty of Arts who may have taken both the above parts in the Second Year will be provided with suitable instruction according to the proficiency which they may have acquired: and this special course will stand in lieu of the one above prescribed.

Physical Laboratory.

The Physical Laboratory was commenced in 1886, and completed early in 1888. It is open all day in Term time, and during most of the vacations. Besides the lecture and instrument rooms, there is a special workshop, furnished with machine tools and various electric generators large Junior Laboratory, several small rooms for advanced work, Professor's Private Laboratory, and a small but efficient library. The building is lighted throughout by the electric light. There is a large installation of storage cells and a fair supply of apparatus. Junior students, whether members of the University or not, are admitted to the laboratory at stated times, and receive instruction from the Demonstrator. Senior students are admitted at any time by arrangement with the Professor. During the vacations, instruction and assistance will be provided for such students as have passed through an elementary course. It is not intended, however, to open the Laboratory during vacation to students requiring much supervision, however many Junior courses they may have attended. Senior students are encouraged as much as possible in the pursuit of original investigation, as it is believed that this supplies the best training. Such students need not be members of the University, but in this case they will require to make special arrangements with the Registrar with regard to fees.

The Laboratory was founded for the encouragement of Physical Science, both by imparting instruction and aiding research, and no reasonable requirement or facility within the means of the University will be refused for either of these purposes. Detailed information on any point connected with the Laboratory may be obtained at any time from the Professor of Physics.

22.—Practical Physics.

FIRST YEAR.

The course consists of quantitative experiments in the following:—

Measurement of Length. Estimation of Mass. Determination of Density. Thermometry and Expansion. Calorimetry.

Determination of Musical Pitch. Measurement of Velocity of Sound in the Air and in Solids. Reflection and Refraction of Light. Total Reflection. Refractive Indices. Elementary Spectroscopy. Double Refraction. Polarisation of Light. Fundamental Experiments of Electro-statics. Electrometer and Galvanometer Measurements. Measurement of Resistance. Electro-magnetic Induction.

Text Book.—"Physics," C. G. Knott (W. and R. Chambers).

All students attending the Physical Laboratory are required to keep a record of their practical work in special note-books, to be obtained from W. E. Smith, Bridge Street. These note-books are examined every day by the Demonstrator, as well as at the end of the year by the Examiner in Physics, and form the basis on which marks are allotted for Practical Physics at the annual examination.

Students presenting themselves for examination in Physics at the end of any Academic Year during which they have not attended the Laboratory, must also present themselves for examination in Practical Physics.

SECOND YEAR.

The course consists of quantitative experiments in the following:—

Expansion of Solids and Gases. Elasticity of Solids. Measurement of Time. Determination of Moments of Inertia. Pendulums. Magnetic Measurements. Relation between Magnetic Force and Magnetic Induction in Metals, investigated magnetometrically and ballistically. Determination of the Magnetic Elements. Accurate Comparison of Resistances. Electrolytic Measurement of Currents. Comparison of Electro-motive Forces. Measurement of Capacity. Fundamental Experiments of Electro-magnetism. Measurement of Mutual and Self Induction, &c.

Text Book.—Stewart and Gee's Practical Physics, Vols. i. and ii.

A short course of ten classes in elementary experimental optics will be held in Lent Term, if desired. The course has been arranged to be preparatory to the instruction in Petrology for students in the Second Year of Arts, and will include experiments in the Reflection and Refraction of Light, Total Reflection, Refractive Indices, Double Refraction, Polarisation, Construction and use of a Nicol's prism, &c.

THIRD YEAR.

Advanced Physical Measurements.

BOOKS RECOMMENDED.

FOR FIRST YEAR STUDENTS IN ARTS.

Balfour Stewart's Elementary Text Book of Physics.

FOR SECOND AND THIRD YEAR STUDENTS IN SCIENCE.

General Physics.—Tait's Properties of Matter. Lord Kelvin's Article on Elasticity, in the Encyclopædia Britannica. Glazebrook and Shaw's Practical Physics, and Balfour Stewart and Gee's Practical Physics. Maxwell's Matter and Motion. Worthington's Dynamics of Rotation.

Heat.—Maxwell's Theory of Heat. Tait's Heat. Balfour Stewart's Treatise on Heat. Ewing's Steam Engine and other Heat Engines.

Light.—Lewis Wright's Light. Glazebrook's Physical Optics, or Lloyd's Wave Theory of Light. Preston's Theory of Light.

Sound.—Tyndall's Treatise on Sound. Stone's Sound.

Electricity and Magnetism.—J. J. Thomson's Elements of the Mathematical Theory of Electricity and Magnetism. Clerk Maxwell's Elementary Electricity. Clerk Maxwell's Electricity and Magnetism. Gordon's Electricity. Articles on Electricity and Magnetism in the Encyclopædia Britannica. Balfour Stewart and Gee's Practical Physics, part II. Ewing's Magnetic Induction in Iron and other Metals. Gerard's Leçons sur l'Electricité. Fleming's Alternate Current Transformer, 2 vols.

General Text Book.—Anthony and Brackett's Physics.

Standard Works on Physics which may be consulted by students.—Maxwell's Electricity and Magnetism. J. J. Thomson's Recent Researches in Electricity and Magnetism. Helmholtz's Sensations of Tone. Clausius' Thermodynamics—translated by Browne. Lord Rayleigh's Sound. Verdet's Optique. Thomson's Application of Dynamics to Physics and Chemistry. Preston's Theory of Heat.

CHEMISTRY.*

INTRODUCTORY.

23.—This course is on the general principles of elementary chemistry; the non-metallic elements and their principal compounds; certain of the common carbon compounds of everyday life; and such processes as combustion, respiration and fermentation. The metals as a class, and their chief compounds with the non-metals.

Candidates for Honours and Scholarships are required to attend the Laboratory for one Term.

Text Books.—Tilden's Inorganic Chemistry, or Thorpe's Non-metals.

* A fuller syllabus can be obtained in the Registrar's Office or at the Laboratory. The course is delivered in Lent Term; and is intended for students of all Faculties.

THE METALS.

24.—*Second Course* of about forty lectures upon the Metals and their principal compounds and alloys. Compulsory for students in the Faculties of Medicine and Science and the Department of Engineering. During Trinity Term.

Text Books.—Tilden's Inorganic Chemistry, or Thorpe's Metals.

ORGANIC CHEMISTRY.

25.—*Third Course* upon the Carbon Compounds. Compulsory for students in the Faculties of Science and Medicine. During Michaelmas Term.

Arts students of the Second or Third Years may take up Course No. 24 or 25 as a voluntary subject, but an Arts student who has taken up one of these courses in his Second Year cannot be allowed to take up the same course again in the Third Year.

Text Books.—Organic Chemistry by Perkin and Kipping. Tilden's Organic Chemistry and Streatfeild's Organic Chemistry (Spon).

CHEMICAL PHILOSOPHY.

26.—*Fourth Course* compulsory for students of the Third Year in the Faculty of Science, and Undergraduates in Medicine who are candidates for the degree of B.Sc. in Chemistry. The History of Chemical Philosophy and Discovery.

Text Books.—Theoretical Chemistry, by W. Nernst (McM. & Co.), Meyer's Modern Theories of Chemistry (Longmans & Co.), or Oswald's Outlines of General Chemistry (McM. & Co.) and History of Chemistry, E. von Meyer (McM. & Co.).

NOTE.—Students in the Second and Third Years in the Faculty of Science, who select Chemistry as one of their subjects, are required to go through a course of QUANTITATIVE ANALYSIS, and to be examined in the same. This applies also to students in the FACULTY OF MEDICINE, who take up the advanced course in Chemistry to qualify for the B.Sc. Degree.

Students in the Mining Branch of Engineering are required in their Second and Third Years to go through a course of QUANTITATIVE ANALYSIS and ASSAYING, and to be examined in the same.

METALLURGY.

27.—A course of about fifty lectures will be given during Lent and Trinity Terms for Third Year students in the Department of Mining and Metallurgy. Introduction: Physical and

chemical properties of metals and alloys; fire-resisting materials; manufacture of charcoal, coke and gaseous fuels; pyrometry; general metallurgical processes and agents; types of furnaces; fluxes, slags, &c. Detailed descriptions of the methods of extracting the following metals from their ores:—Gold, silver, lead, copper, tin, platinum, antimony, zinc, nickel, cobalt, bismuth, mercury, aluminium, and iron. If possible, the latter part of the course will be subject to modifications to meet the wishes of students who desire to study in particular the metallurgy of certain metals.

Excursions will be arranged to works in districts where metallurgical operations are being carried on. Students attending the course will have special facilities for studying the processes carried out at the Government metallurgical works.

No text book will be used. Students will be expected to make full notes at the lectures, and will be referred to the literature of the subject immediately under discussion.

Tutorial Class in Chemistry.

A Class for Calculations and similar exercises will meet once a week, provided a sufficient number of students enter their names.

PRACTICAL CHEMISTRY.

THE CHEMICAL AND METALLURGICAL LABORATORIES.

The foundations of the new Chemical Laboratory were laid in January, 1889, and, although the interior was not finished, students were admitted in March, 1890. The building is a plain rectangular structure, about 170 feet long by 86 feet wide. For the most part it consists of only one floor, but with extensive cellar space under that part; these cellars afford convenient rooms for stores, workshops, gas engine, dynamo, gas holders, and other similar purposes.

The small lecture room will seat 120, and the larger one about 240 students.

The Junior Laboratory will accommodate 120 students per term when worked up to its full capacity, and the Senior Laboratory will take about 60 advanced students. There are also separate rooms for spectroscopic, volumetric, and gas analysis and photography. There are also two or three other rooms, specially provided and fitted up as laboratories for the use of

students engaged upon researches. There is also a Chemical Collection Room; in this are preserved old forms of apparatus, &c., which may be of historical interest.

The building is provided with the electric light throughout the upper floor, and the gas engine for driving the dynamos is attached to shafting connected with the grinding machines, apparatus for the liquefaction of gases and similar appliances necessary for a large laboratory. Leads are carried to convenient places in the laboratories, so that, if necessary, the full power of the dynamos may be used for experimental purposes.

Special efforts have been made to give the students the benefits of modern improvements and appliances, and particularly those which tend to save time; draught cupboards, filter pumps, exhaust pipes, and similar conveniences are fitted to each bench, so that the student has not to waste his time in going from place to place for different purposes. A number of larger and separate hoods and draught cupboards for combustions, sulphuretted hydrogen gas, water baths, ovens, &c., are also provided for use in common, to all of which gas and water are laid on; and some, in addition (for fusions with gas furnaces), are arranged for a blast of compressed air. There are three balance rooms, each 21 by 16 feet, well provided with balances for different purposes, which, to prevent vibration, are supported on slate benches resting upon stone brackets.

The Metallurgical Laboratory is provided with the usual fusion and muffle assay furnaces; and arrangements are being made for the erection of reverberatory and other furnaces.

A plant for the concentration and treatment of a few hundredweights of ore is provided, and is about to be erected, in order that the students may acquire some practical knowledge of such processes. It includes a Gates' rock breaker, Roger's crushing rolls, and the necessary sieves, elevators and samplers, amalgamating plates, a Frue vanner, a set of plunger jigs, settling tanks, &c. Also vats and the necessary appliances for the extraction of gold and silver ores by chlorine, cyanide, hyposulphite, and other similar leaching processes.

28.—PRACTICAL COURSES.

A.—Introductory Course for Junior and Medical Students.

This course consists of thirty exercises of three hours each.

1. Glass working.—Rounding the ends of rods and tubes, drawing, bending and joining tubes, blowing bulbs, mending test tubes.

2. The preparation and properties of gases, *e.g.*, hydrogen, oxygen, carbon, monoxide, carbon dioxide, the oxides of nitrogen and sulphur, chlorine, hydrochloric acid, hydrofluoric acid, ammonia, &c.

3. The structure of flame, flame re-actions, use of blowpipe, reduction of metals on charcoal, residues coloured by cobalt nitrate, incrustations, films, &c., borax and microcosmic salt beads.

4. Spectroscopic reactions.

5. Reactions of Reagents.

6. Qualitative Analysis by wet and dry processes.

7. Reactions and processes for the detection of the alkaloids, sugars, starch, glycerine, alcohol, fusil oil, carbolic acid and similar common substances.

Students who have done the above course, either in the University Laboratory or elsewhere, are allowed to proceed with more advanced work.

At the practical examinations there will be separate pass and honour tests or exercises.

Each student is required to provide himself with a set of apparatus necessary for the above course of Experimental Chemistry and Qualitative Analysis.

In certain exceptional cases of emergency, students may obtain sets of apparatus on payment of 25s. to the Accountant. One half-price will be allowed for all articles returned by students in good condition. Apparatus left by a student and not removed within three months is liable to be forfeited.

The larger and more expensive pieces of apparatus are provided, for the general use of students, by the University, on the condition that all breakages have to be made good.

Students require one of the following books—Qualitative Analysis (*Thorpe and Muir*), Qualitative Analysis (*W. Valentin, F.C.S.*), Qualitative Analysis, (*Fresenius*), Tables for Qualitative Analysis (*A. Liversidge, M.A., F.R.S.*)

B.—Quantitative Courses.

Candidates for the B.Sc. degree in Chemistry, and B.E. degree in Mining and Metallurgy, are required to make correct determinations of the following substances :—

1. Verification of weights. 2. Determination of ash in filter paper. 3. Copper Sulphate. 4. Potassium dichromate. 5. Calcite. 6. Sodium chloride. 7. Rochelle Salt. 8. Ammonio-ferrous sulphate. 9. Lead Nitrate. 10. Siderite. 11. Dolomite. 12. Apatite. 13. Orthoclase. 14. Niccolite (kupfernickel). 15. Smaltite (Co. Ni. and As.). 16. Copper pyrites. 17. Topaz.

And certain of the following :—

18. Blende. 19. Zinc silicate. 20. Pyrolusite. 21. Chromite. 22. Wolfram. 23. Mispickel. 24. Fahlore. 25. Petalite. 26. Beryl. 27. Strontianite. 28. Cinnabar. 29. Coinage—bronze. 30. Lead, tin, bismuth, cadmium alloy. 31. Ilmenite. White lead and pigments. Cements. Iron Ores. Iron and Steel. Fireclay. Oils. Mineral Oils—including flashing points. Coal Gas. Furnace Gases. Coal, including ash and calorific power. Coke. Water for domestic and manufacturing purposes. Manures.

Also the following volumetric estimations :—

1. Chlorine. 2. Silver. 3. Potassium and sodium. 4. Sodium hydrate 5. Iron by permanganate and dichromate solutions. 6. Bleaching powder. 7. Nitric acid. 8. Chloric acid. 9. Ammonia.

And the following determinations of organic substances :—1. Exercises in the purification of substances, including fractional crystallisation and distillation. 2. Boiling and melting points; specific gravity. 3. Ultimate analyses. 4. Vapour density. 5. Molecular weights of acids. 6. Use of polariscope. 7. Preparation of carbon compounds.

Books Recommended.—Quantitative Analysis, by Clowes and Coleman; Fresenius' Quantitative Analysis.

C.—Assaying Courses.

Candidates for the B.E. Degree in Mining and Metallurgy are required to take the following courses :—

I. Technical examination of fuels and fire clays, dry assay of gold, silver, lead, copper, and tin ores; gold and silver assaying by mint methods; vanning of gold and tin ores;

volumetric and electrolytic assay of copper, iron, and zinc; analysis of furnace gases, slags, fluxes, mattes, and other furnace products.

And certain of the following according to the requirements of the student:—

II. Methods for the rapid estimation of zinc, lead, manganese, calcium, copper, and antimony ores; detailed examination of gold ores; preparation and examination of certain metals and alloys; ultimate analysis of fuel; leaching assays of gold and silver ores by chlorine, cyanide, and other processes; further analysis of gases.

Books Recommended.—Beringer's Text Book of Assaying; or one of the following:—Hiorn's Metallurgy and Assaying; Brown's Manual of Assaying; Furman's Manual of Practical Assaying.

29. Regulations for the Chemical and Metallurgical Laboratories.

The Chemical and Metallurgical Laboratories are open daily during Term time for practical instruction in Experimental Chemistry, Qualitative and Quantitive Chemical Analysis and Assaying.

Assistance will also be afforded to those who wish to perform chemical researches. Students engaged in private investigations will have to provide themselves with any materials they may require which are not included among the ordinary reagents, also with the common chemicals when they are employed in large quantities.

Students engaged in Quantitative Analysis will have to provide themselves with a platinum crucible; also a set of gramme weights.

All preparations made from materials belonging to the Laboratory become the property of the Laboratory.

No experiment of a dangerous character may be performed without the express sanction of the Professor or Demonstrator.

The nature of the instruction will depend upon the special requirements of the student and the extent of his previous knowledge.

Each student is required to keep full notes of each day's work for the use of the Examiners.

The Laboratory hours are from 10 a.m. to 5 p.m., except on Saturdays, when the Laboratory will be closed at 1 p m.

Every student not working with a class is required to enter the time of his arrival and departure in the attendance book.

The Fees for instruction in the Laboratory in the case of students who have already attended the introductory practical course, No. 28A, will be found on page 141.

30.—MINERALOGY.

Optional for Students in Third Year in the Faculties of Science and Arts and Department of Engineering, compulsory for Students in Mining Engineering in their Second Year.

A course of about twenty-five Lectures upon Mineralogy will be delivered during Trinity Term. These lectures are illustrated by a series of over 1000 hand specimens for close inspection, also by models of crystals and diagrams, and will include—

I. INTRODUCTION.

II. CRYSTALLOGRAPHY.—The different systems under which crystals are grouped; the laws by which their variations and combinations are governed. The formation of crystals.

III. The principal PHYSICAL PROPERTIES of Minerals, which aid in the recognition of the various species.

IV. CLASSIFICATION OF MINERALS.

V. The PHYSIOGRAPHY or systematic description of minerals, including all the more abundant or important minerals, both those which are of geological importance and those which are of commercial value.

PRACTICAL MINERALOGY.

During Michaelmas Term exercises will be given in the Geological Laboratory upon the characteristic physical and chemical properties of minerals; with practical work upon the determination and description of mineral specimens. Especial stress will be laid upon tests useful to the miner, geologist and explorer.

Each student has to provide himself with a small collection of specimens for use with the blowpipe; also with the following

apparatus, viz., a blowpipe, pair of platinum pointed forceps, pestle and mortar, platinum wire and foil, duster, test tubes, glass tubing.

Text Books.—Dana's Manual of Mineralogy and Petrography; Bauerman's Mineralogy; Collins' Mineralogy, Parts I. and II.; Minerals of New South Wales, A. Liversidge, M.A., LL.D., F.R.S.

Optical Properties of Minerals.*

An additional course of about ten lectures will be delivered during Michaelmas Term on this subject. These lectures are illustrated by means of diagrams, and a series of transparent sections of minerals specially prepared for showing interference figures, &c. This course is optional for Pass students, but compulsory for Honour students in Mineralogy or in Third Year Geology.

Text Books.—Microscopical Physiography of Rock-making Minerals, Rosenbusch, Iddings; Rock-forming Minerals, Rutley.

GEOLOGY AND PHYSICAL GEOGRAPHY.

31.—Physiography.

FOR FIRST YEAR STUDENTS.

A course of thirty lectures on the above subject, with special reference to Australian Physical Geography, will be delivered in Michaelmas Term.

The lectures will treat of the Composition, Movements and Work of the Atmosphere and of the Ocean; of Evaporation and Rainfall; of Lakes, Rivers, Springs and Artesian Wells; of the various phenomena of Frozen Water, and of the Nature, Composition and Movements of the Earth's Crust, with a short account of Ore Deposits and Meteorites.

A brief sketch will be given of the development of Animal and Plant Life from early Geological time down to the present day, and of the Geological Antiquity of Man, with outlines of the theories of Darwin and Weissmann. The course will conclude with a summary of the cosmical aspects of Geology. The lectures are illustrated by means of diagrams and lantern views.

Text Book.—Mill's Realm of Nature.

For Reference and Further Study.—Volcanoes, by Professor J. W. Judd; Weather, by Abercrombie; Climate, by Dubois.

* See note on page 124 in regard to the use of University Microscopes.

32.—General Geology.

FOR SECOND YEAR STUDENTS.

This course of instruction will consist of a series of sixty lectures, together with practical work in the Geological Laboratory in the determination of common minerals by blowpipe and chemical tests, in slicing rocks for microscopic examination, and in the determination of rocks by means of the petrological microscope.

The following are the subdivisions of the subjects in the order in which they will be discussed at the lectures:—History of Geology, Elementary Mineralogy, Material Geology, Structural Geology, Stratigraphical Geology.

The Geological Laboratory is provided with a lapidary's lathe and all material necessary for the preparation of transparent microscopic sections of rock, and ten petrological microscopes of the latest and most approved pattern, and with a large assortment of microscopic slices of rocks from Australia and other countries.*

The lectures will occasionally be illustrated by means of a lime-light lantern, with microscopic attachment for projecting the enlarged images of actual rock slices on to the screen. Occasional Geological Excursions will be conducted on Saturdays during the Lent and Trinity Terms to localities of special geological interest in the neighbourhood.

Three type collections respectively of Minerals, Rocks and Fossils have been arranged specially for the use of students in the new buildings for the University School of Mines.

Larger type collections for the use of advanced students are available in the same building.

Text Books.—Rutley's Mineralogy and either Geikie's Classbook of Geology or the Student's Lyell, by Judd, 1896.

For Reference and Further Study.—The Student's Handbook of Physical Geology, A. J. Jukes Browne. Physical Geology, A. H. Green.

33.—ADVANCED GEOLOGY AND PALÆONTOLOGY.

FOR THIRD YEAR STUDENTS.

This course will consist of sixty lectures, to be delivered during the Lent, Trinity and Michaelmas Terms, and will include practical work in the Laboratory,† and instruction in the preparation

* See Regulation in reference to Microscopes on page 124.

of geological maps and sections indoors and in the field. The lectures will be devoted partly to advanced Geology, but chiefly to Palæontology. Students attending these lectures will be encouraged to take up some original line of research, either in Palæontology, Petrology or Field Mapping, and will be credited for such original work, if satisfactory, at the Annual Examination.

Students seeking Honours must attend the lectures and practical work in Optical Mineralogy.

Geological excursions will be held occasionally, as in the case of Second Year Geology students.

Text Books.—Grundzüge der Palæontologie, Zittel; Cole's Aids in Practical Geology; Geikie's Text Book of Geology; Nicholson's Manual of Palæontology. Tables for the Determination of the Rock-forming Minerals, by Professor F. Lœwinson Lessing, translated by J. W. Gregory, B.Sc., F.G.S., with a chapter on the Petrological Microscope by Professor Grenville A. J. Cole, M.R.I.A., F.G.S.; London, Macmillan & Co., 1893; price, 4s 6d. net. Further reference will be given as required in the course of lectures.

BIOLOGY.* †

34.—Botany.

A course of about thirty lectures on Morphological and Physiological Botany.

35.—Zoology.

A course of fifty lectures on Zoology and Comparative Anatomy.

36-7.—Zoology and Comparative Anatomy. Advanced Courses.

Two advanced courses, one on the Morphology and Embryology of the Invertebrata, with laboratory work,† for Science students of the Second Year; the other on the Morphology and Embryology of the Vertebrata, with laboratory work, for Science students of the Third Tear.

38.—Botany—Advanced Course.

A short course for Science students of the Second Year.

39.—Practical Botany.

A course of practical work on the Morphology of Plants.

* A detailed syllabus of the various courses, with books recommended and other information, is to be had from the Registrar.

† See Regulation in reference to Microscopes, page 124.

There is also an advanced practical course for Science students of the Second Year.

40.—Practical Zoology—Elementary Course.†

An elementary course for Medical and Science students of the First Year.

Students of Medicine and Science of the First Year take 34, 35, 39 and 40. Students of Science of the Second Year take 36 and 38; Third Year 37. Nos. 34, 38 and 39, or Nos. 35 and 40, constitute the Biology for Arts students of the Second and Third Years.

HUMAN ANATOMY.

41.—Descriptive Anatomy.

FOR MEDICAL STUDENTS OF SECOND YEAR.

Daily during Lent, Trinity and Michaelmas Term.

Introduction. Preliminary account of Human Ontogeny. Description of Structure and Development, Osseous system, Articular system, Muscular system, Vascular system, Peripheral Nervous system, Central Nervous system, and Organs of Special Sense.

The lectures are illustrated by anatomical preparations, naked-eye and microscopical, and by dissections, lantern slides and diagrams.

Text Books.—Morris's Treatise on Anatomy; Gray's Anatomy; Macalister's Text book of Anatomy. The last edition of Quain's Anatomy still forms the most complete handbook, and even though another text book be chosen certain of the separate parts of Quain ought to be in the possession of every student (especially Vol I., pt. 1., and Vol. III., pts. 1 and 3).

42.—Regional Anatomy.

FOR MEDICAL STUDENTS OF THIRD YEAR.

Daily during Lent and Trinity Terms.

The special anatomy of the human subject is described topographically, and the descriptions are systematically illustrated by demonstrations upon the dead body. The course of demonstrations is made as complete as possible, and *vivâ voce* as well as written examinations are held during its progress.

43.—Practical Anatomy or Dissections.

The dissecting rooms are open daily to members of the Practical Class only, during all the three terms, from 9 a.m. to

†A detailed syllabus of the various courses, with books recommended and other information, is to be had from the Registrar.

5 p.m., under the supervision of the Professor and Demonstrator. Parts for dissection will be allotted by the Demonstrator. During each of the six terms in which attendance on Practical Anatomy is obligatory in accordance with the University By-laws, every student must be actually engaged in dissection, so far as the allotment of parts renders this at any time possible.

Not less than two consecutive hours must be devoted daily to actual work in the dissecting room, where alone a practical familiarity with the details of human structure can be acquired.

The necessary certificate of having dissected a part will be given only where diligence and attention to the work, and a fair degree of proficiency in actual dissection, have been exhibited. Certificates of having dissected each "part," at least once, are necessary for admission to the Third Year Examination. Prosectors for the Anatomy Classes are selected from among the best dissectors.

Text Book for Practical Work.—Cunningham's Manual of Practical Anatomy.

ANATOMICAL LABORATORY.

The Professor will give all possible assistance to any advanced student or other competent person who may desire to pursue some special study or enter upon some original investigation in Anatomy; provided that, if not a member of the University, the applicant shall make special arrangements with the Registrar.

44.—PHYSIOLOGY—JUNIOR AND SENIOR.

These classes include a description of the microscopical anatomy of the tissues and organs of the body, a special account of the Physics and Chemistry of the body, and of the functions of all its various parts.

The course is fully illustrated by experiments, diagrams, models, &c., &c.

45.—PRACTICAL PHYSIOLOGY.

Conducted conjointly by the Professor and his Assistants. The work of this class includes:—

I. PRACTICAL HISTOLOGY.*—In which each student prepares, examines, and preserves for himself specimens of the tissues and organs of the body. The student

* See Regulation in reference to Microscopes, page 124.

is shown all the more important processes in histological work, and where practicable, performs them himself.

II. Experimental Physiology.—In this class each student performs for himself, and obtains graphic records of, the simpler experiments dealing with the physiology of muscle and nerve, the circulation and respiration, and the action of various poisons on muscle, nervous centres, heart, &c. He also obtains practical training in the use of those physiological instruments employed in clinical work, *e.g.*, ophthalmoscope, laryngoscope, perimeter, sphygmograph, &c.

III. Practical Chemical Physiology.—In which each student makes an examination of the principal proteids, carbohydrates and fats contained in animals and plants. He then examines chemically blood, muscle, milk, bile, saliva, and gastric and pancreatic juices, and performs experiments in artificial digestion with the three latter. After this he proceeds with the qualitative and quantitative (gravimetric and volumetric) analysis of normal and abnormal urine. Special attention is drawn to the clinical bearing of the work.

In these courses the use of the apparatus (except microscope), and of the reagents is *gratis*.

46.—Short Course of Practical Physiology.

FOR ARTS STUDENTS.

This course includes :—

A short account of the bones, joints and ligaments, and of the principal muscles, nerves and vessels.

An account of the microscopical structure of the tissues and organs of the body.

The anatomy of the organs of respiration, circulation, alimentation, excretion, &c.

A description of the sense organs, of the larnyx, of the central nervous system, and of the organs of reproduction.

A course of microscopical anatomy and of chemical and experimental physiology.

The course will be illustrated by means of dissections, models, diagrams, microscopical preparations, &c., &c., &c.

Text Books for Physiology.—Foster's Text Book of Physiology; Schäfer's Text Book of Physiology; Kirke's Handbook of Physiology; Waller's Human Physiology; G. N. Stewart's Manual of Physiology; Starling's Elements of Human Physiology; Halliburton's Essentials of Chemical Physiology; Brodie's Essentials of Experimental Physiology; Quain's Anatomy or Schäfer's Essentials of Histology.

THE PHYSIOLOGICAL LABORATORY.

The Physiological Laboratory (including the special laboratories for Histology, Experimental Physiology, Physiological Chemistry, and the workshop) is open daily from 10 a.m. to 5 p.m., Saturdays, 10 a.m. to 1 p.m.

Junior students are admitted at stated times, and receive instruction from the Demonstrator. Senior students can use the laboratory at any time during Term, and most vacations, by arrangement with the Professor, and are encouraged in the prosecution of original investigations under his direction, and that of the Demonstrator.

Any gentlemen, whether or not members of the University, wishing to undertake any original research in the laboratory, can do so by application to, and arrangement with, the Professor, who will afford suitable investigators every assistance in his power.

47.—MATERIA MEDICA AND THERAPEUTICS.

Mr. Thomas Dixson, M.B. and Ch.M.

In this course special attention is devoted to the physiological as well as the therapeutical effects of the various remedial agents, including under the latter the more important substances, whether Pharmacopœial or Extra-Pharmacopœial, obtained from the organic and inorganic kingdoms.

The principles of Dietetics, of Hydrotherapy, of Climatotherapy, and of Massage, as well as those of prescribing, are included within the range of study.

Microscopic preparations, &c., will be employed, where possible, in illustrating the lectures.

Text Books.—Pharmacology, Therapeutics, and Materia Medica, *Lauder Brunton*. Materia Medica, *Hale White*. Elements of Pharmacology, *Schmiedeberg* (English Edition). Text Book of General Therapeutics, *Hale White*. Food in Health and Disease, *J. Burney Yeo*.

Books of Reference.—Handbook of General Therapeutics, *Von Ziemssen* (7 vols). Guide to the Health Resorts of Australia, Tasmania and New Zealand, *Bruck.* Immunity and Serum Therapy, *Aernberg.*

48.—PRACTICE OF MEDICINE.

Dr. J. C. Cox.

1. History of Medicine as a Science.

2. Methods used for the Observation, Diagnosis and Recording of Diseases.

3. The Symptoms, Diagnosis and Treatment of—

a. Fever. *b.* Idiopathic Fevers. *c.* General Diseases allied to the Fevers. *d.* Constitutional Diseases. *e.* Diseases of the Circulatory System. *f.* Diseases of the Respiratory System. *g.* Diseases of the Alimentary System. *h.* Diseases of the Urinary System. *i.* Diseases of the Nervous System. *j.* Diseases of the Skin.

Books Recommended.—Principles and Practice of Medicine, *Fagge.* Principles and Practice of Medicine, *Osler.* The Practice of Medicine, *Taylor.*

49.—PRINCIPLES AND PRACTICE OF SURGERY.

Dr. A. MacCormick.

Introduction—Principles and Practice.

1. Healthy Nutrition.

2. Aberrations from Healthy Nutrition.

a. Hypertrophy. *b.* Atrophy. *c.* Inflammation. *d.* Traumatism. *e.* Surgical Diseases. *f.* Regional Surgery—Injuries and diseases peculiar to parts of the body.

Text Books Recommended.—Walsham's Surgery; Heath's Surgical Dictionary; Treve's Manual of Surgery; MacCormac's Operations; Barker's Manual; Jacobson's Operations of Surgery.

50A. MIDWIFERY.

James Graham, M.A., M.D.

Anatomy and Physiology of the several organs and structures connected with Ovulation, Gestation, Parturition, &c.

Gestation, its Signs, Symptoms, Duration and Abnormalities.

The Phenomena of Natural and complicated Labour.

The Induction of Premature Labour and Obstetric Operations.

The Management of the Puerperal State.

Text Books.—Playfair's Manual of Midwifery; The Science and Art of Obstetrics, *Parvin;* Galabin's Manual of Midwifery; Herman's Difficult Labour.

50B.—DISEASES OF WOMEN.

Mr. J. Foreman, M.R.C.S.

Introductory.

Anatomy of the Female Pelvic Organs.

Diseases of the Vagina.

Diseases of the Uterus and Fallopian Tubes.

Diseases of the Ovaries.

Pelvic Tumours.

BOOKS RECOMMENDED.—Galabin's Student's Guide to Diseases of Women; McNaughton-Jones' Manual of Gynæcology (6th edition).

51.—PATHOLOGY.*

Dr. W. Camac Wilkinson.

A.—GENERAL PATHOLOGY.

1. PATHOLOGY OF CIRCULATION:—
   (*a*) Heart: morbid states, and the effect of such upon (i.) the Heart itself and (ii.) upon the circulation. The Pulse: its variations in disease, and effects thereof.
   (*b*) Vessels: morbid states and their effect on Heart and circulation; local vascular disturbances. Anæmia, Hyperæmia, Thrombosis, Embolism, Hæmorrhage, Dropsy.
   (*c*) Blood and Lymphatics: chief morbid states. Anæmia, Chlorosis, Pernicious Anæmia, Leucocythalmia, Lymphadenoma. Changes due to perversion of internal secretion of Thyroid, Pancreas, Suprarenals, &c., Gout, Rheumatism.
2. PATHOLOGY OF NUTRITION:—
   (*a*) Atrophy, Degeneration, Necrosis, Organisation and Regeneration, Hypertrophy.
3. INFLAMMATION.—Phenomena, their nature and explanation. Signs. Classification of phenomena (*a*) histological, (*b*) aetiological. Rôle of micro-organisms. Special study of pathogenic organisms. Infectious diseases. Fever. Immunity.
4. TUMOURS.

* See Regulations in reference to Microscopes on page 124.

B.—Special Pathology.

An account of disturbances of function, nutrition and structure in the various organs of the body.

C.—Practical Pathology.

A microscopical course during one term—every day for two hours—Bacteriology and Morbid Histology.

52.—MEDICAL JURISPRUDENCE AND PUBLIC HEALTH.

Dr. W. H. Goode.

The Science of Medical Jurisprudence, Duties of a Medical Jurist, Evidence, Coroners' Inquests, Signs and Causes of Death, Poisoning, Wounds, Inheritance, Insanity.

Public Health.—History of Epidemics. Soils—Conditions of Soil affecting Health, Drainage of Soil. Water—Quantity and Supply, Quality, Impurities, Purification. Removal of Excreta—Methods of Removal, Sewers, Air—Impurities in Air, Diseases produced by Impure Air, Ventilation, Cubic Space required. Natural Ventilation, Artificial Ventilation. Habitations—General conditions of Health, Hospitals. Warming of Houses. Food—General principles of Diet, Diseases connected with Food, Quality, Choice and Cooking of Food. Beverages. Bacteriology—Methods of examination for, and cultivation of; Bacteriological examination of Soils, Air, and Water. Disinfection. Vital Statistics.

53.—PSYCHOLOGICAL MEDICINE.

Dr. Chisholm Ross.

This course comprises:—

I. An account of the Nature, Causes, Classification, Social and Medico-Legal Relations of Insanity.

II. An account of the various forms of Mental Disease or Disorder; their Clinical History, Diagnosis, Prognosis and Treatment.

54.—OPHTHALMIC MEDICINE AND SURGERY.

Mr. F. Antill Pockley, M.B., Ch.M.

Diseases and Injuries of the Conjunctiva, Cornea, Sclerotic, Iris and Ciliary Body, and Crystalline lens.

Glaucoma.

Refraction and Accommodation—Emmetropia, Ametropia, Hypermetropia, Myopia, Astigmatism : Asthenopia.

Examination of the Eye, Ophthalmoscopy.

Affections of the Vitreous Humour, of Optic Nerve, Retina, and Choroid.

Affections of Sight unaccompanied by any definite intra-ocular signs :—Amblyopia and Amaurosis, Colour Blindness, &c.

Perimetry :—Defects in Visual Field, Hemianopsia, &c.

Affections of the Ocular Muscles :—Paralysis, Strabismus, &c.

Diseases of Eyelids and Lachrymal Apparatus.

Operations.

Books Recommended.—*Texts*—Diseases of the Eye, *Nettleship;* Handbook of Diseases of the Eye, *Swanzy;* Diseases of the Eye, *Berry*. *For Reference*—Traité Cómplet d' Ophthalmologie, *de Wecker and Landolt.*

55.—APPLIED MECHANICS.

FIRST YEAR.

Lent Term.—The chief constructive processes used by engineers, such as casting, forging, turning, planing, drilling, chipping, filing, &c., and the various tools, machines and appliances used in these processes. The behaviour of materials when subjected to tensile, compressive, transverse, shearing and torsional stresses in testing machines. The various methods used for ascertaining the stresses in structures. Bending moments and shearing stresses in beams and girders. Moments of resistance, and their determination by graphic and analytical methods. The stresses in simple braced structures, such as roofs and lattice girders. The endurance of materials and the determination of the safe working stresses in structures. The design of simple structures, such as beam bridges of timber, cast-iron and wrought-iron girders, roof trusses and lattice girders.

Books Recommended.—Shelly's Workshop Appliances; Unwin's Machine Design; Engineering Construction in Iron, Steel and Timber, by Prof. Warren, published by Longmans.

Trinity Term.—Elementary Mechanism and Machinery. —The science of mechanism. History of the development of machinery. Definition of a machine. Plane motion. Con-

strainment of plane motion. Virtual motion in mechanisms. Relative velocities in mechanisms. Spur-wheel trains. Various profiles for wheel teeth. Epicyclic gearing. Cam trains.

In the course is also included the design of such details as—riveted joints, bolts, nuts, keys and cotters, shaft couplings, pedestals and brackets.

BOOKS RECOMMENDED.—Kennedy's Mechanics of Machinery; Unwin's Machine Design, Part I.

56.—PRACTICAL PLANE AND SOLID GEOMETRY.

PLANE GEOMETRY.—Scales. Constructions relating to straight lines, polygons, circles and circular arcs, conic sections, cycloidal curves, involutes and spirals.

SOLID GEOMETRY.—Principles of orthographic projection. Representation of points, lines and planes by their projections and traces. Elementary problems on lines and planes. The determination of the projections of simple solids, under given conditions of position. The interpenetration of given solids. Tangent planes. The projection of shadows. Principles of perspective projection. Principles of isometric projection.

BOOKS RECOMMENDED.—Angel's Practical Plane Geometry and Projection; Plane Geometrical Drawing and Perspective, by E. M. Mutton (Philips and McCredie).

57.—APPLIED MECHANICS.

SECOND YEAR.

57A. THE MECHANICS OF MACHINERY.—Tangential and radial acceleration. Velocity and acceleration diagrams. Static equilibrium of links and mechanisms. Various problems in machine dynamics, such as train resistance, the fly-wheel, the connecting rod and the governor.

Miscellaneous mechanisms. The pantograph. Parallel or straight line motions. Quick return motions.

Non-plane motion. The screw. Conic crank trains. The universal joint. Disc engines.

Friction in mechanisms and machines. "Laws" of friction. Various appliances for determining the co-efficient of friction. Friction brakes and dynamometers.

57B. THE STEAM ENGINE AND OTHER PRIME MOVERS.—History of the steam engine. Thermodynamics of the steam engine. Proportions and details of various types of engine.

The design of valve gears. Use of the indicator. Efficiency of the steam engine. Compounding, superheating and steam jacketing.

The generation of steam; boilers and their fittings. Refrigerating machines; description of the principal types in use.

Air, gas and oil engines. Internal and external combustion. Use of the regenerator.

Methods of testing engines, boilers and hydraulic machinery.

In the course is also included the design of lifting and hoisting machinery—cranes, winches and elevators, and various kinds of hydraulic machines—pumps, presses, accumulators, water wheels and turbines.

Books Recommended.—Kennedy's Mechanics of Machinery; Cotterill's Applied Mechanics: Ewing's Steam Engine; Holmes' Steam Engine; Unwin's Machine Design, Parts I. and II.; Whitham's Constructive Steam Engineering; D. K. Clarke's Tables and Memoranda. Trail on Boiler Construction.

57c. Development and Transmission of Power.—Determination of most efficient types of engines, boilers, and hydraulic motors in particular cases. Design and construction of power stations. Hydraulic, pneumatic and electrical transmission of power. Wire rope transmission. Design and construction of pneumatic, hydraulic, and electrical machinery.

Books Recommended.—Unwin's Development and Transmission of Power; Silvanus Thompson's Dynamo Electric Machinery; Bell's Transmission of Power.

CIVIL ENGINEERING.

58.—Hydraulic and Railway Engineering.

The courses of instruction in these two branches will consis of 50 lectures in Hydraulic and Railway Engineering for Second Year students in both Civil and Mining Engineering. Civil Engineering students are required to attend an additional course of lectures in their Second and Third Years, which will consist of 25 lectures in Hydraulic Engineering and 25 lectures in Railway Engineering, delivered in alternate years.

(*a*) Hydraulic Engineering.—The water supply of towns, and the design and construction of the various works required.

Sanitary Engineering.—Various systems of sewerage. House drainage. Sewerage disposal. The destruction of night-

soil, street garbage, refuse from slaughter houses, &c. The design and construction of the various works required in connection with Sanitary Engineering.

HARBOUR ENGINEERING.—Description and classification of the principal harbours. The design and construction of breakwaters and harbour works, docks, &c.

RIVERS AND CANALS.—The design and construction of the various works in connection with river improvements. Ship canals, &c.

(*b*) RAILWAY ENGINEERING.—The location of roads and railways. The design and construction of railway works, such as earthworks, tunnels, bridges, permanent way, signals, points and crossings, interlocking systems, passenger and goods stations, locomotive engines, rolling stock, brakes, couplings, and other railway appliances. Road work, paving of carriage ways.

BOOKS AND PAPERS RECOMMENDED FOR REFERENCE IN DESCRIPTIVE ENGINEERING.—Humber's Water Supply; the Manchester Waterworks, by Bateman; Spon's Dictionary; Waring's Sewerage and Land Drainage; Sewage Disposal, by W. Santo Crimp; Stevenson's Harbours and Docks; Stevenson's Rivers and Canals; Vernon Harcourt's Harbours and Docks; Vernon Harcourt's Rivers and Canals; the Proceedings of the Institution of Civil Engineers, and also of the American Society of Civil Engineers; the various reports of Sir John Coode; the various reports on the Sewerage of the principal towns of Australia; Roads and Streets, by D. K. Clark; Barry's Railway Appliances; Gribble's Preliminary Surveys and Estimates; Wilcocks' Egyptian Irrigation. Buckley's Irrigation Works in India. Students are expected to read the current numbers of the various Engineering Journals.

CIVIL ENGINEERING.

THIRD YEAR.

59.—MATERIALS AND STRUCTURES.

The materials used in engineering and building construction: their characteristic properties, strength, and durability, with especial reference to iron, steel, timber, concrete, brickwork, masonry. The theory of long columns. Equations of slope and deflection of beams, discontinuous and continuous. The calculation of the stresses from fixed and moving loads in structures such as plate web and lattice girder bridges for roads and railways. Bowstring and polygonal trusses. Continuous railway bridges. Swing and other movable bridges. Arched, suspension and cantilever bridges, roofs, &c. The design and

construction of retaining walls, reservoir dams, piers, abutments and masonry arches. Temporary works in connection with engineering structures.

BOOKS RECOMMENDED FOR REFERENCE.—Engineering Construction in Iron, Steel and Timber, by Professor Warren (Longmans); Rankine's Applied Mechanics and Civil Engineering; Weyrauch on the Structure of Iron and Steel; Unwin's Testing of Materials; Ritter on Iron Bridges; Lanza's Applied Mechanics; The Strains in Framed Structures, by Dubois; R. H. Smith's Graphics; Clarke's Graphic Statics; Burr's Stresses in Bridges and Roof Trusses; Claxton Fidler's Practical Treatise on Bridge Construction; Report of the New South Wales Railway Bridges Inquiry Commission; Johnson's Theory and Practice of Modern Framed Structures; Baker's Masonry Construction; Patton's Foundations, published by Wiley and Son.

60.—MECHANICAL ENGINEERING.

The lectures of the first two years in Mechanical Engineering are the same as those for Civil Engineering; but, in the classes for engineering drawing, special attention is given to the design of machine details.

In the third year lectures will be delivered on—The theory of the steam engine, including the consideration of wire drawing, cylinder condensation, steam jacketing, multiple expansion, and the determination of the most economical point of cut-off. The design of steam boilers. Gas, oil and air engines. The design and construction of turbines, water wheels and water engines.

The construction of continuous current electrical machinery. Alternating current machinery. The design and preparation of working drawings of generators, transformers, and other alternating current apparatus. Instruments and appliances used in electrical testing.

Discussion of the design, equipment and management of hydraulic and steam power stations for electric lighting, traction, and power distribution. Long distance transmission of power by electricity. Special applications of electricity to industrial purposes, such as the driving of workshop tools, cranes, pumps and other machinery by means of electric motors.

LABORATORY PRACTICE.—Students are required to attend a course in laboratory practice, including—The testing of materials, the practical management and testing of gas engines, steam engines and boilers, the measurement of the flow of water, the testing of hydraulic motors, the determination of the power absorbed by different machines, and various tests of the value of lubricants.

61. Engineering Drawing.

All students in Engineering are required to attend lectures in the following subjects, and to continue their practice till they have satisfied the lecturers as to their proficiency—The use of drawing instruments. Systems of lettering, writing and colouring on engineering and surveying plans, charts, &c. Conventions for the representation of topographical and orographical features.

The course for the first two years includes—The practical design of machine details, engines, boilers, and machinery. Drawing out valve diagrams, and diagrams of stresses in structures. Design of bridges, roofs and buildings.

In the third year students are required to prepare an original set of working drawings, having reference to the particular branch of engineering which they have taken up in that year.

The Engineering Laboratory.

The Engineering Laboratory is fitted with apparatus for systematic instruction in the experimental methods which are used to determine the physical constants of the chief materials of construction and the numerical data employed in engineering calculations. The laboratory is provided with a testing machine, capable of exerting a force of 100 tons, especially arranged for accurate tests of large sized specimens such as beams and columns; also with a machine of 100,000 pounds capacity, with an accumulator and various descriptions of apparatus for measuring strains, autographic recording apparatus, micrometers, verniers, &c. Both machines are adapted for testing in tension, compression, crossbreaking and torsion. Various pieces of apparatus for testing cements, wire, the lubricating value of oils, and the calorimetric value of fuels. An experimental compound condensing engine and locomotive boiler, provided with indicators, brakes, calorimeters, and all necessary apparatus for testing the evaporative efficiency and power developed under various conditions of working. Apparatus for the determination of the friction with materials of the form and with the velocities common in engineering work, the measurement of the energy spent in driving machines, and the useful work done by them.

Excursions are made during terms to works such as the Railway Workshops at Eveleigh; Hudson Brothers, Clyde; Mort's

Dock and Engineering Company; and to the various works in progress in connection with railways, docks, water supply, and sewerage.

62.—SURVEYING.

THE COURSE CONSISTS OF LECTURES AND FIELD DEMONSTRATIONS.

1. GENERAL.—Definition, aim, scope, and theory of survey. Its methods and their analysis. Conditions of precision. General applications of mathematics. Elementary applications of the theory of probability and theory of errors. Physical and economic limitations in surveying, considered as an art.

2. INSTRUMENTS.—Instruments for lineal and angular measurement, for telemetry and photogrammetry: their structure, examination, adjustment and use. Theory of their defects and of defective manipulation: the influence of these on the precision of survey. The elimination of systematic error.

3. FIELD OPERATIONS.—General principles. Methods of lineal measurement. Plane table surveying and its problems. Traversing in horizontal and vertical planes. Aligning, setting out circular and other curves. The use of curves of adjustment in railway surveying. Levelling, contouring, and grading. Systems of telemetry and their place in schemes of survey. Photogrammetry. The setting out of road and railways, of areas, and the measurement of volumes. Retrace of survey and problems connected therewith. Cadastral survey. Methods by which surveys made for different purposes may be included as integral parts of a comprehensive scheme.

4. MARKING AND RECORD.—Methods of marking survey. Necessity for permanent marking in cadastral survey. The recording of survey operations generally. Systems of keeping field records appropriate for various classes of survey.

5. COMPUTATION.—General principles. Mathematical tables, and tables for facilitating various calculations. Graphics. Instruments for facilitating calculation: integrating machines. The closure of survey. Distribution of residual error. Determination of missing elements. Localization of error. Reduction to coördinate systems. Problems arising in survey, respecting lines, areas, and volumes.

6. CARTOGRAPHY.—General principles of cartography. Instruments required, their examination and use. Protractor

and coördinate systems of plotting. The preparation of plans and sections. Conventions in delineating topographical and orographical features. Systems of reducing, enlarging, and reproducing plans. The theory of projection. Projections used in map compilation. Method of map compilation.

7. HYDRAULICS.—The general applications of hydrodynamics. The flow of water through orifices, over weirs, and overfalls, through pipes, and in sewers, canals, and rivers. Velocity and discharge formulæ. Current meters and their rating. The gauging of discharges. Theory of flow in permeable strata and of artesian flow. Hydraulic computations. The present state of hydraulic theory.

8. HYPSOMETRY.—The theory of thermometric and barometric hypsometry: its application to the hypsometer, and to the aneroid and mercurial barometers. Schemes of hypsometric observation. Limitations of these methods of height determination.

9. NAUTICAL AND HYDROGRAPHIC SURVEY.—Scope, aim, and general principles of nautical surveying. Measurement of land and sea bases. System of angle observations. Survey of estuaries, harbours, and of coast line generally. Tidal phænomena: their observation and systematic reduction, and their application to hydrographic survey. Soundings. Hydrographic cartography.

10. ASTRONOMY.—The general mathematical theory of astronomy. Its geodetical applications. Systems of coördinates. Ephemerides. The apparent places of stars. Interpolations in tables. Celestial refraction, parallax, semi-diameter. The various methods of determining time, latitude, meridian, and longitude. Conditions of precision.

11. GEODESY.—The figure of the earth. Distance and azimuths on a sphere, spheroid, and ellipsoid. The measurement of base-lines. Geodetic instruments and their use. The theory of errors and its application to geodesy. Computation of triangulation. The geodetic determination of latitudes and longitudes. Geodetical hypsometry. Terrestrial refraction. Attraction, and the connection between astronomical and geodetic coördinates of points on the earth's surface.

MINING SURVEYING.

1 to 8 inclusive.

12. Elementary Geodesy.—Triangulation; determination of meridian; convergency of meridians; computation and empirical adjustment of a triangulation.

13. Underground Surveying.—General features of underground surveying. Methods of transferring the azimuth of the surface to the underground survey. Alignment and the setting out of tunnels, &c., in curves. Methods of securing precision in underground survey. Special instruments and their use. The relation between surface and mine workings. The survey of the positions of strata veins, &c., their dip, strike, intersection, &c.

14. Deviation of Bores.—Methods of determining the direction and inclination of a bore and the instruments required.

15. Mining Cartography.—Systems of representing the results of mining surveys.

Books Recommended for Reference.—Johnson's Theory and Practice of Surveying; Jackson's Aid to Survey Practice; Bauernfeind's Elemente der Vermessungskunde; Downing's Hydraulics; Neville's Hydraulic Tables, Coefficients and Formulæ; Jackson's Hydraulic Manual: Ganguillet's and Kutter's Flow of Water in Rivers and Channels; Merriman's Hydraulics; Robinson's Marine Surveying; Hawkins' Astronomy (Elementary); Chauvenet's Spherical and Practical Astronomy (Advanced); Doolittle's Astronomy; Clarke's Geodesy; Gore's Elements of Geodesy; Merriman's Least Squares; Wright's Adjustment of Observations; Brough's Mine Surveying.

63.—ARCHITECTURE.

History of Architecture, illustrated by photographs and drawings; and Building Construction, illustrated by diagrams and drawings, and samples of materials.

Books Recommended.—History of Architecture, by Fergusson (4 vols.); A History of Architecture, by Banister Fletcher (1 vol.).

History of Architecture.—The historical evolution of design in buildings from the earliest times to the present day, embracing Egyptian, Assyrian, Grecian, Roman, Romanesque, Byzantine, Saracenic, Gothic, Renaissance, and Modern work, with the outlines of Oriental and earlier American work.

Building Construction.—Description of the nature and proper utilisation of building materials, and of the modes of construction adopted in the various building trades.

64.—MINING.

1. Brief history of Mining. Conditions under which mines are held; the chief provisions of the Mining Acts of New South

Wales; the different varieties of mineral deposits, and their mode of occurrence. Heaves or dislocations; the rules for finding the lost or dislocated portions of lodes. Genesis of mineral veins. Influence of adjoining rocks upon veins. Descriptions of some of the most celebrated mines and mineral districts.

2. Prospecting or search for minerals; shoading; trenching; costeaning. Exploration by shafts and adits. Boring and drilling, the various appliances used therefor.

3. Tools employed in Mining. Explosives and their use in blasting. Tools employed in blasting. Rock-drills. Machinery employed in getting coal.

4. Principles of employment of labour in mines; daily wages; working by tribute or by contract.

5. Methods of Mining in open works and quarries; ground sluicing; hydraulic sluicing.

6. Illumination of Mines. The different varieties of lamps used in metalliferous mines and colliery.

7. Sinking shafts and driving levels. The different methods of securing excavations by timbering, masonry and tubbing. Construction of underground dams.

8. Exploitation of mineral deposits. The different methods of laying out excavations in metalliferous mines and collieries.

9. Haulage or transport of minerals underground.

10. Winding or raising in shafts, and the machinery employed.

11. Pumps and pumping arrangements.

12. Principles of ventilation in mines. Natural ventilation. The noxious gases occurring in mines, and the methods adopted for removing them. Methods of testing the purity and measuring the volume of the air employed for ventilation.

13. The mechanical treatment of ores. The different kinds of machinery used in the reduction and concentration of ores.

Text Books.—A Treatise on Ore Deposits (J. A. Phillips, and H. Louis), Colliery Manager's Handbook (Pamely). The following books may also be consulted:—Callon's Lectures on Mining (translated by Forter and Galloway). Ore and Stone Mining (Dr. C. Le Neve Foster). Mining and Ore-Dressing Machinery (C. G. Warnford Lock).

FACULTY OF LAW.

The following Regulations have been passed by the Senate:—

1. A Class Examination shall be held at the end of each Term by each member of the Teaching Staff in the subject matter of his lectures for the Term, and a report of the results of each examination shall be forwarded to the Registrar to be laid before the Faculty.

2. Every candidate for the degree of LL.B. shall be required to produce certificates from the Lecturer in Procedure and the Lecturer in Equity that he has during his law course attended in court and taken a satisfactory note of such cases as shall be approved of by the said lecturers.

65.—JURISPRUDENCE AND ROMAN LAW.

A.—JURISPRUDENCE.

The Principles of Analytical Jurisprudence, the Theory of Legislation and the Early History of Legal Institutions.

Students are recommended to read the following books:—Austin Lectures, I., V., VI., and the Essay on the Uses of the Study of Jurisprudence; T. E. Holland, Elements of Jurisprudence; Bentham, Theory of Legislation, by Dumont; Maine's Ancient Law, and chapters xii. and xiii. of the Early History of Institutions.

Reference may also be made to Maine's Early Law and Custom; and to Fitzjames Stephen's History of the Criminal Law, chapters ii., iii., xvii., xviii., xix. and xxxiv.

B.—ROMAN LAW.

The Institutes of Justinian, Books I. and II.; Book III., Title 13 to end of Book; Book IV., Titles 1 to 5 inclusive.

Students are recommended to read Moyle's Institutes of Justinian.

Reference may also be made to Hunter's Roman Law.

66.—CONSTITUTIONAL LAW AND INTERNATIONAL LAW.

A.—CONSTITUTIONAL LAW.

Students will be expected to exhibit a general knowledge of the Law and Conventions of the English Constitution, and a more particular knowledge of the Constitutional system of New South Wales.

Students are recommended to read or refer to Stephen's Commentaries, Introduction, sections 3 and 4, Book IV., part I., chapters 1 to 8 inclusive;

Dicey's Law of the Constitution; Bagehot's English Constitution; Anson's Law and Custom of the Constitution; together with the more important Statutes, Instruments, and Decisions, relating to the government of New South Wales.

References may also be made to Broom's Constitutional Law; Traill's Central Government; Cotton and Payne's Colonies and Dependencies.

B.—INTERNATIONAL LAW.

This subject may be studied in Hall's International Law.

Reference may also be made to the Naturalisation Act of New South Wales, 39 Vic., No. 19; Wheaton's International law; Cobbett's Leading Cases and Opinions on International Law.

67.—THE LAW OF STATUS, CIVIL OBLIGATIONS AND CRIMES.*

Students are required to read or refer to Anson's Law of Contract; Pollock's Law of Torts; Fitzjames Stephen's Criminal Law; Stephen's Commentaries; Books III., V. and VI.; Dixon on Divorce; Broom's Judicial Maxims; and the following cases with Notes, from Smith's Leading cases:—Armory v. Delamirie, Ashby v. White, Addison v. Gandasequi, Calye's Case, Coggs v. Bernard, Manby v. Scott, Marriott v. Hampden, Paterson v. Gandasequi, Semayne's Case, Six Carpenters' Case, Twyne's Case, Thompson v. Davenport, Vicars v. Wilcox; together with the Statutes in force in New South Wales relating to the above-mentioned subjects.

Reference may also be made to other parts of Smith's Leading Cases and to Pollock's Principles of Contract.

68.—PROCEDURE IN CIVIL AND CRIMINAL CASES, BOTH BEFORE THE SUPREME COURT IN ITS COMMON LAW JURISDICTION AND BEFORE COURTS OF INFERIOR JURISDICTION, TOGETHER WITH EVIDENCE AND PLEADING.

Students are recommended to read or refer to Fitzjames Stephen's Digest of the Law of Evidence; Stephen on Pleading; Filcher's Supreme Court Practice; Foster's District Court Practice; Wilkinson's Australian Magistrate, and Best on Evidence; together with the following cases, with notes from Smith's Leading Cases:—Higham v. Ridgway, Price v. Torrington, Doe d. Christmas v. Oliver, Hughes v. Cornelius, the Duchess of Kingston's Case, and Trevivan v. Lawrence; and the Statutes in force in New South Wales relating to the above-mentioned subjects.

69.—THE LAW OF PROPERTY AND PRINCIPLES OF CONVEYANCING IN FORCE IN NEW SOUTH WALES.

Students are recommended to read or refer to Williams' Real Property; Williams' Personal Property; together with the Statutes in Force in New South Wales relating to this subject.

*In this and other professional subjects students are of course required to make hemselves acquainted with the law in force in New South Wales.

Reference may also be made to Stephen's Commentaries, Book II.; Elphinstone's Introduction to Conveyancing; The Dissertation contained n Prideaux's Precedents in Conveyancing.

70.—EQUITY, PROBATE, BANKRUPTCY AND COMPANY LAW, TOGETHER WITH PROCEDURE IN THOSE JURISDICTIONS.

Students are recommended to read or refer to Snell's Principles of Equity; The Practice in Equity (Walker and Rich); The Probate Acts (Garret and Walker); The Bankruptcy Acts (Salusbury); The Company Acts (Rich and Rolin); and the following cases with notes from White and Tudor's Leading Cases:—Fox v. Macreth, Ellison v. Ellison, Cuddee v. Rutter, Bassett v. Nosworthy, Townley v. Sherborne, Penn v. Lord Baltimore; together with the Statutes in Force in New South Wales relating to subjects of Equitable Jurisdiction.

Reference may be made to other parts of White and Tudor's Leading Cases.

MICROSCOPES.

In Practical Classes in the Departments of Biology, Pathology, and Physiology, students may use their own microscopes provided they be of an approved pattern, or may use the microscopes provided by the University, for the use of which a charge of £1 per course will be made. The following are the approved patterns of microscopes:—

(1) Zeiss's stand V2 with revolving diaphragm, double nose-piece, ocular 3 and objectives A and D.

(2) Reichert's "University" stand with revolving diaphragm double nose-piece, ocular III., and objectives 3 and 7a.

EXAMINATION SUBJECTS.

FACULTY OF ARTS.

EXAMINATION FOR THE DEGREE OF B.A.

See By-laws, Chap. XV.

EXAMINATION FOR THE DEGREE OF M.A.

See By-laws, Chap. XV., Sec. 24.*

School of Classical Philology and History.

Candidates may offer themselves for examination in one or more of the following subjects:

1. The History of Greece, to the death of Alexander. Special knowledge of Herodotus and Thucydides, or of Thucydides and Demosthenes, will be required.
2. The History of Rome, to the death of Marcus Aurelius. Special knowledge of Cicero's Letters and Tacitus' Annals will be required.
3. Greek Literature, to the death of Demosthenes. Special knowledge will be required of Homer, Iliad or Odyssey, and of six plays from among those of Aeschylus and Sophocles, and candidates will be required to show a general knowledge of, and translate passages from, other Greek authors.
4. Roman Literature, to the death of Tacitus. Special knowledge will be required of Virgil and Horace; and candidates will be required to show a general knowledge of, and to translate passages from, other Latin authors.
5. The History of Greek Philosophy, down to and including Aristotle. Special knowledge will be required of Plato's Republic and of Aristotle's Ethics or Politics.

* Candidates may be admitted to *Examination* for the Degree of M.A. one year after obtaining the Degree of B.A. The Degree of M.A. cannot be conferred until the time has elapsed which is required by the By-laws.

6. Comparative Philology, with special application to the Greek and Latin Languages. Books specially recommended: King and Cookson's Sounds and Inflections in Greek and Latin; Monro's Homeric Grammar; Wordsworth's Specimens of Early Latin; Lindsay's The Latin Language.

Candidates for honours are required to offer not less than two of these subjects, of which one must be Greek and one Roman.

The Greek and Latin books especially prescribed must be read in the original language. Books which have in whole or in part been included in the candidate's course for the B.A. Degree, may be offered only subject to the approval of the Professors of Greek and Latin; but other books or subjects of similar nature and extent may, subject to the approval of the Professors of Greek and Latin, be substituted for those here specified.

SCHOOL OF LOGIC, MENTAL, MORAL AND POLITICAL PHILOSOPHY.

Candidates may offer themselves for examination in one or more of the following subjects:

A. LOGIC. The principles of Logic and the History of Logical Doctrines. In addition candidates are required to offer at least one of the following books:

1. Lotze's Logic.
2. Mill's Logic and Jevons' Principles of Science.
3. Bosanquet's Logic or Bradley's Principles of Logic.

B. MENTAL PHILOSOPHY. Outline of the History of Mental Philosophy. In addition a special knowledge will be required of at least one of the following groups:

1. Plato—Timaeus, Sophistes, Parmenides. Aristotle—Metaphysics.
2. Descartes—Method and Meditations. Spinoza—Ethics. Leibnitz—Monadologie.
3. Berkeley (Selections by Frazer); Hume—Treatise on Human Nature, Book I.; Kant—Critique of Pure Reason.

4. The Logic of Hegel (Trans. by Wallace); Bradley's Appearance and Reality.

C. Moral Philosophy. Outline of the History of Ethics. In addition a special knowledge will be required of at least one of the following groups:

1. Plato—Gorgias, Philebus, Republic; Aristotle's Ethics.*
2. Hume—Treatise on Human Nature, Books II. and III. Kant—Metaphysics of Morals and Critique of Practical Reason; Green-Prolegomena to Ethics.
3. Mill—Utilitarianism; Spencer—Principles of Ethics; Alexander's Moral Order and Progress.

D. Political Philosophy:

1. History of Political Theories. In addition a special knowledge will be required of at least one of the following:—

*(*a*) Plato's Republic, and Aristotle's Politics.

(*b*) Hobbes' Leviathan; Locke's Treatise on Civil Government; Rousseau's Social Contract, and the Social Philosophy of Comte; Bentham's Theory of Legislation; and Austin's Jurisprudence.

(*c*) Mackenzie's Introduction to Social Philosophy; Sidgwick's Elements of Politics; Burgess' Political Science and Constitutional Law.

Or, 2. The Principles of Political Economy. A special knowledge will be required of Mill's Political Economy and Marshall's Principles of Economics.

Candidates for honours are required to offer not less than two of these subjects.

Classical and Foreign Authors may be read in translations. Other books or subjects of similar nature and extent may be offered, subject to the approval of the Professor of Logic and Mental Philosophy.

School of Mathematics.

Candidates may offer themselves for Examination in any Mathematical subjects distinctly in advance of those prescribed for the B.A. course; the subjects to be approved by the Professor of Mathematics.

* Candidates who offer C 1 and D 1 (*a*) together must offer some other book or books equivalent to the Republic.

School of Modern Literature.

Candidates may offer themselves for examination in one or more of the following subjects:—

1. English Philology, English Literature before Chaucer. Special knowledge of Beowulf, the Chronicle, and Layamon will be required.
2. English Literature from Chaucer to the present day. Special knowledge will be required of three of the following authors—Chaucer, Shakespeare, Burke, Tennyson.
3. German Philology. German Literature before Klopstock. Special knowledge of the Niebelungen Lied, Walter von der Vogelweide, Hans Sachs (Lichtungen Goedeke, and Tittman).
4. German Language and Literature from Klopstock to the present day. Special knowledge will be required of Goethe's Novels and Dramas, or Schiller's Plays and Poems, and of Lessing's Chief Prose Works.
5. *French Philology. French Literature till 1600.* Special knowledge will be required of the Chanson de Roland, of the Romances and Pastorals (Romanzen and Pastorellen, ed. *Bartsch*), and of Montaigne.
6. French Language and Literature from 1600 to the present day. Special knowledge will be required of Molière, of Voltaire's Historical Works and La Henriade, of Saint-Beuve's Port Royal, and Hugo's Dramas.

Subject to the approval of the Professor of Modern Literature, candidates may offer other books and authors of similar nature and extent in place of those specified above.

In all these subjects there may be *viva voce* examination in addition to the examination in writing.

Candidates who have graduated after March, 1894, will be required to present an essay on some subject connected with the period, and written in the language they have selected. The choice of the subject will be left to themselves, but must be approved by the Professor.

Candidates for honours are required to offer (*a*) not less than two of the preceding subjects, or (*b*) one of the six subjects

mentioned, along with one of the subjects prescribed for Classics, Philosophy, or History. In the latter case the approval of both Professors concerned must be obtained.

School of Modern History.

A new scheme has been adopted for the giving of the Degree of M.A in modern History.

Students who have already selected their subjects in accordance with the scheme printed in the 1897 Calendar, p. 128., must present themselves for examination in those subjects not later than March, 1899.

In the future candidates must choose their subjects in accordance with the new scheme, which is as follows: —

PASS.

Candidates will be required:—

(A) To write an essay on some subject to be suggested by themselves, and approved by the Professor of History.

The essay must be sent into the Registrar on or before the first day of the examination in March for the M.A. Degree.

(B) To offer themselves for examination in one of the following subjects, provided that they have not been examined in any part of the subject for the Degree of B.A.

(1) The History of England from 449 to the present time (*a*).

(2) The History of Continental Europe from 449 to the present time (*b*).

(3) The History of England from 449 to 1603, together with the History of Continental Europe during the same period.

(4) The History of England from 1603 to the present time, together with the history of Continental Europe during the same period.

Papers on the History of England will be set in December, other papers in March.

Subject to the approval of the Professor of History, candidates may offer other subjects of similar nature and extent in place of those specified above.

HONOURS.

Candidates will be required:—

(A) To write an essay on some subject to be approved by the Professor of History.

The essay must be sent in to the Registrar on or before the first day of the examination in March for the M.A. Degree.

(B) To offer themselves for examination in the following jects:—

(1) The History of England from 449 to the present time (*a*).

(2) The History of Europe from 449 to the present time (*b*).

(3) One of the following subjects:—

(i.) Political Philosophy as prescribed in the School of Philosophy, Section D 1 (*d*).

(ii.) Political Economy as prescribed in the School of Philosophy, Section D 2.

(iii.) The writings of Milton, Burke and Carlyle, to be studied in relation to the history of their times.

(iv.) The Application of the Federal Principle in Modern History (*c*).

Papers on the History of England will be set in December, other papers in March.

Subject to the approval of the Professor of History, candidates may offer other subjects of similar nature and extent in place of those specified above.

(*a*) BOOKS RECOMMENDED FOR HISTORY OF ENGLAND.—Same as for B.A. Degree; *see* Calendar for 1898, page 89.

(*b*) BOOKS RECOMMENDED FOR HISTORY OF EUROPE.—Same as recommended for B.A. Degree, *see* Calendar for 1898; and, in addition, the following:—*Church's* Beginning of the Middle Ages; *Hodgkin's* Charles the Great; Epochs of European History (*Rivington*); *Finlay's* History of Greece; *Lodge's* Modern Europe; *Dyer's* Modern Europe; *Creighton's* Papacy;

Ranke's Popes; *Villari's* Savonarola; *Beard's* Hibbert Lectures; *Beard's* Luther: *Froude's* Council of Trent; *Froude's* Erasmus; *Motley's* Dutch Republic and United Netherlands; *Armstrong's* Religious Wars in France; Heroes of the Nations Series; *Gardiner's* Thirty Years' War; *Longman's* Seven Years' War; *Carlyle's* Frederick the Great, and the French Revolution; *De Tocqueville's* Ancien Regime.

(*c*) BOOKS RECOMMENDED (so far as they bear on the subject).—*For the U.S.*—*Bryce's* American Commonwealth; *Fiske's* American Revolution, and Critical Years of American History; *Landon's* Constitutional History and Government of the U.S.; *Burgess's* Political Science. *For Switzerland.*—*Adams's* Swiss Confederation; *Vincent's* Federal Government in Switzerland. *For Canada.*—*Bourinot's* Constitutional History of Canada and Federal Government in Canada; *Munro's* Constitution of Canada. *For Australia.*—*Barton's* Australian Federation; *Debates* of the Sydney Convention. *Generally.*—*Hart's* Introduction to the Study of Federal Government; *Freeman's* Federal Government, ch. 1 and 2; *Dicey's* Law of the Constitution, Book I.; *Baker's* Manual of Reference to Authorities. *Garran's* The Coming Commonwealth.

Candidates will be expected to show a general knowledge of the origin, development, and present structure of the systems of Federal Government existing in the United States of America, Switzerland, Canada, and the German Empire; together with a knowledge of the Federal Movement in Australia from 1846 to the present time.

(*d*) The following books are recommended for the History of Political Theories:—Essays on Plato and Aristotle in "Hellenica:" *Flint's* Philosophy of History; *Maine's* Ancient Law and Popular Government; *Bonar's* Philosophy and Economics; *Lecky's* Democracy and Liberty; *Hegel's* Introduction to Philosophy of History; *Graham's* Socialism; *Montague's* Limits of Individual Liberty; *Green's* Ground of Political Obligation.

EXAMINATION FOR THE DEGREE OF LL.B.

See By-laws, Chap. xvi.

A. The Intermediate LL.B. Examination will, until further notice, include the following subjects:—

1. Jurisprudence.
2. Roman Law.
3. Constitutional Law.
4. International Law.

The examination will be conducted partly in writing and partly *vivâ voce*.

B. The Final LL.B. Examination will, until further notice, include:—

1. The Law of Property and Principles of Conveyancing.
2. The Law of Status, Civil Obligations and Crimes.
3. Procedure in Civil and Criminal Cases, both before the Supreme Court in its common jurisdiction, and before courts of inferior jurisdiction, together with Evidence and Pleading.
4. Equity, Probate, Bankruptcy, and Company Law; and Procedure in those jurisdictions.

The examination will be conducted partly in writing and partly *vivâ voce*.

EXAMINATION FOR THE DEGREE OF LL.D.

See By-laws, Chap. xvi.

The Examination for the Degree of Doctor of Laws will, until further notice, include the following subjects:—

I.—Jurisprudence.

All candidates will be examined in Jurisprudence and the Principles of Legislation. They will be expected to show a critical knowledge of the subject, and a familiarity with current literature relating thereto.

II.—Roman Law.

Candidates will be examined in the General Principles of Roman Law, and in the following special subject to be studied in connection with the corresponding department of English Law.

For March, 1899—The contract of Emptio Venditio. On this subject candidates are advised to refer to the following Titles of the Digest—De contrahenda Emptione (xviii., 1); De actionibus empti et venditi (xix., 1).

III.—The Law of New South Wales.

Candidates will be expected to show a general knowledge of the principles of the law applicable in New South Wales, and also to show a detailed knowledge both of principles and practice in one of the following departments—

1. Common Law, including the Law of Evidence and Criminal Law.
2. Equity.

IV.—PUBLIC AND PRIVATE INTERNATIONAL LAW.

Candidates will be expected to show a general knowledge of the principles of International Law and a more detailed knowledge of the principles and decisions relating to the international application of Foreign Law.

No books are prescribed by the Faculty, but any person proposing to present himself as a candidate may apply to the Professor of Law for advice on the subject. The examination will be conducted partly in writing and partly *vivâ voce*.

EXAMINATIONS FOR THE DEGREES OF M.B. & M.D.

See By-laws, Chap. xvii.

EXAMINATIONS FOR THE DEGREES OF D.Sc. & B.Sc.

See By-laws Chap. xviii.

EXAMINATIONS FOR DEGREES IN ENGINEERING.

See By-laws, Chap. xviii.

PUBLIC EXAMINATIONS.

Full particulars regarding these examinations can be had on reference to the "Manual of Public Examinations," which contains the By-laws, Subjects of Examination, Books Recommended, Directions for Candidates, Examination Papers, &c., and is obtainable from almost any bookseller.

ADMISSION OF BARRISTERS.

Certain privileges are conceded to Graduates and Third Year students of the University in respect to the conditions necessary for admission to the Bar. As to these, candidates are advised either to refer to the Rules for the admission of Barristers (see Law Almanac), or to apply for information to the Secretary of the Barristers' Admission Board, Supreme Court.

ADMISSION OF ATTORNEYS.

The following are extracts from the Rules of the Supreme Court for the admission of Attorneys, which refer to Examinations held at the University :—

Every person desirous of entering into Articles of Clerkship who shall not have taken a Degree in the University of Sydney, or in some other University recognised by it, shall, before approval of such Articles, produce to the Prothonotary a Certificate of his having passed a Matriculation Examination in the said University, or in some other University recognised by it; or a Certificate from the Registrar of the University of Sydney of his having passed some equivalent examination before Professors or Examiners appointed by the Senate thereof; or a certificate of his having passed in England, Scotland or Ireland, the Preliminary Examination which Articled Clerks may be there required to pass, and shall lodge with the said Prothonotary a copy of such Certificate.

Preliminary Examinations (equivalent to the Matriculation Examination) for Articled Clerks are held at the University in the months of April, July and November, commencing on the first Monday in each case. Fee, £5 10s. 6d., to be paid to the Prothonotary of the Supreme Court.

The subjects of the Examinations to be held in July and November, 1898, and April, 1899, will be the same as those prescribed for the Matriculation Examination of March, 1899, and so on in future years. (See page 54.)

LIST OF
*SCHOLARSHIPS, EXHIBITIONS, PRIZES, &c.

All students of the University who shall during their course have received Bursaries, Exhibitions, Scholarships or Fellowships, or exemptions from Fees, are invited by the Senate to make returns to the University when their circumstances in life shall permit, for the purpose of conferring like benefits on future students. The names of all students making such return will be published in the University Calendar.

AWARDED AT THE MATRICULATION EXAMINATION.

The SALTING Exhibition—Awarded on the recommendation of the Trustees of the Sydney Grammar School, to a student proceeding thence to the University. £25 for three years. (See page 159.) The last award was made in March, 1897.

The BOWMAN-CAMERON Scholarship—Every third year, for general proficiency. £50 for three years. (See page 155.) The last award was made in March, 1896.

The COOPER Scholarship No. II.—Awarded to a student distinguished in Classics. £50 for one year. (See page 153.)

The BARKER Scholarship No. II.—Awarded to a student distinguished in Mathematics. £50 for one year. (See page 152.)

The LITHGOW Scholarship—Awarded to a student distinguished in modern languages (French and German). £50 for one year. (See page 154.)

The AITKEN Scholarship—For general proficiency. £50 for one year. This Scholarship is not given in the year in which the Bowman-Cameron Scholarship is awarded. (See page 156.)

The FREEMASONS Scholarship—For Sons of Freemasons. Every third year. £50 for three years. (See page 155.) The last award was made in March, 1896.

*Scholars are required to proceed with their studies in the respective Faculties in which their Scholarships are awarded.

HORNER Exhibition.—For proficiency in Mathematics. £8 for one year. (See page 160.)

BURSARIES of the annual value of £25, £40 and £50 each are awarded from time to time. (See page 160.)

AWARDED AT THE FIRST YEAR EXAMINATIONS.

The COOPER Scholarship No. III.—For Classics. £50 for one year. (See page 153.)

The GEORGE ALLEN Scholarship—For Mathematics. £50 for one year. (See page 154.)

The *LEVEY Scholarship—For Chemistry (theoretical and practical) and Physics (theoretical and practical). £40 for one year. (See page 151.)

The *SMITH Prize—For Physics. £5. (See page 167.)

The SLADE Prizes—For Practical Chemistry and Practical Physics. £5 each. (See page 168.)

The COLLIE Prize—For Botany. £5. (See page 168.)

The STRUTH Exhibition—For general proficiency. Awarded at the First Year Examination in Arts to a student entering the Faculty of Medicine. £50 for five years. (See page 159.) The last award was made in March, 1897.

AWARDED AT THE SECOND YEAR EXAMINATIONS.

The COOPER Scholarship No. I.—For Classics. £50 for one year. (See page 153.)

The BARKER Scholarship No. I.—For Mathematics—£50 for one year. (See page 152.)

The NORBERT QUIRK Prize—For Mathematics. £6. (See page 168.)

The DEAS-THOMSON Scholarship—Awarded in the Faculty of Science for Chemistry and Physics. £50 for one year. (See page 152.)

The DEAS-THOMSON Geology Scholarship—Awarded in the Faculty of Science for Geology. £50 for one year. (See page 152.)

* Candidates for Honours and Scholarships in Physics are required to attend the Laboratory during one term, *i.e.*, two afternoons a week.

The CAIRD Scholarship—Awarded in the Faculty of Science for Chemistry and Physics. £50 for one year. (See page 155.)

AWARDED AT EACH DEGREE EXAMINATION.

BRONZE MEDALS are awarded to the highest proficients in the various Degree Examinations.

SCHOLARSHIPS TENABLE BY GRADUATES.

The FRAZER Scholarship—Awarded upon the results of examinations, &c., in History. £80. (See page 157.)

The JAMES KING of Irrawang Scholarship, awarded to a Graduate of not more than four years' standing. £150 for two years. (See page 156.)

Her Majesty's Commissioners of the Exhibition of 1851 have on four occasions awarded Scholarships to Graduates in Science of this University, upon the nomination of the Senate. £150 for two or three years. (See page 157.)

AWARDED IN THE FACULTY OF LAW.

The WIGRAM ALLEN Scholarship—Awarded for proficiency at the Intermediate Law Examination. Candidates are required to present themselves for examination in all the subjects of the Intermediate Examination, notwithstanding they may have passed in some of them in the Arts course. £50 for one year. (See page 154.)

AWARDED IN THE FACULTY OF MEDICINE.

The STRUTH Exhibition—For proficiency in the subjects of the First Year Examination in Arts, to a student entering the Faculty of Medicine. £50 for five years. (See page 159.) The last award was made in March, 1897.

The RENWICK Scholarship—For proficiency in the subjects of the First Year Examination in Medicine. £50 for one year. (See page 154.)

The JOHN HARRIS Scholarship—For proficiency in the subjects of Anatomy and Physiology in the Third Year Examination in Medicine. £40 for one year. (ee page 156.)

The BELMORE Medal. A Gold Medal of the value of £15, awarded annually for proficiency in Geology and Practical Chemistry, with special reference to Agriculture. (See page 166.)

1. Candidates must be of two, and under five years' standing in the University of Sydney.

2. They must pass examinations in Chemistry and Geology, with special reference to Agriculture.

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*PRIZE COMPOSITIONS.

WENTWORTH Medal for Graduates—£10. Awarded annually for an English Essay. The competition for this Medal is confined to Bachelors of Arts of not more than three years' standing. (See page 166.)

Subject for 1898-9.—The Influence of Great Men in History.

WENTWORTH Medal for Undergraduates — £10. Awarded annually for an English Essay. (See page 166.)

Subject for 1898-9.—The Influence of Great Men in History.

NICHOLSON Medal—£10. Awarded annually for Latin Verse (Hexameters). The competition for this medal is open to all Undergraduates and to Bachelors of Arts of not more than two years' standing. (See page 166.)

Subject for 1898-9.—Tennyson's Guinevere, King Arthur's Speech to the Queen:—"Liest thou here so low," to "The mockery of my people and their bane."

UNIVERSITY Prize—£10. Awarded annually for English Verse (to be written in rhyme.) The competition for this Medal is open to all Undergraduates and to Bachelors of Arts of not more than three years' standing. The Composition must be at least one hundred lines in length.

Subject for 1898-9.—Nansen.

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* The exercises for these Prizes, which must not be in the handwriting of the Author, must be sent to the Registrar before the first day of Lent Term, 1899. They must be contained in an envelope with a motto, and be accompanied by a sealed letter containing the name and motto of the Author.

Professor ANDERSON's Medal—£10. Awarded annually for an Essay on some Philosophical subject The competition for this medal is open to all Bachelors of Arts of not more than two years' standing.

Subject for 1898-9.—Philosophy as Criticism of Categories.

TABLE OF FEES.

	£	s.	d.
Matriculation Fee	2	0	0
Entrance Examination for Law, Medicine and Science	2	0	0
Lecture Fees, *per term*—			
Anatomy, Dissections (including 15s. for "parts")	2	17	0
Anatomy, General and Descriptive ..	3	3	0
Anatomy, Regional and Surgical .	2	12	6
Anatomy, Senior	3	3	0
Applied Mechanics	2	2	0
Architecture	2	2	0
Assaying *(see Practical Chemistry)*			
Biology	2	2	0
Biology, Practical	2	2	0
Chemistry	3	3	0
Chemistry, Practical*	5	5	0
Civil Engineering	2	2	0
Descriptive Geometry and Drawing ..	1	11	6
English, First Year	0	10	6
English, Second and Third Year ..	2	2	0
French	2	2	0
Geology	2	2	0
Practical Geology	3	3	0
German	2	2	0
Greek	2	2	0

* For Students who have passed through the first course the following is the Table of Fees; two half-days being counted as one day—

For 6 days	in the	week,	£5	per	month, or	£12 per term.
,, 5	,,	,,	£4 5s.	,,	£10	,,
,, 4	,,	,,	£3 6s. 8d.	,,	£8	,,
,, 3	,,	,,	£2 10s.	,,	£6	,,
,, 2	,,	,,	£2	,,	£4	,,
,, 1	,,	,,	£1	,,	£2	,,

LECTURE FEES *per term—continued.*	£	s.	d.
HISTORY	2	2	0
LATIN	2	2	0
LAW, EACH COURSE*	2	2	0
LOGIC AND MENTAL PHILOSOPHY	2	2	0
LOGIC FOR MEDICAL STUDENTS	1	1	0
MATERIA MEDICA AND THERAPEUTICS ..	3	3	0
MATHEMATICS	2	2	0
MECHANICAL DRAWING	2	2	0
MECHANICAL ENGINEERING	2	2	0
MEDICAL JURISPRUDENCE	3	3	0
MEDICINE	3	3	0
MEDICINE, CLINICAL	2	2	0
MIDWIFERY	3	3	0
METALLURGY	2	2	0
MINERALOGY	2	2	0
MINING	2	2	0
OPHTHALMIC MEDICINE AND SURGERY ..	1	1	0
PATHOLOGY	3	3	0
PATHOLOGY, PRACTICAL	4	4	0
PHYSICS	3	3	0
PHYSICS, PRACTICAL	3	3	0
PHYSIOGRAPHY	2	2	0
PHYSIOLOGY	3	3	0
PHYSIOLOGY, SENIOR	3	3	0
PHYSIOLOGY, PRACTICAL	3	3	0
PSYCHOLOGICAL MEDICINE	1	1	0
SURGERY	3	3	0
SURGERY, CLINICAL	2	2	0
SURGERY, OPERATIVE	4	4	0
SURVEYING	2	2	0

* In the Faculty of Law, the fees payable by Students in the two Final Years are eight guineas per term.

	£	s.	d.
DEGREE FEES—			
B.A.	3	0	0
M.A.	5	0	0
LL.B.	10	0	0
LL.D.	20	0	0
M.B.	10	0	0
M.D.	10	0	0
Ch.M.	10	0	0
B.Sc.	3	0	0
D.Sc.	10	0	0
B.E.	10	0	0
M.E.	10	0	0
Fee for entering name on books, to be paid by those who are admitted *ad eundem statum* or *gradum*	2	0	0
YEARLY EXAMINATION FEE for students who have been exempted from attendance upon lectures	2	0	0
Fee payable for a deferred examination in March or at any other time, or for re-examination at a subsequent Annual Examination ..	2	0	0
PUBLIC EXAMINATION FEES—			
SENIOR EXAMINATION	1	10	0
JUNIOR ,, ...	1	0	0
PRELIMINARY EXAMINATION FOR ARTICLED CLERKS (payable to the Prothonotary)	5	10	6

TABLE OF FEES SHOWING THE TOTAL COST OF GRADUATION IN MEDICINE.

		£	s.	d.	£	s.	d.
1st Year—	Chemistry	6	6	0			
	Practical Chemistry	5	5	0			
	Physics	6	6	0			
	Practical Physics	3	3	0			
	Biology	4	4	0			
	Practical Biology	4	4	0			
					29	8	0
2nd Year—	Descriptive Anatomy	6	6	0			
	Practical Physiology	6	6	0			
	Physiology	6	6	0			
	Chemistry—Organic	3	3	0			
	Descriptive Anatomy (Senior)	3	3	0			
	Dissections and parts	8	11	0			
					33	15	0
3rd Year—	Regional and Surgical Anatomy	5	5	0			
	Practical Physiology	3	3	0			
	Physiology (Senior)	3	3	0			
	Materia Medica and Therapeutics	6	6	0			
	Dissections	8	11	0			
					26	8	0
4th Year—	Surgery	6	6	0			
	Pathology	6	6	0			
	Operative Surgery	4	4	0			
	Clinical Surgery	4	4	0			
	Practical Pathology	4	4	0			
	Medical Jurisprudence and Public Health	3	3	0			
	Tutorial Surgery	1	1	0			
					29	8	0
5th Year—	Midwifery and Gynæcology	6	6	0			
	Medicine	6	6	0			
	Psychological Medicine	1	1	0			
	Clinical Medicine	4	4	0			
	Ophthalmic Medicine and Surgery	1	1	0			
	Applied Logic	1	1	0			
	Tutorial Medicine	1	1	0			
					21	0	0
	Total Lecture Fees				£139	19	0
	Matriculation Fee				2	0	0
	Fee for M.B. Degree				10	0	0
	Total Fees payable to University				£151	19	0
	Perpetual Attendance at the Prince Alfred Hospital	10	10	0			
	Practical Midwifery	5	5	0			
	Practical Pharmacy	3	3	0			
	Fees payable to Hospitals				18	18	0
	Total Cost of Education and Graduation as M.B.				£170	17	0

TABLE OF LECTURE FEES PAYABLE IN THE DEPARTMENT OF ENGINEERING.

		£	s.	d.	£	s.	d.
1st Year—	Mathematics	6	6	0			
	Descriptive Geometry, &c.	3	3	0			
	Applied Mechanics	4	4	0			
	Chemistry—Inorganic	6	6	0			
	Practical Chemistry	8	5	0			
	Physics	6	6	0			
	Practical Physics	3	3	0			
	Mechanical Drawing	2	2	0			
					39	15	0

		Civil Eng. £	s.	d.	*Mining Eng.* £	s.	d.
2nd Year—	Mathematics	6	6	0			
	Applied Mechanics	4	4	0	4	4	0
	Physics	9	9	0	—		
	Practical Physics	3	3	0	—		
	Geology	6	6	0	6	6	0
	Surveying	4	4	0	4	4	0
	Mechanical Drawing	2	2	0	1	1	0
	Civil Engineering	3	3	0	3	3	0
	Practical Chemistry	—			15	0	0
		£38	17	0	£33	18	0

		Civil Eng. £	s.	d.	*Mining Eng.* £	s.	d.
3rd Year—	Mathematics	6	6	0	—		
	Civil Engineering	3	3	0	2	2	0
	Materials and Structures	4	4	0	2	2	0
	Surveying	2	2	0	2	2	0
	Architecture and Building Construction	2	2	0	—		
	Drawing School	2	2	0	—		
	Metallurgy	—			4	4	0
	Mineralogy and Practical Mineralogy	—			4	4	0
	Mining	—			4	4	0
	Assaying—(Crucibles, &c.)	—			24	0	0
		£19	19	0	£42	18	0

FOUNDATIONS.

I.

CHALLIS FUND.

In 1880, the late John Henry Challis, Esq., formerly of Sydney, bequeathed his residuary real and personal estate to the University, "to be applied for the benefit of that Institution in such manner as the governing body thereof should direct." The bequest was subject to a tenure until death or re-marriage on the part of his widow, and to the payment of various annuities, and also to a period of five years' accumulation after such death or re-marriage. By the death of the widow, in September, 1884, the University became entitled to the accumulated property in September, 1889. The assets have been collected and invested partly in England and partly in New South Wales; and all the specific bequests have been paid, as well as the annuities up to date.

The assets in England, amounting to £30,000, being not more than sufficient to provide for the payment of the various annuities, may be retained by the Trustees until the expiration of such annuities. Those in Australia amount to £238,224.

By a resolution of the Senate passed in 1885, it was determined that the Challis Fund should be applied as a permanent provision of income for educational uses.

From the income of the Fund a sum of £7,500 has been applied for the payment of half the cost of the erection of a new Chemical Laboratory, and a further sum of £1,200 has been devoted to the erection of a marble statue of Mr. Challis, which has been placed in the Great Hall opposite to that of Mr. W. C. Wentworth.

The income arising from the Australian assets is now devoted to the maintenance of seven Challis Professorships in the following subjects, viz., Anatomy, Biology, Engineering, History, Law, Logic and Mental Philosophy and Modern Literature; and three Challis Lectureships in Law.

CHALLIS PROFESSORSHIPS.

Anatomy, 1890—James T. Wilson, M.B., Ch.M. (Edin.)

Biology, 1890—William A. Haswell, M.A., D.Sc. (Edin.)

Engineering, 1890—William H. Warren, M.I.C.E.

Law, 1890—Pitt Cobbett, M.A., D.C.L. (Univ. Coll., Oxon.)

Logic and Mental Philosophy, 1890—Francis Anderson, M.A. (Glasg.)

Modern Literature, 1890—Mungo W. MacCallum, M.A. (Glasg.)

History, 1891—G. Arnold Wood, M.A. (Oxon.)

CHALLIS LECTURESHIPS.

Equity, Probate, Bankruptcy, and Company Law, 1890—G. E. Rich, M.A.

The Law of Status, Civil Obligations and Crimes, 1890—F. Leverrier, B.A., B.Sc.

Law of Procedure in Civil and Criminal Cases, Evidence and Pleading, 1890—C. A. Coghlan, M.A., LL.D.

II.

THE PETER NICOL RUSSELL ENDOWMENT FOR THE DEPARTMENT OF ENGINEERING.

In 1896, Peter Nicol Russell, Esq., formerly of Sydney but now living in London, presented to the University a sum of £50,000 for the endowment of the Department of Engineering in the University.

The conditions of the gift are the following:—

1. That the Department of Engineering at present existing in the University, together with such additions as may be made thereto, shall be called the P. N. Russell School of Engineering.

2. That the University shall, out of the income to be derived from the sum of £50,000, afford both practical and theoretical teaching in the following subjects, in so far as such subjects relate to the School of Engineering—viz., Mechanical Engineering, Surveying, Mining, Metallurgy, Architecture, and such further instruction as the Senate of the University may deem necessary to give effect to the intention of Mr. P. N. Russell in connection with the P. N. Russell School of Engineering.

3. The University shall apply the income of the Fund in the maintenance of the P. N. Russell School of

Engineering, but shall not charge such income with any proportion of the cost of the existing buildings, nor with the expense or any proportion thereof of service by ordinary attendants, nor with the expense or any proportion thereof of the Professorships of Mathematics, Chemistry, Physics, Geology, or the Challis Chair of Engineering.

Other conditions of the Deed of Gift relate to the mode of investment of the principal sum, and provide that any unused surplus of income shall be added to the principal sum, and invested as if it formed a part of the original donation.

Under the second clause of the deed of gift above recited, a portion of the income of the Russell Fund has been devoted to the maintenance of the following offices:—

Assistant Lecturer in Mechanical Engineering and Drawing, 1897—S. Henry Barraclough, B.E. (Sydney), M.M.E. (Cornell), Assoc. M. Inst. C.E.

Lecturer in Surveying, 1890—George H. Knibbs, L.S., F.R.A.S.

Lecturer in Mining, 1892—Edward F. Pittman, A.R.S.M.

Lecturer in Metallurgy, 1898—James Taylor, B.Sc., A.R.S.M.

Lecturer in Architecture, 1897—John Sulman, F.R.I.B.A.

Mechanical Instructor—Henry Blay.

PETER NICOL RUSSELL SCHOLARSHIPS FOR MECHANICAL ENGINEERING.

Under the gift of Peter Nicol Russell, Esq., for the Endowment of the School of Engineering at the University, the Senate has determined, with the donor's approval, to award one Scholarship annually, until further notice, for the encouragement of higher education in Mechanical Engineering, under the following conditions:—

1. Every candidate must present evidence that he has satisfied one of the two following conditions:—(i.) That he has been engaged in an approved workshop for a period of at least one year, and has, in addition, obtained Certificates of the following courses in the Sydney Technical College:—

(*a*) Applied Mechanics, First and Second Year Courses.

(*b*) Mechanical Drawing, First and Second Year Courses.

(*c*) Mechanical Workshops, a two years' Course.

or, (ii.) that he has been engaged, under approved conditions, in the study of Practical Mechanical Engineering for at least three years, by apprenticeship or service in a mechanical workshop or drawing office, provided that one year at least shall have been spent in a workshop.

2.—The Scholarship will be awarded, after competitive examination held in the month of November, concurrently with the Senior Public Examination, and the holder will be styled the "Peter Nicol Russell Scholar."

3.—The subjects of Examination will be the following:—

(*a*) Applied Mechanics (250 marks).

(*b*) Mechanical Drawing (250 marks).

(*c*) Arithmetic, including the elements of Mensuration (150 marks).

(*d*) Algebra, including the Progressions, the Binomial Theorem for a positive index, and the properties and use of Logarithms (150 marks).

(*e*) Geometry, Euclid I.—IV., VI., XI., propositions 1—21, with easy deductions (100 marks).

(*f*) Trigonometry (150 marks).

Optional subjects (as in the Senior Public Examination), two may be taken—

(*a*) English (150 marks).

(*b*) Chemistry (150 marks).

(*c*) Physics, Part I. (150 marks).

(*d*) Physics, Part II. (150 marks).

(*e*) Geometrical Drawing and Perspective (100 marks).

(*f*) French (150 marks).

(*g*) German (150 marks).

(*h*) Latin (150 marks).

(*i*) Greek (150 marks).

Candidates must attain a certain standard in each of the Compulsory subjects. They will be allowed to take two, but not more than two of the optional subjects, and in these they must also attain the prescribed standard.

Subject to this provision, the Scholarship will be awarded to the candidate who obtains the highest aggregate number of marks in this examination, provided that he shall have shown sufficient merit to enable him, in the opinion of the Examiners, to profit by the award of a Scholarship.

4.—The Scholar will be required to commence attendance upon the University Classes in the March following the award of the Scholarship to him, and he can only continue to hold the Scholarship so long as he shall be of good conduct, and shall attend regularly the courses prescribed in the University for candidates for the Degree of Bachelor of Engineering in the Department of Mechanical Engineering, and shall pass all the prescribed examinations.

5.—The Scholarship will be of the value of £90 per annum and will be tenable for three years, under the conditions mentioned in the preceding paragraph. The payments will be quarterly, commencing on the first of April after the student commences his University course.

6.—Those scholars who have, before entering upon their University course, qualified themselves for admission to the Department of Engineering by passing the Examination prescribed for that purpose, or who have in the Peter Nicol Russell Scholarship Examination passed in (i.) Latin and (ii.) Greek, or French or German, will be entitled, after the three years' course, to the Degree of Bachelor of Engineering in Mechanical Engineering.

Those who have not so qualified themselves will be entitled at the end of the three years' course to certificates of their Attendance and Examination in the individual subjects, and a certificate showing that they have held the Peter Nicol Russell Scholarship, under the prescribed conditions, for a period of three years—but not to any Degree.

The candidates' names, together with an examination fee of £1 10s., and all the required certificates, must be in the hands of the Registrar of the University at least three weeks before the first day of examination.

THE PETER NICOL RUSSELL MEDAL.

THE PETER NICOL RUSSELL MEDAL (value £20) is open to competition amongst Graduates in Engineering of not more than two years' standing. Candidates are required to prepare and

submit a thesis upon some subject connected with the studies in the Department of Engineering, under the regulations in force for the time being.

III.

LECTURESHIPS.

1.—WILLIAM HILTON HOVELL LECTURESHIP ON GEOLOGY AND PHYSICAL GEOGRAPHY.

In 1877, certain tenements and land situated in the city of Goulburn were bequeathed by the widow of the late William Hilton Hovell, Esq., of that district, for the endowment of a Professorship or Lectureship in Geology and Physical Geography, in honour of her late husband. The present estimated value of the property is £6000.

1877.—Archibald Liversidge, Christ's College, Cambridge.

1882.—William John Stephens, M.A., Queen's College, Oxford.

1891.—T. W. Edgeworth David, B.A., New College, Oxford.

IV.

FELLOWSHIP.

WENTWORTH TRAVELLING FELLOWSHIP.

In 1862, the sum of £445 was given by W. C. Wentworth, Esq., to be invested and allowed to accumulate until it should reach an amount which, in the opinion of the Senate, would be sufficient for the foundation of a Travelling Fellowship, to be awarded upon certain specified conditions. The fund in April, 1898, was £2,011 11s. 1d.

V.

CURATORSHIP OF MACLEAY MUSEUM.

In 1888, the sum of £6000 was given to the Senate by the Hon. Sir William Macleay, M.L.C., to provide for the services of a Curator for the collections in Natural History which he had presented to the University. The present Curator, nominated by Sir William Macleay, is

1888—George Masters.

VI.

*SCHOLARSHIPS.

Awarded only when candidates exhibit a degree of proficiency satisfactory to the Examiners. No Undergraduate may hold more than two Scholarships at one time. Scholars are required to proceed with their studies in the respective Faculties in which their Scholarships are awarded.

1—UNIVERSITY SCHOLARSHIPS.

Awarded at the Matriculation Examination for General Proficiency. Extinguished in 1893, by reason of Private Foundations for the same purpose.

1891—Edwards, D. S.

1892—Hall, E. C. } æq.
Rowland, N. de H. }

2—LEVEY SCHOLARSHIP.

Founded by Solomon Levey, Esq., by a gift of £500 (with accumulations), as an endowment for the education of orphan boys in the Sydney College. In 1853 the fund was transferred to the University of Sydney on its foundation in 1851 as an endowment for a Scholarship.

It is awarded at the First Year Examination, for proficiency in Chemistry and Physics, both theoretical and practical. Students in any Faculty may compete for it, but no student is eligible to compete for more than one year. It is tenable for one year, and is of the annual value of £40.

1891—Brearley, J. H. D.
1892—Seale, H. P.
1893—Wood, J. P.
1894—Strickland, T. P.
1895—Sandes, F. P.
1896—Woolnough, W. G.
1897—Harker, G.
1898—Madsen, John P. V.

BARKER SCHOLARSHIPS.

Founded in 1853 by a gift of £1,000 (with accumulations) from Thomas Barker, Esq., for the encouragement of Mathematical Science.

*The names of holders of Scholarships before the year 1891 will be found in the University Calendar for 1893.

3.—BARKER SCHOLARSHIP, No. I.

Awarded at the Second Year Examination, for proficiency in Mathematics. £50, tenable for one year.

1891—Fell, J. W.*
1892—Davies, W. J. E.
1893—Davies, A. B.
1894—Burfitt, W. F.
1895—Stewart, D. G.
1896—Chalmers, S. D.
1897—Griffiths, F. G.
1898—Sawkins, Dansie T.

4.—BARKER SCHOLARSHIP, No. II.

Awarded at the Matriculation Examination, for proficiency in Mathematics. £50, tenable for one year.

1891—Davies, A. B.
1892—Simpson, E. S.
1893—Stewart, D. G. } æq.
Strickland, T. P†. }
1894—Chalmers, S. D.
1895—Griffiths, F. G.
1896—Hawken, R. W.
Waterhouse, G. A., *prox. acc.*
1897—Boyd, W. S. }
Horn, W. R. } *prox.*
Mort, H. S. } *acc.*
Stephen, H. M. }
1898—Mort, Harold S.

DEAS-THOMSON SCHOLARSHIPS.

Founded in 1854 by a gift of £1000 (with accumulations) from the Honourable Edward Deas-Thomson, for the encouragement of the study of Natural Science.

5.—DEAS-THOMSON SCHOLARSHIP FOR PHYSICS.

Awarded at the Second Year Examination, for proficiency in Chemistry and Experimental Physics. Candidates must have attended the courses of instruction of the Second Year upon Chemistry and Physics, and the scholar is required to attend the courses of instruction upon Physics during his tenure of the Scholarship; provided that candidates who are students in Civil Engineering shall not be obliged to have attended the course of instruction in Chemistry in their Second Year. £50, tenable for one year.

1891—Fell, J. W.
1892—Brearley, J. H. D.
1893—Brearley, J. H. D.
1895—Strickland, T. P.
1898—Durack, Joseph J. E.

6.—THE DEAS-THOMSON GEOLOGY SCHOLARSHIP.

Awarded at the Second Year Examination in the Faculty of Science. Candidates must have attended the courses of instruc-

*Awarded to H. de B. O'Reilly, Fell being the holder of two other Scholarships.
†Awarded to D. G. Stewart, T. P. Strickland being the holder of two other Scholarships.

tion on Geology (including Biology) of the Second Year, and the scholar is required to attend the lectures and Laboratory practice of the Third Year in Geology and Mineralogy. £50, tenable for one year.

1892—Hughes, M. O'G., B.A. | 1893—Watt, J. A., M.A.

COOPER SCHOLARSHIPS.

Founded in 1857 by a gift of £1000 (with accumulations) from Sir Daniel Cooper, Bart., for the encouragement of Classical Literature.

7.—COOPER SCHOLARSHIP, No. I.

Awarded at the Second Year Examination for proficiency in Classics. £50, tenable for one year.

1891—Parker, W. A.
1892—Levy, D.
1893—Garnsey, A. H.
1895—Waddell, G. W.
1896—Whitfeld, H. E.
1897—Evans-Jones, D. P.
1898—Teece, R. C.*

8.—COOPER SCHOLARSHIP, No. II.

Awarded at the Matriculation Examination for proficiency in Classics. £50, tenable for one year.

1891—Garnsey, A. H.
1892—Hall, E. C.
1893—Mitchell, E. M. } æq.
Waddell, G. W. }
1894—Whitfeld, H. E.
1895—Evans-Jones, D. P.
1896—Teece, R. C.†
1897—Robson, R. N.
Arnold, A. G. de L. } æq.
Bourne, Eleanor E. } *prox. acc.*
1898—Power, Percy H.
Woodd, G. N. } *prox. acc.*
Todd, F. A. }

9.—COOPER SCHOLARSHIP, No. III.

Awarded at the First Year Examination for proficiency in Classics. £50, tenable for one year.

1891—Levy, D.
1892—Garnsey, A. H.
1893—Rowland, N. de H.‡
1894—Mitchell, E. M. } æq.
Waddell, G. W. }
1895—Whitfeld, H. E.
1896—Evans-Jones, D. P.
1897—Teece, R. C.§
1898—Robson, R. N.

* R. C. Teece being the holder of two Scholarships could not retain the Cooper Scholarship No. 1, which was not awarded.
† Awarded to B. P. McEvoy, R. C. Teece being the holder of two Scholarships.
‡ The first place in the Scholarship Examination was gained by E. C. Hall, who did not comply with the conditions for holding the Scholarship.
§ Awarded to J. J. Walsh, R. C. Teece being the holder of two other Scholarships.

10.—LITHGOW SCHOLARSHIP.

Founded in 1864 by a bequest of £1000 from William Lithgow, Esq. Awarded for proficiency in French and German at the Matriculation Examination. £50, tenable for one year.

1891—Mell, C. N.
1892—Rowland, N. de H. } æq.
Whitfeld, Eleanor M. }
1893—Strickland, T. P.
1894—Ludowici, E.*
1895—Pilcher, N. G. S.
1896—Nicholson, G. G.
1898—Armstrong, Ina B. H.

11—WIGRAM ALLEN SCHOLARSHIP.

Founded by gifts of £381 in 1867 (with accumulations), and £500 in 1883, from Sir George Wigram Allen, for the encouragement of the study of Law. Awarded for general proficiency in the subjects of the Intermediate Law Examination. Candidates for this Scholarship are required to present themselves for examination in all the subjects of the Intermediate Examination, notwithstanding they may have previously passed in some of them in the Arts Course. £50, tenable for one year.

1892—Flannery, G. E., B.A.
1893—Holme, J. B., B.A.
1894—Levy, D., B.A.
1895—Bavin, T. R., B.A.
1896—Hammond, J. H., B.A.
1897—Mitchell, E. M., B.A.
1898—Dettmann, H.S., B.A.

12.—RENWICK SCHOLARSHIP.

Founded in 1877 by a gift of £1000 from Sir Arthur Renwick, B.A., M.D., for the encouragement of the study of Natural Science, including Comparative Anatomy. Awarded in the Faculty of Medicine for proficiency in the subjects of the First Year Examination in Medicine. £50, tenable for one year.

1891—Hughes, M. O'G.
Veech, M., *prox. acc.*
1892—Deck, G. H. B.
1893—Dixon, G. P.
1894—Hall, E. C. } æq.
Kater, N. W. }
1895—Sandes, F. P.
1896—Burfitt, W. F., B.A.
1897—Macintosh, A. H.
Graham, Mabel J., *prox. acc.*
1898—Muscio, A.

13.—GEORGE ALLEN SCHOLARSHIP.

Founded in 1877 by a bequest of £1000 from the Hon. George Allen. Awarded at the First Year Examination for proficiency in Mathematics, £50, tenable for one year.

1891—Levy, D.
1892—Davies, A. B.

* Awarded to Trixie Whitehead, E. Ludowici not having complied with the conditions necessary for holding the Scholarship.

1893—Burfitt, W. F.
1894—Stewart, D. G.
1895—Chalmers, S. D.
1896—Griffiths, F. G.
1897—Hawken, R. W. } æq
Morris, J. F. } æq
Sawkins, D. T. } æq
Page, E. C. G.* } æq
1898—Boyd, W. S.

14.—BOWMAN-CAMERON SCHOLARSHIP.

Founded in 1877 by a bequest of £1100 from Andrew Robertson Cameron, Esq., M.D. Awarded every third year for general proficiency at the Matriculation Examination. £50, tenable for three years.

1893—Mitchell, E. M. | 1896—Teece, R. C.

15.—FREEMASONS SCHOLARSHIP.

Founded in 1880 by a gift of £1000 from the Freemasons of New South Wales under the Constitution of the Grand Lodge of England, for the endowment of a Scholarship in honour of the District Grand Master of the Order, John Williams, Esq. Awarded for general proficiency at the Matriculation Examination. Competitors must be sons of Freemasons of five years' standing of the United Grand Lodge of New South Wales. If at any time there shall be no candidates for Matriculation eligible to compete for the Scholarship, or if any such candidates fail to show sufficient merit, it will be open to like competition at the First Year Examination. The Scholarship may be held in any Faculty. £50, tenable for three years, provided that the scholar shall so long faithfully pursue his studies in the University, and shall pass the Annual Examinations with credit. Applications for permission to compete for the Scholarship will be received not later than the last day for receiving entries for the Examination for Matriculation Honours and Scholarships.

1893—Strickland, T. P. | 1896—Teece, R. C.

16.—CAIRD SCHOLARSHIP.

Founded in 1886 by a gift of £1000 from George S. Caird, Esq., for the encouragement of the study of Chemistry. Awarded at the Second Year Examination in the Faculty of Science. Candidates must have attended the courses of instruction of the Second Year upon Chemistry and Physics. The Scholar is required to attend the theoretical and practical courses of instruction in Chemistry during the Third Year of the Faculty of Science. £50, tenable for one year.

1891—Fell, J. W. | 1898—Harker, George
1894—Simpson, E. S.

* E. C. G. Page did not comply with the regulations for holding the Scholarship.

17.—AITKEN SCHOLARSHIP.

Founded in 1878 by a bequest of £1000 from James Aitken, Esq., of Grafton, for a Bursary or Scholarship. Up to 1893 it was applied as a Bursary. It is now awarded as a Scholarship for general proficiency at the Matriculation Examination in the years in which the Bowman-Cameron Scholarship is not awarded. £50, tenable for one year.

1894—Dettmann, H. S.
1895—Griffiths, F. G.
1897—Horn, W. R.
Bourne, Eleanor E., *prox. acc.*
1898—Todd, Frederick A.

18.—JAMES KING OF IRRAWANG TRAVELLING SCHOLARSHIP.

Founded in 1888 by a bequest of £4000 from William Roberts, Esq., of Penrith, for the Foundation of a Scholarship or Scholarships, in memory of the late James King, of Irrawang, near Raymond Terrace. By the terms of the will, the choice of competitors and the decision of their respective merits are vested in the Senate, acting upon the advice of the Professors of Classics, Mathematics, Chemistry, Physics, and Natural History. It has been decided that the sum shall be devoted to the foundation of a Travelling Scholarship, to be called the James King of Irrawang Travelling Scholarship, and to be awarded on the following conditions:—

1. The Scholarship shall be awarded to a Graduate of not more than four years' standing, reckoned from his qualification by examination for his first degree.

2. The holder will be required to prosecute his studies or researches to the satisfaction of the Senate, in some approved place or places during the tenure of his Scholarship.

3. The amount of the Scholarship is £150 per annum, tenable for not more than two years.

1889—Newton, H., B.A.
1892—Brennan, C. J., B.A.
1894—Henderson, G. C., B.A.
1896—Smith, G. E., M.D., Ch.M.
1898—Chalmers, S. D., B.A.

19—JOHN HARRIS SCHOLARSHIP.

Founded in 1887 by a gift of £1000 from John Harris, Esq., then Mayor of Sydney. Awarded for proficiency in Anatomy and Physiology at the Third Year Examination in Medicine. £40, tenable for one year.

1891—Dick, R.
1892—Smith, G. E.
1893—Craig, R. G.
1894—Deck, G. H. B.
1895—Dixon, G. P.
1896—MacPherson, J., M.A., B.Sc.
1897—Willis, C. S.
1898—Burfitt, W. F., B.A.

20.—COUNCIL OF EDUCATION SCHOLARSHIP.

Founded in 1889 by a gift of £300 from the Trustees of the subscribers to a Memorial of the late Council of Education for the foundation of a Scholarship to be called the Council of Education Scholarship. Competition for the Scholarship is to be confined to the sons of teachers or officers in the Department of Public Instruction. It is provided by the deed of gift that before any award is made the fund shall be allowed to accumulate until it shall reach such a sum as will provide a Scholarship of not less amount than those already established in the University. It is to be awarded at the Matriculation Examination for general proficiency, but only when the candidates show such proficiency as in the opinion of the Examiners will entitle them to the award of a Scholarship, and is to be tenable for three years. The fund in April, 1898, amounted to £434 2s. 1d.

21.—SCIENCE SCHOLARSHIPS OF HER MAJESTY'S COMMISSIONERS FOR THE EXHIBITION OF 1851.

Given by Her Majesty's Commissioners of the Exhibition of 1851, to be awarded to a student of three years' standing for the prosecution of study and research in any branch of Science with a view of developing the Manufactures and Industries of his country. £150, tenable for two years.

1892—Barraclough, S. H., B.E.
1893—Ledger, W. H., B.E.
1895—Watt, J. A., M.A., B.Sc.
1897—Strickland, Tom P., B.E.

22.—FRAZER SCHOLARSHIP.

Founded in 1890 by a bequest of £2000 from the Hon. John Frazer, M.L.C. £80.

1. The Scholarship is awarded upon the result of the Third Year Examination in History, combined with such further examination, or other test, as the Professor of History may from time to time determine.

2. Those students only are eligible who have just completed their Third Year, and who at the time of the election are qualified for the B.A. Degree.

3. One half of the Scholarship money will be paid to the successful candidate at the time of election. The second half will be paid to him (i.) on his passing an examination qualifying for the Degree of M.A., with Honours in History, within two years of the date of his election, or (ii.) on his having within the same period pursued for at least one year, to the satisfaction of the Senate, some other course of historical study or research.

The Scholarship will be awarded in March, to the student who shows most proficiency in the papers and essays set in connection with the Examination for Honours in the third year.

1893—Henderson, G. C., B.A.
Wearne, Amy I., B.A., *prox. acc.*
1894—Finney, J., B.A.
Harriott, Georgina J., B.A., *prox. acc.*
1895—Dennis, J., B.A.
Griffith, J. S., B.A., *prox. acc.*
1896—Doust, Edith L., B.A. } æq.
Yarnold, A. H., B.A. }
Murray, Florence J., B.A., *prox. acc.*
1897—Chalmers, S. D., B.A.
1898—Lance, Elisabeth A., B.A. } æq.
Pilcher, N. G. S., B.A. }

24.—WOOLLEY SCHOLARSHIPS.

The late Edwin Dalton, Esq., of Sydney, by his will in 1875, bequeathed his residuary estate, subject to a life interest on the part of his widow, and an annuity of £75, to the University to found "a Scholarship or Scholarships in commemoration of the late Dr. Woolley, its first Principal and Professor," desiring that the Scholarship or Scholarships so to be founded should "have reference to that branch of teaching or philosophy which the late Dr. Woolley chiefly inculcated." By the death of his widow in 1893 the University became entitled to the residuary estate, amounting to about £8000, subject to the annuity of £75. The regulations for the award of the Scholarship or Scholarships have not yet been made.

VII.

MILITARY COMMISSIONS.

A Commission in the British Army is offered annually to a student of this University under the regulations issued with Army Orders, dated 1st January, 1892. These will be found in full in the University Calendar for 1896.

Under the provisions of No. 11 of the Regulations, the the Senate has decided that candidates for a nomination must be Matriculated students who have completed one year in the Faculty of Arts, and passed the First Year Examination, and who have also passed a satisfactory examination in Geometrical Drawing.

After nomination by the Senate the candidate is required to pass in the following September the examination in Military subjects referred to in regulation 13. The War Office will make arrangements for this examination to be held in Sydney.

1895—Harris, John | 1896—Johnson, Robert B. I.

VIII.

EXHIBITIONS.

1.—SALTING EXHIBITION.

Founded in 1858 by a gift of £500 (with accumulations) from Severin Kanute Salting, Esq., to be applied for the promotion of sound learning. Awarded on the recommendation of the Trustees of the Sydney Grammar School to a student proceeding thence to the University. £25, tenable for three years in the Faculty of Arts.

1891—Garnsey, A. H.
1894—Whitfeld, H. E.
1897—Stephen, H. M.

2.—J. B. WATT EXHIBITIONS.

Founded in 1876 by a gift of £1000 from the Honourable John Brown Watt, and two subsequent gifts of £1000 each in 1888 and 1889. The Exhibitions are bestowed on the bursary principle (see p. 160), being not tenable in the Professional Schools, and are awarded to boys or youths who have been for at least three years in private colleges or schools. They are tenable for three years, and entitle the holders to £30 for the first year, £40 for the second, and £50 for the third year. The candidates must have passed with special credit either the Junior or Senior Public Examination. The Exhibition is intended to enable the holder to obtain a course of higher education, either at the University or elsewhere, subject to the direction of the Senate. The complete conditions of award will be found in the Manual of Public Examinations.

3.—STRUTH EXHIBITION.

Founded in 1883 by a gift of £1000 from John Struth, Esq., for the foundation of an exhibition to assist students of intellectual promise, but whose means are not otherwise sufficient for the purpose, in obtaining a Degree in the Faculty of Medicine. The Exhibition is awarded to a student who has completed the First Year of the Arts course upon the following conditions:—

1. The Deans of the Faculty of Arts and the Faculty of Medicine shall receive a satisfactory assurance that the means of the applicant are insufficient to enable him to proceed with the Medical course without some such pecuniary assistance.

2. Applications for permission to compete for the Exhibition, accompanied by the necessary certificates, must be sent to the Registrar at least fourteen days before the first day of the Annual Examinations.

3. The Exhibition shall be awarded to that candidate, of those who are allowed to compete, who shall show the greatest proficiency in the First Year Examination of the Arts course.

4. The holder, who shall at once proceed with his studies in the Faculty of Medicine shall receive the sum of £50 per annum for five years; provided that he shall only continue to hold it on the condition that he is diligent and of good conduct, and that he passes creditably all the examinations of his course. In the event of illness of the holder causing prolongation of his course of medical study, the case will be subject to the special consideration of the Senate. The Exhibition is open to students of either sex. The last award was made in March, 1897.

4.—HORNER EXHIBITION.

Founded in 1889 by a bequest of £200 from Francis Horner, Esq., M.A. Awarded for proficiency in Mathematics at the Matriculation Examination. It cannot be held with two other Scholarships in the University. In case of equality in order of merit in competition for the Exhibition, preference shall be given to a student matriculating direct from The King's School, Parramatta, or in the absence of a student from that School, to a candidate from Newington College, Stanmore. £8, tenable for one year.

1891—Davies, A. B.
1892—Simpson, E. S.
1893—Stewart, D. G. } æq.
Strickland, T. P.*
1894—Chalmers, S. D.
1895—Griffiths, F. G.†
1896—Hawken R. W.
Waterhouse, G. A., *prox. acc.*
1897—Boyd, W. S.
Horn, W. R. } *prox. acc.*
Mort, H. S.
Stephen, H. M.
1898—Mort, Harold S.

IX.

BURSARIES.

The Bursaries at the disposal of the University have all been created (on the initiation of the late Dr. Badham, when

* Awarded to D. G. Stewart; Strickland being the holder of two Scholarships.
† Awarded to W. G. Forsyth; Griffiths being the holder of two Scholarships.

Professor of Classics) by private foundations at a cost of £1000 each, together with a margin in some cases to ensure prescribed annual awards amounting to £50; and they are helped, on the part of the Senate, by an accompanying exemption from all lecture fees and the fee for Matriculation.

They were created for the purpose of placing the advantages of education in this University within the reach of students who, whilst giving sufficient promise of benefit, would otherwise be excluded through the want of financial means. And in order to secure privacy as regards the poverty of the candidates and their friends, the nominations are directed to be made by the Chancellor alone.

Other bursaries in greater number have lately been created by the Government in connection with the Public School system, but the University is not concerned in their award, although the Senate has conceded to them a like exemption from fees, upon like conditions.

Some of the Founders indicate a preference for students from the country, but the majority are silent on this subject. In two, they "trust that the Senate will coincide in their opinion that except in cases where religion offers an insurmountable barrier, the bursar shall be required to reside in one of the Affiliated Colleges;" and in several, it is expressed that the bursaries are "to enable the recipient to reside in one of the Affiliated Colleges, or in some other place approved of by the authorities of the University from which he may attend the prescribed courses of lectures:" but in the great number, there is no corresponding expression. In practice, the Senate has abstained from imposing any restrictions as to residence, not only in the case of bursaries, but of the whole body of students, notwithstanding Section 18 of the Incorporation Act.

In some cases the founders contemplated full bursaries of £50 a year, as for students from the country, though without prohibiting divisions of the amount; but more generally they either expressly allow of awards of £25 a year, or other less sums than £50, or leave the matter open. And of late years the absence of new foundations has created a necessity for extending the usefulness of the bursaries by frequent divisions into halves; and the Senate has granted the same exemptions from fees as in the case of full bursaries.

No bursary is subject to any distinction of creed or of position, except that in one case a preference is expressed, but not imposed, for a student belonging to the donor's own Church, and in another the nomination is confined to sons of a minister of religion, but without distinction of Church; in both of which cases the founder bestowed a second bursary without any restriction.

All the bursaries, except five, which were given by Mr. Thomas Walker, in July, 1881, were founded before women were admitted to the University, and they were ostensibly for men only. But Mr. Walker's bursaries were for both sexes, and his instructions required that women should participate. The practice has since been to observe no distinction of sex.

All the bursaries were founded before the introduction of Professional Schools into the University, except those of Mr. Walker, which were on the verge of such introduction and which referred to a past intention, and all appear to have contemplated only the established three years' course in "Literature, Science, and Art," according to the Foundation Act of 1850. On which ground, and for appropriate and independent reasons, they are not considered to be ordinarily available for students in Professional Schools.

The total number of full bursaries is fourteen, in addition to which two more will eventually be created by means of surpluses which are required to be accumulated for the purpose. This enumeration is exclusive of the Exhibitions of Mr. Watt (3), and Mr. Struth, and of the Levey and Alexander Endowment for graduates, all of which are based on the bursary principle as to inadequacy of means.

The conditions on which the bursaries are conferred are:—

1. That the Chancellor shall have received satisfactory assurance that the candidate's own means, and those of his parents, guardians, "or other friends" (as expressed in some of the foundations) are insufficient to enable him to bear the cost of attending the University without the assistance of a bursary.
2. That the candidate is qualified by education and capacity to benefit by the University course, with which view some of the earlier foundations required that the candidate should be examined by the Professor of Classics and (in some cases "or") the

Professor of Mathematics and certified by them, or one of them, to be intellectually fit. But as the University bursaries are now ordinarily granted after the Matriculation Examination, or an equivalent at the Public Examinations, this stipulation has dropped out of use.

3. That the bursar, if not already matriculated, shall matriculate at the commencement of the next Academic Year after his appointment, and shall come into his attendance on lectures as the Senate may direct; and that he shall be diligent, and of good conduct; and that he shall pass creditably at the annual examinations during his tenure of the bursary.

4. Subject to the above conditions, the bursary is held for three years, except when granted to undergraduates who have already gone through part of the three years' course, and have then become unable to finish their course without help, in which case the tenure is confined to the residue of the ordinary three years' course.

1.—MAURICE ALEXANDER BURSARY.

In 1874, debentures for £1000, at 5 per cent., were given by Mrs. Maurice Alexander for the endowment of a Bursary in memory of her late husband. The annual value is £50.

2.—THE LEVEY AND ALEXANDER ENDOWMENT.

In 1879, debentures for £1000, at 5 per cent, were given by Mrs. Maurice Alexander for the purpose of establishing an endowment in the University, in memory of her late parents, Isaac and Dinah Levey. It is intended for young men who shall have gone through the regular University course, and shall have passed the statutory Examination for the Degree of Bachelor of Arts in the University of Sydney, and graduated with credit to themselves, and who shall then be desirous of entering a liberal profession, but be without sufficient pecuniary means to bear the cost of the necessary preparation and superior instruction.

It is provided that no regard whatever shall be had to the religious creed or denomination of any candidate, provided that his personal character and repute shall be good, and that in determining any such award the only considerations shall be such

as have reference to the character and to the abilities and learning of the candidate, as proved by University Examinations, and to his financial position.

The award is to be made to a Graduate who shall have recently taken his B.A. Degree; but the choice would be given to one who had graduated in Honours.

The professions which are held specially in view are those of Medicine and Surgery, and of Law in either branch, and those of Architects, Surveyors, and Engineers; but full discretion is given to the University Senate to include any other secular profession which shall be deemed by them to be of a learned or liberal character.

It is intended that the graduate selected under this endowment shall enjoy the income for three years, either by one payment of not exceeding one hundred and fifty pounds (when sufficient accumulations are available) for fees or premiums on articles of pupilage; or by half-yearly payments of twenty-five pounds for three years; or partly in each way, as may be deemed by the Senate best for carrying out the objects in view.

3—JOHN EWAN FRAZER BURSARY.

In 1876, debentures for £1250, at 4 per cent., were given by the Honourable John Frazer, M.L.C., for the endowment of a Bursary, of the annual value of £50, to be called after the name of his deceased son, John Ewan Frazer.

4.—ERNEST MANSON FRAZER BURSARY.

In 1876, debentures for £1250, at 4 per cent., were given by the Honourable John Frazer, M.L.C., for the endowment of a Bursary, of the annual value of £50, to be called after the name of his deceased son, Ernest Manson Frazer.

5.—WILLIAM CHARLES WENTWORTH BURSARY, No. I.

In 1876, the sum of £1000 was given by Fitz-William Wentworth, Esq., for the foundation of a Bursary, of the annual value of £50, to be called after the name of his deceased father, William Charles Wentworth, Esq.

6.—WILLIAM CHARLES WENTWORTH BURSARY, No. II.

In 1876, the further sum of £1000 was given by Fitz-William Wentworth, Esq., for the foundation of a second Bursary, of the annual value of £50, to be called after the name of his deceased father, William Charles Wentworth, Esq.; but

the founder directed that this sum should accumulate until it should reach £1500, that a second Bursary should then be established, and that the surplus should accumulate until the sum of £1500 should again be reached, when a similar result is to follow. This foundation reached the sum of £1500 in 1886, and a second Bursary was established accordingly.

7.—WILLIAM CHARLES WENTWORTH BURSARY, No. III.

This fund was established in 1886 by the setting apart of the sum of £500 from the last-named foundation, to accumulate for the establishment of a third Bursary in accordance with the directions of the founder. It amounted in April, 1898, to £946 11s. 2d.

8.—BURDEKIN BURSARY.

In 1876, the sum of £1000 was given by Mrs. Burdekin for the foundation of a Bursary, of the annual value of £50, to be called the Burdekin Bursary.

9.—HUNTER-BAILLIE BURSARY, No. I.

In 1876, Government debentures for £1000, at 5 per cent., were given by Mrs. Hunter-Baillie for the foundation of a Bursary of the annual value of £50, to be called the Hunter-Baillie Bursary.

10.—HUNTER-BAILLIE BURSARY, No. II.

In 1877, Government debentures for £1000, at 5 per cent., were given by Mrs. Hunter-Baillie for the foundation of a Bursary of the annual value of £50, for the sons of ministers of religion. In the deed of gift the Senate is declared to be the sole judge of who are to be considered ministers of religion.

11.—WALKER BURSARIES.

In 1881, the sum of £5000 was given by Thomas Walker, Esq., of Yaralla, Concord, for the foundation of Bursaries. The gift was especially connected with the late resolution of the Senate, to grant to women equal participation with men in all University privileges, and it was desired by the founder that a portion of the Bursaries—up to one half, as circumstances might dictate—should be made applicable to students of the female sex. Four Bursaries, of the value of £50 per annum, and one of £40 per annum are awarded.

X.

*PRIZES.

1.—WENTWORTH MEDAL.

Founded in 1854, by a gift of £200 from W. C. Wentworth, Esq., the interest to be applied for an Annual Prize for the best English Essay.

The fund having accumulated sufficiently to provide for two Prizes of the value of £10 each, a Prize is now given for competition amongst Undergraduates, and a Second Prize for competition amongst Bachelors of Arts of not more than three years' standing.

GRADUATES' MEDAL.

1891—Curnow, W. L., B.A.
1893—Smairl, J. H., B.A.
Pratt, F. V., B.A., *prox. acc.*
1894—Smairl, J. H., B.A.
1895—Pratt, F. V., B.A.
1896—Griffith, J. S., B.A.
1897—Cowan, David, B.A.
Taylor, Eliz. I., B.A., *prox. acc.*
1898—Dettmann, H. S., B.A.

UNDERGRADUATES' MEDAL.

1894—MacMaster, D. A. D.
1895—Griffith, J. S.
1896—Dettmann, H. S.
1897—Dowling, F. V.
1898—Nicholson, G. G.

2.—NICHOLSON MEDAL.

Founded in 1867 by a gift of £200 from Sir Charles Nicholson, Bart, D.C.L., to provide an Annual Prize for Latin Verse. The competition for this medal is open to all Undergraduates and Graduates of not more than two years' standing. Value, £10. The last award was made in 1889.

3.—BELMORE MEDAL.

Founded in 1870, by a gift of £300 from the Right Honourable the Earl of Belmore. Awarded annually to a member of the University, under the standing of M.A., for proficiency in Geology and Practical Chemistry, with special reference to Agriculture. The Examination is held in Michaelmas Term. Value, £15. The last award was made in 1885. (See page 138.)

4.—FAIRFAX PRIZES.

Founded in 1872, by a gift of £500 from John Fairfax, Esq. Awarded to the greatest proficients among the female

*The names of those who gained prizes before 1891 will be found in the University Calendar for 1893.

candidates at the Senior and Junior Public Examinations. In the case of Seniors the candidates must not be over twenty-five years of age, and of Juniors seventeen years. Value, £20 and £10 respectively.

SENIOR PRIZE.

1891—Whitfeld, Eleanor M.
1892—Bloomfield, Elsie I'A.
1893—Crouch, Olive
1894—Lance, Elisabeth Ada } æq.
England, Hannah }
1895—Lane-Latham, Ethel J.
1896—Bourne, Eleanor E.
1897—Copas, Theodora E. J.

JUNIOR PRIZE.

1891—Ferguson, Margaret Elizabeth } æq.
Parker Annie H. }
1892—Dey, Charlotte J.
1893—Read, Elizabeth Jane
1894—Lane-Latham, Ethel Jane
1895—Copas, Theodora E. J. } æq.
Middleton, Florence G. }
1896—Bowmaker, Jessie } æq.
Bruce, Grace Mitchell }
Mills, Elsie A. H. } *prox. acc.*
Stewart, Jessie I. }
1897—Armitage, Lilian M. } æq.
Harkess, Blanche J. }
Sandford, Blanche V.
prox. acc.

5.—WEST MEDAL.

Founded in 1874, by a gift of £200 from the subscribers to a memorial of the Reverend John West, Editor of the *Sydney Morning Herald.* Awarded to the greatest proficient in the Senior Public Examination. Value, £10.

1891—Dixon, Graham P. } æq.
Hall, Edwin C. }
Rowland, Norman de H. }
Simpson, Edward S. }
Roberts, Francis J., *prox. acc.*
1892—Mitchell, E. M. } æq.
Strickland, T. P. }
1893—Whitfeld, Hubert Edwin
1894—Griffiths, Frederick Guy
Kerr, Richard Alex., *prox. acc.*
1895—Teece, Richard C.
1896—Bourne, Eleanor E.
Horn, W. R. } *prox. acc.*
Robson, R. N. }
Stephen, H. M. }
1897—Todd, F. A.

6.—SMITH PRIZE.

Founded in 1885, by a bequest of £100 from the Honourable Professor Smith. Awarded to the best Undergraduate of the First Year in Experimental Physics. Value £5.

1891—Deck, G. H. B.
Doak, W. J., *prox. acc.*
1892—Doak, W. J.
1893—Strickland, T. P.
Quaife, A. F. } *prox. acc.*
Stewart, D. G. }
1895—Burfitt, W. F.
1896—Beaver, W. R. } æq.
Harker, G. }
1897—Ward, L. K.

7.—NORBERT QUIRK PRIZE.

Founded in 1886, by a gift of £144 from the subscribers to a memorial of the Rev. John Norbert Quirk, LL.D., late principal of Lyndhurst College. Awarded for proficiency in Mathematics at the Second Year Examination. Value, £6.

1891—O'Reilly, H. de B.
1892—Davies, W. J. E.
1893—Davies, A. B.
1894—Burfitt, W. F.
1895—Stewart, D. G.
1896—Chalmers, S. D.
1897—Griffiths, F. G.
1898—Sawkins, D. T.

8.—SLADE PRIZES.

Founded in 1886, by a gift of £250 from G. P. Slade, Esq., for the encouragement of Science. Awarded for proficiency in Practical Chemistry and Practical Physics respectively. Value, £5 each.

CHEMISTRY.

1891—Weigall, A. R.
1892—Dixon, J. T.
Simpson, E. S. (Class Exam.)
1893—Woore, J. M. S.
Strickland, T. P. (Class Exam.)
1894—Sandes, F. P.
Warren, E. W. (Class Exam.)
1895—Reid, N.
1896—Jack, R. L.
1897—Winton, L. J.

PHYSICS.

1891—Brearley, J. H. D.
1892—Doak, W. J.
1893—Arnott, R. F. } æq.
Jackson, C. F. }
1894—Sandes, F. P.
1895—Woolnough, W. G.
1897—Madsen, J. P. V.

9.—GRAHAME PRIZE MEDAL.

Founded in 1891, by a bequest of £100 from William Grahame, Esq., of Waverley. Awarded to such candidate as shall display the greatest general proficiency at the Senior Public Examination. Value, £5.

1891—Dixon, Graham P. } æq.
Hall, Edwin C. }
Rowland, Norman de H. }
Simpson, Edward S. }
Roberts, Francis J., *prox. acc.*
1892—Mitchell, E. M. } æq.
Strickland, T. P. }
1893—Whitfeld, Hubert E.
1894—Griffiths, Frederick Guy
Kerr, Richard A., *prox. acc.*
1895—Teece, Richard C.
1896—Bourne, Eleanor E.
Horn, W. R. } *prox. acc.*
Robson, R. N. }
Stephen, H. M. }
1897—Todd, F. A.

10.—COLLIE PRIZE.

Founded in 1892, by a bequest of £100 from the Rev. Robert Collie, F.L.S., of Newtown. Awarded to a student of any Faculty at the First Year Examination in Botany. Value, £4.

1893—Hall, E. C.
1895—Burfitt, W. F., B.A.
1896—Graham, Mabel J.
1897—Bourne, Eleanor E.

*UNIVERSITY PRIZES.

I.—M.A. EXAMINATION.

A Medal is awarded to the most distinguished candidate in the Honour Examination for the Degree of Master of Arts in the several schools, if of sufficient merit.

LOGIC, MENTAL, MORAL AND POLITICAL PHILOSOPHY.

1892—Cocks, N. J.
1896—Smairl, J. H.

II.—B.A. EXAMINATION.

A Medal is awarded to the most distinguished candidate in the Honour Examination for the Degree of Bachelor of Arts in he several schools, if of sufficient merit.

CLASSICS.

1891—Stephen, E. M.
1892—Parker, W. A.
1893—Levy, Daniel
1896—Mitchell, E. M.
1897—Whitfeld, H. E.
Dettmann, H. S., *prox. acc.*
1898—Evans-Jones, D. P.

MATHEMATICS.

1893—Davies, W. J. E.
1894—Davies, A. B.
1896—Stewart, D. G.
1897—Chalmers, S. D.

LOGIC AND MENTAL PHILOSOPHY.

1891—Brennan, C. J.
1892—Pratt, F. V.
1893—Henderson, G. C.
1894—Cowan, D.
1895—Rowland, N. de H. } æq.
Whitfeld, Eleanor M. }
1896—Swanwick, K. ff.
1897—Wallace, D.
1898—Pilcher, N. G. S.

III.—LL.B. EXAMINATION.

A Medal is awarded to the student who exhibits the greatest proficiency at the LL.B. Examination, if of sufficient merit.

1894—Flannery, G. E.
1896—Bavin, T. R.
1898—Peden, J. B.

IV.—M.D. EXAMINATION.

A Medal is awarded to the candidate who exhibits the greatest proficiency at the M.D. Examination, if of sufficient merit.

1895—Smith, Grafton E. (Anatomy.)

* The names of those who gained prizes before 1891 will be found in the University Calendar for 1893.

V.—M.B. EXAMINATION.

A Medal is awarded to the student who exhibits the greatest proficiency at the M.B. Examination, if of sufficient merit.

1892—Dick, Robert
1894—Craig, R. G.
1896—Dixon, G. P.
1898—MacPherson, J.

VI.—B.Sc. EXAMINATION.

A Medal is awarded to the student who exhibits the greatest proficiency at the B.Sc. Examination, if of sufficient merit.

1894—Watt, J. A., (Geology and Palæontology).

VII.—M.E. EXAMINATION.

A Medal is awarded to the most distinguished candidate in the Honour Examination for the Degree of Master of Engineering, if of sufficient merit.

1892—Vicars, James
1894—Dare, H. H.
1896—Bradfield, J. J. C.

VIII.—B.E. EXAMINATION.

A Medal is awarded to the student who exhibits the greatest proficiency at the B.E. Examination, if of sufficient merit.

1892—Stephens, C. T.
1893—Ledger, W. H.
1894—Seale, H. P.
1895—Doak, W. J. } æq.
Jackson, C. F. V. }
1897—Strickland, T. P.

IX.—ENGLISH VERSE.

A Medal of the value of £10 is given by the University for the best composition in English Verse. The competition for this medal is open to all Undergraduates and Bachelors of Arts of not more than two years' standing.

1892—Brereton, John le Gay
1893—Brereton, John le Gay

X.—UNIVERSITY PRIZE FOR PHYSIOGRAPHY.

A University Prize of the value of £5 is awarded to the student of the First Year who passes the best class examination in Physiography, if of sufficient merit.

1891—Blatchford, T.
1892—Whitfeld, Eleanor M. } æq.
Thompson, Alexr. }
1893—Murray, Florence J.
1894—Darbyshire, Taylor
Hansard, Edith H., *prox. acc.*
1895—Evans-Jones, D. P.
1896—Harker, G.
1897—Rutherford, Florence M.
Mutton, I., *prox. acc.*

XI.—UNIVERSITY PRIZES AT PUBLIC EXAMINATIONS.

Prizes of £20 and £10 were appropriated annually by the Senate until the year 1894 for the greatest proficients amongst the male candidates at the Senior and Junior Public Examinations. A Prize of £5 is now offered for competition amongst the greatest proficients in the Junior Examination, the Prize for Seniors being withdrawn. The limit of age for Juniors is seventeen years.

Senior Prize.

1891—Dixon, Graham P.
Hall, Edwin C.
Rowland, Norman de H.
Simpson, Edward S.
} æq.
Roberts, Francis J., *prox. acc.*

1892—Mitchell, E. M.
Strickland, T. P.
} æq.
1893—Whitfeld, H. E.
1894—Griffiths, Frederick G.
Kerr, Richard A., *prox. acc.*

Junior Prize.

1891—Whitfeld, Hubert E.
Stewart, D. G., *prox. acc.*
1892—Kelly, E. H.
Grant, R. W., *prox. acc.*
1893—Teece, R. C.
1894—Robson, Reginald N.
1895—Brown, Claude S.
Woodd, George N., *prox. acc.*
1896—Teece, R. N.
1897—Griffiths, J. N.

*PRIVATE ANNUAL PRIZES.

PATHOLOGY.—Prizes, given by Dr. W. Camac Wilkinson, for proficiency in Pathology.

1891—Smith, G. E.
1892—Craig, R. G.
1894—Halliday, J. C.
1895—Dixon, G. P.
1896—MacPherson, J., M.A., B.Sc.

MATERIA MEDICA AND THERAPEUTICS.—Prizes presented by Dr. Thomas Dixson.

1894—McClelland, W. C., B.Sc. } æq.
Harris, L. H. L. }
1895—MacPherson, J., M.A.
1896—Brennand, H. J. W., B.A.
1897—McLean, G.
Burfitt, W. F., *prox. acc.*

ENGLISH.—Prizes of £2 10s. each, given by Professor MacCallum, for English Essays in the First and Second Years, and of £10 for proficiency in English in the Third Year.

FIRST YEAR.

1891—Mell, C. N.
1892—Kidd, Russell Whitfeld, Eleanor M. } æq.
1893—Murray, Florence J.
Waddell, G. W. (*a*)
1894—Dettmann, H. S.
1895—Forsyth, W. G.
1896—Nicholson, G. G. White, Margaret I. } æq.
1897—Gough, N. J.

SECOND YEAR.

1891—Proctor, Lizzie
1892—Brereton, J. Le G.
1893—Whitfeld, Eleanor M.
Roseby, Gertrude (*a*)
1894—Yarnold, A. H.
1895—Dettmann, H. S.
1896—Dowling, F. V.
1897—Read, Elizabeth J. Withycombe, E. J. } æq.

THIRD YEAR.

1891—Pickburn, J. P. Pratt, F. V. } æq.
1892—Kennedy, Annie A.
1893—Brereton, J. Le G.
Uther, Jennie B. (*a*)
1894—Whitfeld, Eleanor M.
1895—Beardmore, Ada
1896—Dettmann, H. S.
1897—Fidler, Isabel M.

BIOLOGY.—Prizes of £2 2s., given by Professor Haswell, for proficiency in Biology.

1891—MacPherson, J.
1892—Dixon, G. P.
1893—Kater, N. W.
1894—Brennand, H. J. W.
1895—(ZOOLOGY)—
Woolnough, W. G.
Burfitt, W. F., *prox. acc.*
1896—Graham, Mabel J.
1897—Bourne, Eleanor E. Muscio, A. } æq.

* The names of those who gained prizes before the year 1891 will be found in the University Calendar for 1893. (*a*) Second prizes given by Mr. A. W. Jose.

BIOLOGY.—A Prize of £1 1s., given by Professor Haswell, for excellence in Laboratory notes.

1895—Holmes, H. G. } æq.
Durack, W. J. }
Harris, W. E. }
1896—Humphery, E. M.
1897—Muscio, A.

BOTANY.—Prize of £2 2s., given by Professor Haswell, for proficiency in Botany.

1892—MacPherson, J.

GEOLOGY.—Prize of £10, given by Professor David, for proficiency in Geology.

1891—Ledger, W. H.
1892—Andrews, E. C.
1893—Simpson, E. S. (2nd Year)
Watt, J. A. (3rd Year)
1894—Brearley, J. H. D. (2nd Year)
Burfitt, W. F. (3rd Year)
1895—Griffiths, F. G. (1st Year)
Graham, Mabel (1st Year)
Shortland, W. A. (2nd Year)
1896—Woolnough, W. G. (2nd Year)
1897—Waterhouse, G. A. (2nd Year)
Woolnough, W. G. (3rd Year)

SURGERY.—Prize of £10, given by Dr. MacCormick, for proficiency in Surgery.

1891—Luker, D.
1892—Studdy, W. B.
1893—Halliday, J. C.

ANATOMY.—Two Prizes of £5 each, given by Professor Wilson, for proficiency in the Class Examinations in (*a*) General and Descriptive Anatomy and (*b*) Regional and Surgical Anatomy respectively.

1891—(*a*) Robison, E. H.
(*b*) Smith, G. E.
1892—(*a*) Dixon, G. P.
(*b*) Craig, R. G.

PHILOSOPHY.—A Gold Medal, of the value of £10, given by Professor Anderson, M.A., for the best essay on a philosophical subject; competition to be open to all Bachelors of Arts of not more than two years standing.

1891—Davis, Henry, B.A.
1892—Davis, Henry, B.A.
1894—Pratt, F. V., B.A.
Henderson, G. C., B.A., *prox. acc.*
1895—Barron, J., B.A.
1896—Cowan, D., B.A.
1898—Wallace, D., B.A.

CHEMISTRY.—Prizes of £5 and £3 3s. respectively, given by Professor Liversidge, for proficiency in Chemistry amongst Evening students.

1893—Barry, H. de B. } æq.
Dennis, J. }
1897—Quaife, C.

LOGIC AND MENTAL PHILOSOPHY.—Prizes of £5 each given by Professor Anderson.

1891—Peden, J. B. (2nd Year)
1892—Abigail, Eliza L. (2nd Year) } æq.
Kendall, F. C. (2nd Year) }
Pratt, F. V. (3rd Year) } æq.
Peden, J. B. (3rd Year) }
1893—Cowan, D. (2nd Year)
Henderson, G. C. (3rd Year)
1894—Cowan, D. (3rd Year)
Whitfeld, Eleanor M. (2nd Year)
1895—Taylor, Eliz. I. (2nd Year) } æq.
Swanwick, K. ff. (2nd Year) }
Rowland, N. de H. (3rd Year) } æq.
Whitfeld, E. M. (3rd Year) }
1896—Wallace, D. (2nd Year)
Swanwick, K. ff. (3rd Year)
Taylor, Elizabeth I., *prox. acc.*
1897—Pilcher, N. G. S. (2nd Year)
Wallace, D. (3rd Year)
1898—Nicholson, G. G. (2nd Year)
Pilcher, N. G. S. (3rd Year).

HISTORY.—Prize of £5, given by Professor Wood for proficiency in History.

1894—Dennis, J.
1895—Doust, Edith L.
1896—Bloomfield, Elsie I'A.
1897—Lance, Elisabeth A.
1898—Teece, R. C.

*HONOURS AT THE DEGREE EXAMINATIONS.

FACULTY OF ARTS.

M.A. EXAMINATION.

LOGIC AND MENTAL PHILOSOPHY, ETC.

1892—Cocks, N. J.
Brennan, C. J.
1894—Shaw, H. G.

1896.
CLASS I.—Smairl, J. H.
CLASS II.—Millard, G. W.

ENGLISH LITERATURE AND POLITICAL PHILOSOPHY.

1894—Russell, F. A. A.

LATIN AND MODERN FRENCH LITERATURE.

1895—Bowmaker, Ruth (second class).

PHILOSOPHY AND FRENCH LITERATURE.

1896—Stonham, J. (second class).

GREEK AND LATIN LITERATURE.

1897—Pratt, F. V. (second class).

ENGLISH LITERATURE AND MODERN HISTORY.

1897—Doust, Edith L. (second class).

MODERN HISTORY.

1898—Chalmers, S. D. (second class).
Edwards, E. S. (second class).

B.A. EXAMINATION.

CLASSICS (LATIN AND GREEK).

1891.

CLASS I.—Stephen, E. M.

CLASS II.—Brennan, C. J.

LATIN.

1892.

CLASS I.—Parker, W. A.
Peden, J. B.
Pratt, F. V.
CLASS II.—Bowmaker, Ruth
Craig, C.

1893.

CLASS I.—Levy, D.
Atkins, W. L.
Kennedy, Annie A.
CLASS II.—Anstey, G. W.
Kendall, F. L.

* The names of those who obtained honours before the year 1891 will be found in the University Calendar for 1893.

1894.

CLASS I.—Edwards, D. S.
CLASS II.—Garnsey, A. H. } æq.
Mell, C. N. }
CLASS III.—Kilgour, A. J.
Stonham, J.
MacMaster, D. A. D. } æq.
Barron, J. }
Dixon, H. H.

1895.

CLASS II.—Whitfeld, Eleanor M.
Rowland, N. de H.
Nelson, D. J.
Griffith, J. S.
CLASS III.—Macdonald, Fannie
Scoular, D.

1896.

CLASS I.—Mitchell, E. M.
CLASS II.—Murray, Florence J.
CLASS III.—Anderson, Maud E.

1897.

CLASS I.—Whitfeld, H. E.
Dettmann, H. S.
CLASS II.—Armstrong, Margaret J.
Hobbs, E.

1898.

CLASS I.—Fidler, Isabel M.
Evans-Jones, D. P.
CLASS III.—Dunnicliff, Mary C.

GREEK.

1892.

CLASS I.—Parker, W. A.
Peden, J. B.
CLASS II.—Pratt, F. V.

1893.

CLASS I.—Levy, D.
Gill, A. C.

1894.

CLASS I.—Garnsey, A. H.
CLASS II.—Edwards, D. S.

1895.

CLASS I.—Griffith, J. S.
Rowland, N de H.

1896.

CLASS I.—Mitchell, E. M.

1897.

CLASS I.—Dettmann, H. S. } æq.
Whitfeld, H. E. }
CLASS II.—Hobbs, E.

1898.

CLASS I.—Evans-Jones, D. P.

LATIN AND FRENCH.

1891.

CLASS II.—Forde, J.

FRENCH.

1892.

CLASS I.—Bowmaker, Ruth
Perkins, J. A. R.
Craig, C.
CLASS II.—Wilson, Ella

1893.

CLASS I.—Atkins, W. L.
Kennedy, Annie A.
James, A. H.

1894.

CLASS I.—Stonham, J.
CLASS II.—Maynard, Ethel M.
CLASS III.—Uther, Jennie B.

1895.

CLASS I.—Stonham, Kathleen
Hunter, Mary A. M.
CLASS II.—Macdonald, Fannie
Mallarky, Ethel M.

1896.

CLASS I.—Montefiore, Hortense H.
CLASS III.—Johnston, Mary E.

1897.

CLASS II.—Armstrong, Margaret J.
Musmann, C. E. G.

1898.

CLASS I.—Fidler, Isabel M.
CLASS II.—De Lissa, Ethel N.
Harwood, Marian F.
Dey, Charlotte J.
Jarvie, B.
} æq.

LATIN AND ENGLISH.

1891.

CLASS I.—Holme, E. R.

GERMAN.

1893.

CLASS I.—Barton, Joanna
James, A. H.
Proctor, Lizzie

1894.

CLASS II.—Mell, C. N.

1895.

CLASS II.—Stonham, Kathleen
Hunter, Mary A. M.

1897.

CLASS I.—Dettmann, H. S.
CLASS II.—Musmann, C. E. G.

1898.

CLASS II.—Harwood, Marian F.
De Lissa, Ethel N.

ENGLISH.

1892.

CLASS I.—Pickburn, J. P.

1893.

CLASS I.—Kennedy, Annie A.
Martin, L. O.
Lenthall, Ellen M.
James, A. H.

1894.

CLASS I.—Brereton, J. Le G.
Byrne, J. K.

1895.

CLASS I.—Harker, Constance E.
Roseby, Minnie
CLASS III.—Wearne, R. A.

1896.

CLASS I.—Beardmore, Ada
Bunting, Edith A.
Doust, Edith L.
CLASS II.—Byrne, Lily C.

1897.

CLASS I.—Dettmann, H. S.
CLASS II.—Barnes, Pearl E.
CLASS III.—Saunders, Eva F.

1898.

CLASS I.—Fidler, Isabel M.
CLASS II.—Jarvie, B.

HISTORY.

1892.

CLASS II.—Wootton, E.

1893.

CLASS I.—Boyce, F. S.
Henderson, G. C.
Wearne, Amy A.
} æq.
Abbott, H. P.
Kendall, F. L.
Chapman, A. E.

1893.

CLASS II.—Kellett, F.
Lewis, H. C.
} æq.
Telfer, J. B.
Symonds, Daisy
CLASS III.—Layton, J. E.
Dove, N. W.

1894.

CLASS I.—Finney, J.
Harriott, Georgina J.
CLASS II.—Walker, J. E.
Walker, S. H.
CLASS III.—Edwards, E. S.

1895.

CLASS I.—Dennis, J.
Griffith, J. S.
Whitfeld, Eleanor M.
Harker, Constance E.
Elkin, J. B.
CLASS III.—Hunter, Mary A. M.
Roseby, Minnie

1896.

CLASS I.—Doust, Edith L. } æq.
Yarnold, A. H. }
Murray, Florence J.
CLASS III.—Foreman, H. J. C.

CLASS I.—Bloomfield, W. J. (evening student)

1897.

CLASS I.—Chalmers, S. D.
Monahan, W. W.
CLASS II.—Jones, C. H. F.

1898.

CLASS I.—Lance, Elisabeth A. } æq.
Pilcher, N. G. S. }
CLASS II.—Gordon, Emily I.
CLASS III.—Rossiter, Florence A.

MATHEMATICS.

1891.

CLASS III.—Stephen, E. M.
Doak, F. W.

1892.

CLASS II.—Marks, H. } æq.
O'Reilly, H. de B. }
CLASS III.—Bowmaker, Ruth

1893.

CLASS I.—Davies, W. J. E.
CLASS III.—Craig, A. D.

1894.

CLASS I.—Davies, A. B.
CLASS II.—Andrews, E. C.

1895.

CLASS II.—Burfitt, W. F.

1896.

CLASS I.—Stewart, D. G.
Strickland, T. P. (Eng.)
CLASS II.—Swanwick, K. ff.
CLASS III.—Mitchell, E. M.

1897.

CLASS I.—Chalmers, S. D.

1898.

CLASS II.—Griffiths, F. G.
CLASS III.—Jarvie, B.

LOGIC AND MENTAL PHILOSOPHY.

1891.

CLASS I.—Brennan, C. J.
Smairl, J. H. } æq.
Stephen, E. M. }
CLASS II.—Russell, Lillian

1892.

CLASS I.—Pratt, F. V.
Peden, J. B.
Edmunds, J. M.
Mannell, F. W.
CLASS II.—Rooney, W. J.
Lasker, S.
MacManamey, W. F.
Kidston, R. M.

1892.

CLASS II.—Wootton, E.
Shaw, H. G.
Perkins, J. A. R.
CLASS III.—Wilson, Ella

1893.

CLASS I.—Henderson, G. C.
Kennedy, Annie A. } æq.
Atkins, W. L. }
CLASS II.—Kendall, F. L.
Proctor, Lizzie
CLASS III.—Chapman, A. E.
Martin, L. O.
Dowe, P. W.

1894.

CLASS I.—Cowan, D.
Bavin, T. R.
CLASS II.—Russell, J. F. S.
CLASS III.—Barron, J.

1895.

CLASS I.—Rowland, N. de H. } æq.
Whitfeld, Eleanor M }
CLASS II.—White, C. A.
Roseby, Gertrude } æq.
Roseby, Minnie }

1896.

CLASS I.—Swanwick, K. ff.
Taylor, Elizabeth I.
CLASS II.—Bloomfield, W. J.
Beardmore, Ada } æq.
Davis, Agnes M. H. }

1897.

CLASS I.—Wallace, D.
Whitfeld, H. E.
Stephen, J. W. F.
CLASS II.—Broinowski, L. T.

1898.

CLASS I.—Pilcher, N. G. S.
De Lissa, Ethel N.
CLASS II.—Bavin, Gertrude L.
Dumolo, Nona.
CLASS III.—Edwards, E. E.

GEOLOGY AND PALÆONTOLOGY.

1891.

CLASS I.—Cosh, Jas.
CLASS II.—Blacket, C.
Harris, G.
Serisier, L. E.

1892.

CLASS II.—Prentice, A. J.

1893.

CLASS I.—MacPherson, J.
CLASS II.—Enright, W. J.
Symonds, Daisy

1895.

CLASS I.—Burfitt, W. F.
CLASS II.—Elliott, Millicent V.

1896.

CLASS II.—Montefiore, Hortense H.
Brook, H. J. S.
*Officer, C. G. W.

1897.

CLASS II.—Langley, Isabella E.

1898.

CLASS II.—Heden, E. C.
Potts, Cuthbert

BOTANY.

1893.

CLASS I.—MacPherson, J.

1894.

CLASS II.—Holmes, W. F.

CHEMISTRY.

1894.

CLASS II.—Blatchford, T.

1897.

CLASS II.—Sharp, W. A. R.

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* Not passing through the regular course.

FACULTY OF LAW.

LL.B. EXAMINATION.

1892.

CLASS II.—Meillon, J.
Kelynack, A. J.
CLASS III.—Curlewis, H. R.
Mack, S.

1893.

CLASS II.—Taylor, J. M.
Harris, G. } æq.
Uther, A. H. }
CLASS III.—Waddy, P. R.
Veech, L. S.

1894.

CLASS I.—Flannery, G. E.
CLASS II.—Pickburn, J. P.
Gerber, E. W. T.
Watt, A. R. J.

1895.

CLASS II.—Levy, D.
Martin, L. O.
Holme, J. B.

1896.

CLASS II.—Walker, J. E.
Boyce, F. S. } æq.
Kershaw, J. C. }

1897.

CLASS I.—Bavin, T. R.

1898

CLASS I.—Peden, J. B.
CLASS II.—Clines, P. J.
Hammond, J. H.
Parker, W. A.

FACULTY OF MEDICINE.

M.D. EXAMINATION.

1895.

Smith, G. E. (Anatomy).

M.B. EXAMINATION.

1892.

CLASS I.—Dick, R.
Sawkins, F. J. T.
CLASS II.—Tidswell, F.

1893.

CLASS II.—Smith, G. E. } æq.
Vallack, A. S. }

1894.

CLASS I.—Craig, R. G.

1895.

CLASS II.—Hall, G. R. P.
Hughes, M. O'G.
Jackson, J. W.

1896.

CLASS II.—Deck, G. H. B. } æq.
Halliday, J. C. }
McClelland, W. C.
Wade, R. B.
Conlon, W. A.

1897.

CLASS I.—Dixon, G. P.
CLASS II.—Pain, E. M.

1898.

CLASS I.—MacPherson, J.
CLASS II.—Hall, E. C.
Kater, N. W.
Throsby, H. Z.
Ellis, L. E.

FACULTY OF SCIENCE.

B.Sc. EXAMINATION.

CHEMISTRY.

1893.

CLASS II.—Forde, J.

GEOLOGY AND PALÆONTOLOGY.

1894.

CLASS I.—Watt, J. A.

CLASS II.—Bennett, Agnes E. L.

1897.

CLASS I.—Horton, Marion C.

1898.

CLASS I.—Woolnough, W. G.
*Poole, W.

MINERALOGY.

1893.

CLASS II.—Forde, J.

1894.

CLASS I.—Watt, J. A.

PHYSICS.

1894.

CLASS I.—Brearley, J. H. D.

1896.

CLASS II.—*Strickland, T. P.

BIOLOGY.

1894.

CLASS II.—Bennett, Agnes E. L.

1897.

CLASS I.—Horton, Marion C.

1898.

CLASS II.—Davis, Agnes M. H.

M.E. EXAMINATION.

CIVIL ENGINEERING.

1892.

CLASS I.—Vicars, James

1894.

CLASS I.—Dare, H. H.

1896.

CLASS I.—Bradfield, J. J. C.

* Not passing through the regular course.

B.E. EXAMINATION.

CIVIL ENGINEERING.

1892.

CLASS I.—Stephens, C. T.
Barraclough. S. H.
Roberts, J. W. } æq.
McTaggart, N. J. C. }

1893:

CLASS I.—Ledger, W. H.

1894.

CLASS I.—Seale, H. P.
CLASS II.—White, N. F.

1895.

CLASS I.—Jackson, C. F. } æq.
Doak, W. J. }
Wood. J. P.

1895.

CLASS II.—Arnott, R. F.

1896.

CLASS II.—Hole, W. F.
Woore, J. M. S.
*Hedgeland, E. W.

1897.

CLASS I.—Strickland, T. P.
CLASS II.—Shortland, W. A.
Smail, H. S. I.

1898.

CLASS II.—Boyd, R. J.

MINING ENGINEERING.

1895.

CLASS II.—Simpson, E. S.
Dixon, J. T.

* Not passing through the regular course.

MATRICULATION EXAMINATION.

HONOURS.

NOVEMBER, 1897.

AITKEN SCHOLARSHIP FOR GENERAL PROFICIENCY—F. A. Todd.

COOPER SCHOLARSHIP No. II., FOR CLASSICS.—P. H. Power.

prox. acc. { G. N. Woodd. F. A. Todd.

BARKER SCHOLARSHIP No. II., AND HORNER EXHIBITION FOR MATHEMATICS—H. S. Mort.

LITHGOW SCHOLARSHIP FOR FRENCH AND GERMAN—Ina B. H. Armstrong.

LATIN.

CLASS I.

Power, P. H. } bar.
Woodd, G. N. } bar.
Todd, F. A.

CLASS II.

Palmer, Selina E.
Larcombe, E. R. } bar.
Barton, E. A. } bar.
Hill, J. G. W.

CLASS III.

Ryan, J. W.
Fahey, B. F. } bae. bae.
Smith, S. A. } bae. bae.
Baker, W. I. } bae. bae.
Bruce, Grace M. } bae. bae.
Thomson, J. M. } bae. bae.
Walker, F. } bae. bae.
Newman, J. M. } bae. bae.
Manning, C. E. } bae. bae.
Fry, Florence M.

GREEK.

CLASS I.

Power, P. H.
Ryan, J. W.
Barton, E. A.
Woodd, G. N. } bae.
Todd, F. A. } bae.

CLASS II.

Larcombe, E. R.
Hill, J. G. W.
Newman, J. M.
Manning, C. E.
Walker, F. } bae. bae.
Boyd, A. } bae. bae.
Jensen, H. I. } bae. bae.
Thomson, J. M. } bae. bae.

CLASS III.

Plomley, M. J.

MATHEMATICS.

CLASS I.

Mort, H. S.
Copas, Theodora E. J.
Todd, F. A.
Smith, S. A.
Sharp, G. G.
Woolnough, R. E.
Plomley, M. J.
Davis, J. F. } bae. bae.
Baker, W. I. } bae. bae.
Dansey, St. J. W. } bae. bae.
Henning, C. T. B. } bae. bae.
O'Sullivan, E. F. } bae. bae.
Merrick, J. O'M. } bae. bae.
Newman, J. F. } bae. bae.
Fahey, B. F. } bae. bae.
Ryan, J. W. } bae. bae.
Peterson, A. J. } bae. bae.
Jordan, G. E. G. } bae. bae.

CLASS II.

Weston, P. L. } bae. bae.
Jensen, H. I. } bae. bae.
Boyd, A. } bae. bae.
Thomson, J. M. } bae. bae.
Middleton, Flo. G. } bae. bae.
O'Reilly, J. F. } bae. bae.
Walker, F.
Delohery, E. C. } bae. bae.
Lowe, W. C. H. } bae. bae.
Spier, R. V.
Bushnell, H. B.

CLASS III.

Woodd, G. N.
Fox, H. E.
Jones, H. A. } bae. bae.
Connolly, T. P. } bae. bae.
Heery, D. J. } bae. bae.
Wood, H. } bae. bae.
Blume, Bertha E. } bae. bae.
Vickery, E. F. } bae. bae.
Hamilton, T.
Mills, Elsie A. H. } bae. bae.
Fry, Florence M. } bae. bae.
Brady, P. P. } bae. bae.
Cohen, D. H. } bae. bae.
Nichols, A. J. A.

GERMAN.

CLASS I.

Armstrong, Ina B. H.
Copas, Theodora E. J.

CLASS II.

Wood, H.
Walker, F.
Marks, R. A.

CLASS III.

Thomson, J. M.
Vickery, E. F.

FRENCH.

Class I.	Class II.	Class III.
Armstrong, I. B. H. } bar.	Marks, R. A.	Paxton, Betha
Woodd, G. N. } bar.	Middleton, Florence G.	Mills, Elsie A. H.
Todd, F. A.	Scrutton, Alice L.	Weston, P. L.
Power, P. H.	Pridham, J. T.	Garry, J. J. P.
Copas, Theodora E. J.	Fry, Florence M.	Marsh, H. S.
Boyd, A.	Bruce, Annie	Davis, J. S.
Palmer, Selina E.	Lingen, Florence E.	Baker, W. I.
	Parsons, Ida M.	Ryan, J. W.
	Phillips, Edith M. G. } bar.	Newman, J. M. } bar.
	Jensen, H. I. } bar.	Barton, E. A. } bar.
	Fahey, B. F.	
	Manning, C. E.	

MARCH, 1898.

PASS.

Adams, Francis Lucy	Harkess, Blanche J.	Penzer, W. W. B.
Armstrong, Ina B. H.	Hamilton, Thos.	Perkins, R.
Blume, Bertha Eliz.	Heery, Rose	Phillips, Edith M. G.
Boorman, Frances J.	Heery, D. J.	Phillips, A. B.
Bruce, Annie	Henning, C. T. B.	Poole, W.
Buchanan, G. A.	Holt, Edith J. K.	Power, P. H.
Budden, Winnifred M.	James, T. H.	Proctor, Ethel
Campbell, W. C.	Jarrett, Marjorie K.	Proctor, Martha E.
Chalmers, G.	Lee, Rose E.	Purcell, H. T. A.
Chamier, F. W.	Lingen, Florence E.	Reynolds, R. B.
Connolly, T. P.	Maclean, C. H.	Rickard, J. C.
Crichton, W. J.	MacDonald, S. G.	Rundle, G. W.
Driscoll, R. J.	Mackness, Constance	Saunders, Eva M.
Fiaschi, Carlo F.	McCrae, A. G.	Shine, Lizzie
Flowers, James	McCue, Maggie	Stackpool, P. J.
Forsyth, Alice N.	Mills, Elsie A. H.	Stephenson, Anita L.
Fry, Florence M.	Moseley, A. H.	Stewart, Jessie M.
Fullerton, Lottie	Nash, F. L. E.	Studdy, Marg. M. E
Futter, J. D.	Niland, A. E.	Taylor, T. M.
Garry, J. J. P.	O'Reilly, J. F.	Thurlow, O. S.
Giblin, N. E.	O'Sullivan, E. F.	Todd, F. A.
Giraud, S.	Palmer, Selina E.	Ure, Sarah L.
Gould, H. J.	Paton, Mary P.	Veech, P. B.
Green, H. McK.	Paxton, Betha	Verge, A.
Halpin, Margaret	Peirce, Martha L.	White, A. B. S.

ENTRANCE EXAMINATION FOR THE FACULTIES OF LAW, MEDICINE SCIENCE, AND DEPARTMENT OF ENGINEERING.

MARCH, 1898.

Note.—Those whose names are marked with the letter (E) are qualified for admission to the Department of Engineering.

PASSED.

Docker, A. B.
Hipsley, P. L.
(E) Laing, W. W.
(E) Mansfield, W. C.
(E) Spier, R. V.
(E) Stanley, F. V.
Thomson, J. G.
(E) Vernon, M. M.

FACULTY OF ARTS.

FIRST YEAR EXAMINATION.

DECEMBER, 1897, AND MARCH, 1898.

COOPER SCHOLARSHIP, No 3, FOR CLASSICS.—R. N. Robson.

GEORGE ALLEN SCHOLARSHIP FOR MATHEMATICS—W. S. Boyd.

PROFESSOR MACCALLUM'S PRIZE FOR ENGLISH ESSAYS—N. J. Gough.

SMITH PRIZE FOR PHYSICS—L. K. Ward.

UNIVERSITY PRIZE FOR PHYSIOGRAPHY—Florence M. Rutherford. I. Mutton, *prox. acc.*

PROFESSOR LIVERSIDGE'S PRIZE FOR CHEMISTRY—(Evening Student)—C. Quaife.

LATIN.

HONOURS.

CLASS I.

Robson, R. N.
Mutton, I.

CLASS II.

Hill, J. H. F.
Fell, Catherine I.
*Gough, N. J. } tie
Scrutton, Carol. M. }
Rutherford, Florence M.

CLASS III.

Stephen, H. M.
Rutherford, G. W.
Ward, L. K.
Clark, F. G.
Young, J.

GREEK.

HONOURS.

CLASS I.

Robson, R. N.

CLASS II.

Hill, J. H. F.
Ward, Pearl W.

CLASS III.

Ward. L. K.

JUNIOR FRENCH.

HONOURS.

CLASS I.

*Gough, N. J.
Bailey, Margaret A.
Uther, Mary H.
Scrutton, Caroline M.
Fell, Catherine I.

CLASS II.

Mutton, I.

CLASS III.

Wilson, Gwendolene L.
Small, E. Ella
Clark, F. G.

JUNIOR GERMAN.

HONOURS.

CLASS I.

Rutherford, Florence M.
Bailey, Margaret A.

CLASS II.

Rutherford, G. W.
Frank, Mathilda J. H.

MATHEMATICS.

HONOURS.

CLASS I.

Boyd, W. S.
Horn, W. R. (Eng.)
Stephen, H. M.

CLASS II.

Heery, T.
Madsen, J. P. V. (Eng.)

* Evening student.

ENGLISH.

PASS.

Rutherford, Florence M.
Bailey, Margaret A.
Fell, Catherine I. } bar.
Scrutton, Carol. M. }
Ward, L. K. } bar.
Robson, R. N. }
*Gough, N. J. }
Rutherford, G. W.
Clark, F. G.
Boyd, W. S.
Hill, J. H. F.
Mutton, I.
Roseby, Sarah M.
Uther, Mary H.
Wilson, Gwendolene L.
Merrington, E. N.
Aiken, P. N.
Ward, Pearl W.
Newman, E. L.
Bradley, Edith M.
Gillam, Dora A.
Doyle, W. J.
Young, J.
*Binns, W. J.
†Patterson, Charlotte C.
Stephen, H. M
Lehane, T. J.
Newsham, Alice I.
Manning, H. E.
*Nolan, J. H. M.
Hutchison, G. T.
*Dey, D. D.
*Graham, A. N.
*Petrie, J. M.
*Smee, R.
Sadler, A.
*Armitage, C. H.
Clouston, T. B.
Crawford, T. S. } bar.
Heery, T. }

LATIN.

PASS.

Boyd, W. S.
Ward, Pearl W.
Newman, E. L.
Bailey, Margaret A.
Newsham, Alice I.
Uther, Mary H.
*Graham, A. N.
Merrington, E. N.
Roseby, Sarah M. } bar.
Aiken, P. N. }
*Binns, W. J.
Gillam, Dora A.
Crawford, T. S. } bar.
Sadler, A. }
Manning, H. E.
Wilson, Gwendolene L.
Heery, T.
*Nolan, J. H. M.
*Quaife, C.
Doyle, W. J.
Bradley, Edith M.
*Smee, R.
Lehane, T. J.
†Patterson, Charlotte C.
Clouston, T. B.
*Armitage, C. H.
Hutchison, G. T.
*Petrie, J. M.

GREEK (PRELIMINARY CLASS).

PASS.

Crawford, T. S. | Merrington, E. N.

GERMAN (JUNIOR).

*Maxted, H. L.

JUNIOR FRENCH.

PASS.

Newman, E. L.
Young, J.
Gillam, Dora A.
Newsham, Alice I.
Lehane, T. J.
Aiken, P. N.
*Smee, R.
*Binns, W. J.
†Patterson, C. C. } bar.
Roseby, Sarah M. }
Boyd, W. S.
Manning, H. E.
*Nolan, J. H. M.
Bradley, Edith M.
Hutchison, G. T.
Heery, T.
Sadler, A.
*Armitage, C. H.
Doyle, W. J.
*Petrie, J. M.
Clouston, T. B.

* Evening Students. † Unmatriculated.

MATHEMATICS.

PASS.

Mutton, I.	Newman, E. L. } bag.	Merrington, E. N. } bag.
Bailey, Margaret A.	*Armitage, C. H. } bag.	Ward, Pearl W. } bag.
Clark, F. G. } bag.	Rutherford, G. W.	Hill, J. H. F.
Rutherford, Flo. M. } bag.	Young, J.	*Smee, R.
Ward, L. K.	Aiken, P. N. } bag.	*Nolan, J. H. M.
Robson, R. N.	Wilson, Gwen. L. } bag.	Crawford, T. S.
Lehane, T. J.	Scrutton, Caroline M.	*Petrie, J. M. } bag.
Uther, Mary H. } bag.	Fell, Catherine I. } bag.	Bradley, Edith M. } bag.
Clouston, T. B. } bag.	Roseby, Sarah M. } bag.	Newsham, Alice I.
Sadler, A.	Doyle, W. J.	†Bligh, E. A. R.
*Quaife, C.	Hutchison, G. T.	Gillam, Dora A.
		Manning, H. E.

CHEMISTRY.

CLASS I.	CLASS II.
*Quaife, C.	*Gurney, E. H.

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

Brownlie, Eliz. A. D.	*Gough, N. J.	Sheridan, Muriel F. B.
Butler, P. J.	Henry, Ada	Small, E. Ella
Cameron, C. B.	Henning, E. T.	Turner, Emily M.
Carlile-Thomas, Ella	Jones, L.	Walton, J. F.
Dight, A. H.	McCook, W. H.	West, Edith A.
Dight, A. R.	†Patterson, Charlotte C.	Wilson, R. C.
Eldridge, Ada M.	Poidevin, L. O. S.	
Frank, Mathilda J. H.	Pratt, W. H.	

PASSED IN INDIVIDUAL SUBJECTS.

* Cole, Louisa (Arithmetic and Algebra).
* Younger, W. L. (English and Latin).

* Evening students. † Unmatriculated.

FACULTY OF ARTS.

SECOND YEAR EXAMINATION.

DECEMBER, 1897, AND MARCH, 1898.

COOPER SCHOLARSHIP No. 1, FOR CLASSICS—[R. C. Teece]—Not awarded.

BARKER SCHOLARSHIP No. 1 AND NORBERT QUIRK PRIZE FOR MATHEMATICS—D. T. Sawkins.

PROFESSOR ANDERSON'S CLASS PRIZE FOR LOGIC AND MENTAL PHILOSOPHY—G. G. Nicholson.

PROFESSOR MACCALLUM'S PRIZE FOR ENGLISH ESSAYS—Elizabeth J. Read, E. J. Withycombe } æq.

PROFESSOR WOOD'S PRIZE FOR HISTORY—R. C. Teece; Elizabeth J. Read, *prox. acc.*

LATIN.

HONOURS.

CLASS I.

Teece, R. C.

CLASS II.

Parsons, J., Galt, J., Walsh, J. J. } æq.
Read, Elizabeth J.

CLASS III.

Tozer, S. D.
Perkins, F. T.

MATHEMATICS.

HONOURS.

CLASS I.

Sawkins, D. T.

CLASS II.

Durack, J. J. (Eng.)

GREEK.

HONOURS.

CLASS I.

Teece, R. C.

CLASS II.

Walsh, J. J.

CLASS III.

Galt, J.
Tozer, S D.

SENIOR FRENCH.

HONOURS.

CLASS I.

Nicholson, G. G

SENIOR GERMAN.

HONOURS.

CLASS I.

Nicholson, G. G.

ENGLISH.

HONOURS.

CLASS III.

Slack, Ida L.

LOGIC & MENTAL PHILOSOPHY.

HONOURS.

CLASS I.

Nicholson, G. G.

CLASS II.

Davies, Edith W.
Lafferty, T. M., Withycombe, E. J. } æq.
Curtis, W. J.

HISTORY.

HONOURS.

CLASS I.

Teece, R. C.
Read, Elizabeth J.

ENGLISH.

PASS.

Read, Elizabeth J.	Williamson, P. L.	Clipsham, Gertrude M.
Withycombe, E. J.	Cadden, L. G. B.	*Dickinson, E. M.
Turner, Annie E.	Davies, Edith W.	Davidson, C. G. W.
Mackintosh, B. A. H.	Verge, J.	Williams, L. B.
Parsons, J. } æq.	*Liggins, Jessie H.	*Clegg, W. C.
Hadley, C. W. }		

LATIN.

PASS.

Nicholson, G. G.	Mackintosh, B. A. H.	Davidson, C. G. W.
*Liggins, Jessie H.	Marr, Fannie A.	Williams, L. B. } æq.
*Grieve, R. H. } æq.	Davies, Edith W.	Williamson, P. L. }
Verge, J. }	Clipsham, Gertrude M.	Withycombe, E. J.
*McEvoy, B. P.	Cadden, L. G. B.	Turner, Annie E.
Curtis, W. J.	Hadley, C. W.	Slack, Ida L.

JUNIOR GREEK.

PASS.

Stephen, H. M. (1st Year)	Marr, Fannie A. (1st Year)

MATHEMATICS.

PASS.

Curtis, W. J. } æq.	Williams, L. B.	*Grieve, R. H.
Verge, J. }	Davidson, C. G. W.	

SENIOR GERMAN.

PASS.

Read, Elizabeth J.

SENIOR FRENCH.

PASS.

Parsons, J.	Davidson, C. G. W.	Curtis, W. J.
*Liggins, Jessie H.	Cadden, L. G. B.	Clipsham, Gertrude M.
Williams, L. B.	Mackintosh, B. A. H.	*Walker, J. W.
*Dickinson, E. M.	Slack, Ida L.	Turner, Annie E.
Davies, Edith W.	Verge, J.	

LOGIC AND MENTAL PHILOSOPHY.

PASS.

Teece, R. C.	Slack, Ida L.	Clipsham, Gertrude M.
Cadden, L. G. B. }	*McEvoy, B. P.	Turner, Annie E.
Galt, J. } æq.	Williamson, P. L.	Marr, Fannie A.
Hadley, C. W. }	Tozer, S. D.	*Mulholland, J. J.
Walsh, J. J. }		

* Evening student.

HISTORY.

PASS.

Galt, J. J.	Hadley, C. W.	*Jackson, Carrie	æq.
*Dickinson, E. M.	*Mulholland, J. J.	Marr, Fannie A.	
Withycombe, J. J.	*Liggins, Jessie H.	*McEvoy, B. P.	
Parsons, J.	Walsh, J. J.	*Clegg, W. C.	
Mackintosh, B. A. H.	Williamson, P. L.	Tozer, S. D.	

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

Buchanan, C. P.	*Grieve, R. H.	Parsons, Emily W.
Butler, S. W. B.	Lafferty, T. M.	Perkins. F. T.
*Clegg, W. C.	Lee, T. N.	Saywell, T. S.
*Dickinson, E. M.	MacLaurin, H. N.	Yarnold, Isabel M.
Elphinstone, Elsie M.	Page, A. E.	

PASSED IN INDIVIDUAL SUBJECTS.

* Grieve, J. T. (English and Latin).
* Jackson, Carrie (Logic and Mental Philosophy).

* Evening Student.

FACULTY OF ARTS.

THIRD YEAR EXAMINATION.

UNIVERSITY MEDAL FOR CLASSICS—D. P. Evans-Jones.

UNIVERSITY MEDAL FOR LOGIC AND MENTAL PHILOSOPHY—N. G. S. Pilcher.

FRAZER SCHOLARSHIP FOR HISTORY—Elisabeth A. Lance, N. G. S. Pilcher } æq.

PROFESSOR ANDERSON'S CLASS PRIZE FOR LOGIC AND MENTAL PHILOSOPHY—N. G. S. Pilcher.

PROFESSOR MACCALLUM'S PRIZE FOR ENGLISH—Isabel M. Fidler.

LATIN.

HONOURS.

CLASS I.

Fidler, Isabel M.
Evans-Jones, D. P.

CLASS III.

Dunnicliff, Mary C.

GREEK.

HONOURS.

CLASS I.

Evans-Jones, D. P.

MATHEMATICS.

HONOURS.

CLASS II.

Griffiths, F. G.

CLASS III.

Jarvie, B.

ENGLISH.

HONOURS.

CLASS I.

Fidler, Isabel M.

CLASS II.

Jarvie, B.

SENIOR GERMAN.

HONOURS.

CLASS II.

Harwood, Marian F.
De Lissa, Ethel N.

SENIOR FRENCH.

HONOURS.

CLASS I.

Fidler, Isabel M.

CLASS II.

De Lissa, Ethel N. } æq.
Harwood, Marian F. }
Dey, Charlotte J.
Jarvie, B.

CLASS III.

Mitchell, Ethel R.

LOGIC AND MENTAL PHILOSOPHY.

HONOURS.

CLASS I.

Pilcher, N. G. S.
De Lissa, Ethel N

CLASS II.

Bavin, Gertrude L.
Dumolo, Nona

CLASS III.

Edwards, E. E.

HISTORY.

HONOURS.

CLASS I.

Lance, Elisabeth A. } æq.
Pilcher, N. G. S. }

CLASS II.

Gordon, Emily I.

CLASS III.

Rossiter, Florence A.

GEOLOGY.

(*See under Faculty of Science.*)

ENGLISH.

PASS.

Forsyth, W. G.	Dey, Charlotte J.	*Walton, G. H. M.
Dunnicliff, Mary C.	*Barry, H. de B.	Cordingley, Grace M.
Dowling, F. V.	Brown, G. E.	Warren, E. W.
Williams, A. J.	Dumolo, Nona	Sinclair, C. A.
Stoney, E. H.	Gordon, Emily I.	

GREEK (SENIOR).

PASS.

Dowling, F. V. (3rd year)	*McEvoy, B. P. (2nd year).
Fitzhardinge, Maude Y. (3rd year)	

LATIN.

PASS.

Pilcher, N. G. S.	Cordingley, Grace M.	Jarvie, B.
Fitzhardinge, Maude Y.	Gordon, Emily I.	Lance, Elisabeth A.
Williams, A. J.	Edwards, E. E.	Heden, E. C.
Rossiter, Florence A.	Hunter, T. B.	Hipsley, Alice E.
Yates, A. A.	Holliday, A.	Dey, Charlotte J.
Warren, E. W.	Dumolo, Nona	Bavin, Gertrude L.

MATHEMATICS (ALPHABETICAL).

Jarvie, B.	Lance, Elisabeth A.

FRENCH (SENIOR).

PASS.

Heden, E. C.	Harris, Marian
Rossiter, Florence A.	Brown, G. E.
Edwards, E. E.	

HISTORY.

PASS.

Bavin, Gertrude L. } æq.	Brown, G. E.	*Barry, H. de B. } æq.
Evans-Jones, D. P. }	Williams, A. J.	Holliday, A. }
Yeates, A. A.	Dunnicliff, Mary C.	Hipsley, Alice E.
Fitzhardinge, Maude Y.		

GERMAN (SENIOR).

PASS.

Hipsley, Alice E.	Lance, Elisabeth A.

* Evening student.

LOGIC AND MENTAL PHILOSOPHY.

PASS.

Dowling, F. V.
Forsyth, W. G. } æq.
*Barry, H. de B. }
*†Beardmore, F. J.
Yeates, A. A.
Holliday, A.

CHEMISTRY.

PASS.

Cordingley, Grace M.

BIOLOGY.

PASS.

Heden, E. C.
Harris, Marian (Zoology)

LAW SUBJECTS.

(See under Faculty of Law.)

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

*Anderson, Catherine
Beaumont, Annie H.
Brown, Lizzie S.
Cook, S. L.
Gregson, W. H.
Harwood, Marian F.
Holt, W. J.
Houison, S. J.
Huggart, W. C.
Mitchell, Ethel R.
Potts, C.
Purcell, P. F.

* Evening student. † Unmatriculated.

FACULTY OF ARTS.

M.A. EXAMINATION.

MARCH, 1898.

MODERN HISTORY.

HONOURS.

CLASS II.—(Alphabetical.)

Chalmers, S. D., B.A.
Edwards, E. S., B.A.

MENTAL PHILOSOPHY.

PASS.

Wallace, D., B.A.

ENGLISH LITERATURE.

PASS.

Cadman, E. W., B.A.
Cocks, Lizzie, B.A.

FACULTY OF LAW.

INTERMEDIATE LL.B. EXAMINATION.

MARCH, 1898.

WIGRAM ALLEN SCHOLARSHIP FOR PROFICIENCY IN THE SUBJECTS OF THE EXAMINATION—H. S. Dettmann, B,A.

PASS.

(Order of Merit.)

Dettmann, H. S., B.A.
Forsyth, W. G.
Broderick, C. T. H., B.A.
Chalmers, S. D., B.A.
Stoney, E. H.
Hunter, T. B.
Craig, C., B.A.
Warren, E. W., B.E.
Monahan, W. W., B.A.
Kilgour, A. J., B.A.
Broinowski, L. T., B.A.

ROMAN LAW AND JURISPRUDENCE.

(Order of Merit.)

Dettmann, H. S., B.A.
Chalmers, S. D., B.A.
Forsyth, W. G.
Broderick, C. T. H., B.A. } bæ.
Craig, C., B.A. } bæ.
Hunter, T. B. } æq.
Stoney, E. H. } æq.
Monahan, W. W., B.A.
Kilgour, A. J., B.A. } bæ.
Warren, E. W., B.E. } bæ.
Sinclair, C. A.
Barraclough, F. E., B.A.
Broinowski, L. T., B.A.

CONSTITUTIONAL LAW AND INTERNATIONAL LAW.

(Order of Merit.)

Dettmann, H. S., B.A. } æq.
Stoney, E. H. } æq.
Broderick, C. T. H., B.A. } bæ.
Forsyth, W. G. } bæ.
Hunter, T. B.
Chalmers, S. D., B.A.
Craig, C., B.A.
Warren, E. W., B.E.
Monahan, W. W., B.A.
Broinowski, L. T., B.A. } bæ.
Kilgour, A. J., B.A. } bæ.

FINAL LL.B. EXAMINATION.

MARCH, 1898.

UNIVERSITY MEDAL FOR GENERAL PROFICIENCY—J. B. Peden, B.A.

HONOURS.

CLASS I.

Peden, J. B., B.A.

CLASS II.

Clines, P. J., B.A.
Hammond, J. H., B.A.
Parker, W. A., B.A.

PASS.

Merewether, W. D. M., B.A.
Elphinstone, J. C., B.A.
Merewether, H. H. M., B.A.

PASSED IN THE LAW OF PROPERTY—W. A. Freeman (Unmatriculated).

FACULTY OF MEDICINE.

FIRST YEAR EXAMINATION.

RENWICK SCHOLARSHIP FOR GENERAL PROFICIENCY IN THE SUBJECTS OF THE EXAMINATION—A. Muscio.

COLLIE PRIZE FOR BOTANY—Eleanor E. Bourne.

PROFESSOR HASWELL'S PRIZE FOR ZOOLOGY—(Class Examination)—A. Muscio, Eleanor E. Bourne } æq.

PROFESSOR HASWELL'S PRIZE FOR ZOOLOGY—(Laboratory notes)—A. Muscio.

PASS (Alphabetical).

Bond, L. W.
Bourne, Eleanor E.
Cahill, J. H.
Elworthy, W. H.
Fitzpatrick, E. B. L.
Horton, W. H.
Johnson, F. J.
Llewellyn, R. F.
Muscio, A.
Page, E. C. G.
Rees, W. L.
Sadler, H. F.
Wallace, D., B.A.
White, Margaret I.

CLASS LISTS IN HONOURS.

BIOLOGY.

CLASS I.

Bourne, Eleanor E.
Muscio, A.
Wallace, D., B.A.

CLASS II.

Page, E. C. G.
Llewellyn, R. F.

CHEMISTRY.

CLASS I.

Muscio, A.

CLASS II.

Page, E. C. G.
Wallace, D., B.A.

PHYSICS.

CLASS I.

Muscio, A.
Wallace, D., B.A.

CLASS II.

Llewellyn, R. F.
Page, E. C. G.
Bourne, Eleanor E.
White, Margaret I.
Johnson, F. J.
Cahill, J. H.

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

Adams, F. C.
Dight, W. B.
Kendall, H. W.
Ure, Edith
Watson, J. F.

SECOND YEAR EXAMINATION.

PASS (Alphabetical).

Anderson, A.	Graham, Mabel J.	Macintosh, A. H.
Barling, J. E. V.	Greenham, Eleanor C.	Maffey, R. W. H., B.A.
Barton, J. a'B. D., B.A.	Griffiths, F. G.	Pritchard, Alice, B.A.
Cameron, D. A.	Hart, B. L.	Savage, E. J.
Clarke, G. R. C.	Holt, A. C., B.A.	Sharp, W. A. R., B.A.
Combes, E.	McCredie, R. W.	Thomas, G. B.
Cox, H.		

ANATOMY AND PHYSIOLOGY.

PASSED WITH DISTINCTION.

Macintosh, A. H.

PASSED WITH CREDIT.

Graham, Mabel J. | Barling, J. E. V. | Cox, H.

ORGANIC CHEMISTRY.

HONOURS.

CLASS I.

Macintosh, A. H. | Graham, Mabel J. | Barling, J. E. V.

CLASS II.

Griffiths, F. G.

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

Anderson, H. M., B.A.	Jones, P. S.
Bridge, N. H.	McDowall, St. A. W. L.
Gullett, Lucy E.	Stephen, E. H. M.

THIRD YEAR EXAMINATION.

JOHN HARRIS SCHOLARSHIP FOR ANATOMY AND PHYSIOLOGY—
W. F. Burfitt, B.A.

DR. DIXSON'S PRIZE FOR MATERIA MEDICA—G. McLean.
W. F. Burfitt, B.A., *prox. acc.*

PASSED WITH DISTINCTION.

Burfitt, W. F., B.A.

PASSED WITH CREDIT.

Holmes, H. G. } æq. | McLean, G.
Knight, H. J. P. } | Lees, G. J.

PASS (Alphabetical).

Blue, A. I.	Coen, T. J.	McEvoy, J. J. S.
Burge, S. B.	Durack, W. J.	Oliver, W. R.
Busby, H.	Harris, W. E.	Roseby, E. R.

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

Pockley, E. O.	Schwabe, J. H.	Tange, F. S.

FOURTH YEAR EXAMINATION.

PASSED WITH CREDIT.

Blackburn, C. B.	Willis, C. S.
Sandes, F. P.	Wilson, T. G.
MacMaster, D. Æ. D., B.A., B.Sc.	Ludowici, E.

PASS (Alphabetical).

Brade, G. F.	Mackenzie, J.	Shorter, H. L. A.
Brennand, H. J. W., B.A.	Magarey, F. W. A.	Taylor, C. J.
Cargill, W. D.	Marsden, E. A.	West, F. W.
Eichler, W. O. H.	Roe, J. M.	Windeyer, J. C.

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

Fairfax, E. W.	Hardman, R.	Old, G. G.

FIFTH YEAR EXAMINATION.

M.B. AND CH.M.

HONOURS AT GRADUATION.

UNIVERSITY MEDAL—J. MacPherson, M.A., B.Sc.

CLASS I.

J. MacPherson, M.A., B.Sc.

CLASS II.

Hall, E. C.	Throsby, H. Z.
Kater, N. W.	Ellis, L. E.

ORDER OF MERIT IN THE SUBJECTS OF THE FIFTH YEAR EXAMINATION TAKEN TOGETHER.

PASSED WITH DISTINCTION.

J. MacPherson, M.A., B.Sc.

PASSED WITH CREDIT.

Pulleine, R. H.	Throsby, H. Z.	Bowker, C. V.
Kater, N. W.	Böhrsmann, G. H.	O'Keefe, J. J.
Ellis, L. E. } aeq.	Lipscomb, T. W. } aeq.	Stacy, H. S.
Hall, E. C. } aeq.	Dey, R.	

PASS (Alphabetical).

Affleck, Ada C.	Cope, H. R.	Sheldon, H.
Biffin, Harriett E.	Newton, Alice S.	Stevens, W. W.
Carlisle-Thomas, Julia	Read, W. H.	Walton, W. B
Cooley, P. G.		

FACULTY OF SCIENCE.

FIRST YEAR EXAMINATION.

Davis, Agnes, M. H., B.A. (Passed in Chemistry).

DEFERRED EXAMINATION.

MARCH, 1898.

PASS.

D'Apice, J. E.

SECOND YEAR EXAMINATION

CAIRD SCHOLARSHIP FOR CHEMISTRY AND PHYSICS—G. Harker.

CHEMISTRY.	PHYSICS.	MATHEMATICS.
HONOURS.	HONOURS.	PASS.
CLASS I.	CLASS I.	Harker, G.
Harker, G.	Durack, J. J. E. (Eng.)	
	CLASS II.	
	Harker, G.	

THIRD YEAR EXAMINATION.

PROFESSOR DAVID'S PRIZE FOR GEOLOGY—W. G. Woolnough.

VERTEBRATE ZOOLOGY.	GEOLOGY, &c.	
HONOURS.	HONOURS.	PASS.
CLASS II.	CLASS I.	Davis, Agnes M. H., B.A.
Davis, Agnes M. H., B.A.	Woodnough, W. G.	Beaumont. Annie H. (Arts)
PASS.	†Poole, W.	Harris, Marian (Arts)
Brennan, Sarah O., M.A.	CLASS II.	Brennan, Sarah O., M A.
	Heden, C. (Arts)	
	Potts, C. (Arts)	

† Unmatriculated.

FACULTY OF SCIENCE.

DEPARTMENT OF ENGINEERING.

FIRST YEAR EXAMINATION.

LEVEY SCHOLARSHIP FOR CHEMISTRY AND PHYSICS—J. P. V. Madsen.

SLADE PRIZE FOR PRACTICAL CHEMISTRY—L. J. Winton.

SLADE PRIZE FOR PRACTICAL PHYSICS—J. P. V. Madsen.

PASS (Alphabetical).

Ball, C. L.
Horn, W. R.
Madsen, J. P. V.
More, G. A.
Slee, R. T.
Winton, L. J.

APPLIED MECHANICS, GEOMETRICAL AND MECHANICAL DRAWING.

HONOURS.

CLASS I.
Winton, L. J.
Madsen, J. P. V.

CLASS II.
Barker, R F.
More, G. A.
Ball, C. L.

PASS.
Horne, W. R.
Slee, R. T.

CHEMISTRY (MINING)

HONOURS.

CLASS II.
Ball, C. L.
Winton, L. J.
Madsen, J. P. V.

PHYSICS.

HONOURS.

CLASS I.
Madsen, J. P. V.

CLASS II.
Ball, C. L.
Slee, R. T.
Winton, L. J.

MATHEMATICS.

(See under Faculty of Arts.)

DEFERRED EXAMINATION.

MARCH, 1898.

Barker, R. F.

SECOND YEAR EXAMINATION.

DEAS-THOMSON SCHOLARSHIP FOR CHEMISTRY AND PHYSICS—J. J. E. Durack.

PROFESSOR DAVID'S PRIZE FOR GEOLOGY—G. A. Waterhouse.

CIVIL ENGINEERING.

PASS (Alphabetical).

Beaver, W. R. | Durack, J. J. E. | Mathison, W. C.

MINING ENGINEERING.

PASS (Alphabetical).

Jack, R. L. | Morris, J. F. | Waterhouse, G. A.

PHYSICS.

HONOURS.

CLASS I.
Durack, J. J. E.

CLASS II.
Harker, G. (Science)

PASS.
Beaver, W. R.
Mathison, W. C.

MINERALOGY.

PASS.

Waterhouse, G. A.
Morris, J. F.
Jack, R. L.
‡Allen, C. P.

GEOLOGY.

HONOURS.

CLASS I.
Waterhouse, G. A.
Morris, J. F.

PASS.
Durack, J. J. E.
Beaver, W. R.
Jack, R. L.
Mathison, W. C.
‡Allen, C. P.

MATHEMATICS.

HONOURS.

(*See under Faculty of Arts.*)

PASS.

Beaver, W. R. (Statics, Dynamics, Differential and Integral Calculus).
Mathison, W. C. (Statics, Dynamics, and Differential Calculus).

APPLIED MECHANICS, CIVIL ENGINEERING AND SURVEYING.

PASS (Alphabetical).

‡Allen, C. P. | Jack, R. L | Morris, J. F.
Beaver, W. R. | Mathison, W. C. | Waterhouse, G. A.
Durack, J. J. E.

‡ Not passing through the regular course.

THIRD YEAR EXAMINATION.

CIVIL ENGINEERING.

PASS.

Boyd, R. J.

MINING ENGINEERING.

PASS (Alphabetical).

Black, R. A. W., B.A.
Palmer, T. H.
Piddington, F. L., B.A.
Reid, N.
*Wilson, J. B.

CIVIL ENGINEERING AND SURVEYING.

HONOURS.

CLASS II.

Boyd, R. J.

PASS (Alphabet).

Black, R. A. W., B.A.
Palmer, T. H.
Piddington, F. L., B.A.
Reid, N.

ARCHITECTURE.

PASS.

Boyd, R. J.
†Gilchrist, J. H.

MINING.

PASS.

Piddington, F. L., B.A.
Black, R. A. W., B.A.
Reid, N.
Palmer, T. H.

METALLURGY.

PASS.

Piddington, F. L., B.A.
Black, R. A. W., B.A.
Palmer, T. H.
Reid, N.

MATHEMATICS, (SPHERICAL TRIGONOMETRY AND ASTRONOMY).

PASS.

Boyd, R. J.

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* Passed in August. 1897. † Unmatriculated,

UNIVERSITY OFFICERS, ETC.

VISITOR.

The Governor of the Colony for the time being is *ex officio* Visitor to the University.

*1850.—His Excellency Sir Charles Augustus Fitz Roy, K.C.B., K.H.

1855.—His Excellency Sir Thomas William Denison, K.C.B.

1861.—His Excellency the Right Hon. Sir John Young, Bart, K.C.B., G.C.M.G.

1868.—His Excellency the Right Hon. the Earl of Belmore, M.A.

1872.—His Excellency Sir Hercules George Robert Robinson, G.C.M.G.

1879.—His Excellency the Right Hon. Lord Augustus W. Loftus, M.A., G.C.B.

1886.—His Excellency the Right Hon. Charles Robert Baron Carrington, P.C., G.C.M.G.

1891.—His Excellency the Right Hon. Victor Albert George Child Villiers, Earl of Jersey, G.C.M.G.

1893.—His Excellency the Right Hon. Sir Robert William Duff, P.C., G.C.M.G.

1895.—His Excellency the Right Hon. Henry Robert, Viscount Hampden.

At the Commemoration in 1872, after Lord Belmore's departure, and at the Commemoration in 1879, after Sir Hercules Robinson's departure, Sir Alfred Stephen, G.C.M.G. and C.B., administering the Government, presided as Visitor. At the Commemoration in 1893, after the departure of the Earl of Jersey, and at the Commemoration of 1895, Sir Frederick Darley, C.J., Kt., administering the Government, presided as Visitor.

CHANCELLOR.

The Chancellor is elected by the Fellows of the Senate out of their own body, for such period as the Senate may from time to time appoint. The period is at present limited by By-law to three years, but the retiring Chancellor is declared to be eligible for re-election.

* The dates prefixed to the names of Office Holders refer to their first appointment or entrance upon office.

1851.—Edward Hamilton, M.A.
1854.—Sir Charles Nicholson, Bart, M.D., D.C.L., LL.D.
1862.—The Hon. Francis Lewis Shaw Merewether, B.A.
1865.—The Hon. Sir Edward Deas-Thomson, C.B., K.C.M.G.
1878.—The Hon. Sir W. M. Manning, LL.D., Kt., K.C.M.G.
1895.—The Hon. Sir Wm. Chas. Windeyer, M.A., LL.D., Kt.
1896.—The Hon. Hy. Normand MacLaurin, M.A., M.D., LL.D

VICE-CHANCELLOR.

The Vice-Chancellor is annually elected by the Fellows of the Senate out of their own body.

1851.—Sir Charles Nicholson, Bart., M.D., D.C.L., LL.D.
1854.—The Hon. F. L. S. Merewether, B.A.
1862.—The Hon. Edward Deas-Thomson, C.B.
1865.—The Hon. J. H. Plunkett, B.A.
1869.—The Rev. Canon Allwood, B.A.
1883.—The Hon. Mr. Justice Windeyer, M.A., LL.D.
1887.—The Hon. Hy. Normand MacLaurin, M.A., M.D., LL.D.
1889.—The Hon. Arthur Renwick, B.A., M.D.
1891.—Henry Chamberlaine Russell, B.A., C.M.G., F.R.S.
*The Hon. Arthur Renwick, B.A., M.D,
1892.—The Hon. Arthur Renwick, B.A., M.D.
† His Honour Judge Backhouse, M.A.
1893.—His Honour Judge Backhouse, M.A.
1895.—The Hon. Hy. Normand MacLaurin, M.A., M.D., LL.D.
1896.—His Honour Judge Backhouse, M.A.

THE SENATE.

The original Senate was appointed by Proclamation on the 24th of December, 1850, under the Act of Incorporation, and consisted of the following:—

The Rev. William Binnington Boyce	Francis Lewis Shaw Merewether, Esq.
Edward Broadhurst, Esq.	Charles Nicholson, Esq.
John Bayley Darvall, Esq.	Bartholomew O'Brien, Esq.
Stuart Alexander Donaldson, Esq.	The Hon. John Hubert Plunkett, Esq.
The Right Rev. Charles Henry Davis.	The Rev. William Purves.
Alfred Denison, Esq.	His Honor Roger Therry, Esq.
Edward Hamilton, Esq.	The Hon. Edward Deas-Thomson, Esq.
James Macarthur, Esq.	William Charles Wentworth, Esq.

*Mr. Russell having retired during his year of office, the Hon. Dr. Renwick was elected in his place for the remainder of the year.
†The Hon. Dr. Renwick having retired during his year of office, Judge Backhouse was elected in his place for the remainder of the year.

Under the original Incorporation Act, the election to vacant Fellowships was vested in the Senate until there should be one hundred Graduates holding the Degree of M.A., LL.D., or M.D. By an Act passed in 1861, the election to vacancies was vested in Fellows of the Senate, Professors and other Public Teachers of the University, Examiners, Principals of Incorporated Colleges within the University, Superior Officers declared to be such by By-law, and Graduates who should have taken any or either of the Degrees of M.A., LL.D., or M.D. By an Act passed in 1881, the privilege of voting at such elections was extended to Bachelors of Arts of three years standing, and by the University Extension Act of 1884 the privilege was further extended to all Bachelors of three years standing. In addition to the sixteen Fellows, it was provided by the Act of 1861 that there should not be fewer than three, nor more than six, *ex officio* Members of the Senate being Professors of the University in such branches of learning as the Senate might by any By-law select.

EX-MEMBERS OF THE SENATE.

1850-1854—Hamilton, Edward, M.A.
1850-1855—Davis, the Right Rev. C. H., D.D.
1850-1856—Broadhurst, the Hon. Edward, B.A.
1850-1859—Boyce, the Rev. W. B.
1850-1859—Therry, His Honour Sir Roger
1850-1860—Macarthur, the Hon. James
1857-1860—Denison, Alfred, B.A.
1850-1861—Donaldson, the Hon. Sir Stuart A.
1857-1861—Cooper, Sir Daniel, Bart., G.C.M.G.
1853-1865—Douglas, Henry Grattan, M.D.
1861-1866—Woolley, the Rev. J., D.C.L. (Principal)
1850-1868—Darvall, Sir John Bayley, M.A.
1850-1869—O'Brien, Bartholomew, M.D.
1850-1869—Plunkett, the Hon. John Hubert, B.A.
1850-1870—Purves, Rev. W., M.A.
1850-1872—Wentworth, the Hon. William Charles
1868-1872—Nathan, Charles, M.D.
1869-1873—Stenhouse, N. D., M.A.
1868-1874—Arnold, the Hon. William M.
1850-1875—Merewether, the Hon. F. L. S., B.A.
1856-1877—Polding, the Most Rev. Archbishop, D.D.
1859-1878—Allen, the Hon. George
1873-1878—Dalley, the Right Hon. William Bede, P.C.
1858-1878—Martin, the Hon. Sir James, Chief Justice
1861-1879—Pell, Professor Morris Birkbeck, B.A.
1850-1879—Deas-Thomson, the Hon. Sir E., C.B., K.C.M.G
1860-1880—Macarthur, the Hon. Sir William
1872-1882—Forster, the Hon. William

1850-1883—Nicholson, Sir Charles, Bart., D.C.L., M.D., LL.D.
1867-1884—Badham, Professor Charles, D.D.
1861-1885—Smith, the Hon. Professor, M.D., LL.D., C.M.G.
1877-1885—Allen, the Hon. Sir George Wigram, K.C.M.G.
1885-1886—Martin, the Hon. Sir James, Chief Justice
1855-1886—Allwood, Rev. Canon, B.A.
1879-1887—Darley, the Hon. Sir F. M., B.A., Chief Justice
1878-1887—Stephen, the Hon. Sir Alfred, C.B., G.C.M.G., Ex-C.J., P.C.
1887-1888—Knox, George, M.A.
1872-1888—Rolleston, Christopher, C.M.G.
1880-1889—Barton, the Hon. Edmund, M.A.
1886-1889—Barry, the Most Rev. Alfred, D.D., LL.D.
1884-1890—Stephens, Professor W. J., M.A.
1883-1891—Jennings, the Hon. Sir Patrick A., LL.D., K.C.M.G.
1875-1891—Macleay, the Hon. Sir William, Kt.
1870-1892—Hay, the Hon. Sir John, M.A., K.C.M.G.
1877-1892—Gurney, Professor Theodore T., M.A.
1891-1892—O'Connor, the Hon. Richard Edward, M.A.
1859-1894—Faucett, the Hon. Peter, B.A.
1885-1894—Scott, Professor Walter, M.A.
1861-1895—Manning, the Hon. Sir William Montagu, Kt., K.C.M.G., LL.D.
1892-1896—Manning, the Hon. Mr. Justice, M.A.
1894-1896—Gurney, Professor Theodore T., M.A.
1866-1897—Windeyer, the Hon. Sir William Charles, M.A., LL.D., Kt.

PRESENT SENATE.

1895—Anderson, Henry Charles Lennox, M.A.
1887—Backhouse, His Honour Judge, M.A., Vice-Chancellor.
1892—Barton, the Hon. Edmund, M.A.
1888—Butler, Professor Thomas, B.A.
1890—Cobbett, Professor Pitt, M.A., D.C.L., Dean of the Faculty of Law (*ex officio*).
1896—Cullen, The Hon. William Portus, M.A., LL.D.
1887—Jones, Philip Sydney, M.D.
1894—Knox, Edward William
1879—Liversidge, Professor Archibald, M.A., LL.D., F.R.S., Dean of the Faculty of Science (*ex officio*).
1883—MacLaurin, the Hon. Henry Normand, M.A., M.D., LL.D., Chancellor.
1893—O'Connor, the Hon. Richard Edward, M.A.
1879—Oliver, Alexander, M.A.
1877—Renwick, the Hon. Sir Arthur, B.A., M.D., Kt.
1889—Rogers, Francis E., M.A., LL.B., Q.C.
1875—Russell, Henry C., B.A., C.M.G., F.R.S.
1896—Scott, Professor Walter, M.A., Dean of the Faculty of Arts (*ex officio*).

1897—Simpson, His Honour Mr. Justice Archibald Henry, M.A.
1888—Stephen, Cecil Bedford, M.A.
1883—Stuart, Professor T. P. Anderson, M.D., Dean of the Faculty of Medicine (*ex officio*)
1889—Teece, Richard, F.I.A., F.F.A.

EX-PROFESSORS.

CLASSICS AND LOGIC.

1852-1866—Woolley, the Rev. John, D.C.L.
1867-1883—Badham, Rev. Charles, D.D.

GEOLOGY AND MINERALOGY.

1870-1872—Thomson, Alexander M., D.Sc.

MATHEMATICS AND NATURAL PHILOSOPHY.

1852-1877—Pell, Morris B., B.A.

CHEMISTRY AND EXPERIMENTAL PHYSICS.

1852-1885—Smith, the Hon. John, M.D., LL.D., C.M.G.

NATURAL HISTORY (GEOLOGY, ETC.)

1882-1890—Stephens, William John, M.A.

TEACHING STAFF.

ANATOMY—Challis Professor—1890 (*a*) James T. Wilson, M.B., Ch.M. (Edin.)
Demonstrator—1897—Arthur E. Mills, M.B., Ch.M.

ARCHITECTURE—P. N. Russell Lecturer—1887—John Sulman, F.R.I.B.A.

BIOLOGY—Challis Professor—1890—William A. Haswell, M.A., D.Sc. (Edin.), F.R.S.—Lecturer for Lent and Trinity Terms—1898—Gregg Wilson, M.A., B.Sc., Ph.D.
Demonstrator—1892—James P. Hill, F.L.S.

CHEMISTRY—Professor—1874 (*b*) Archibald Liversidge, M.A., LL.D., F.R.S. (Christ's College, Cambridge), Dean of the Faculty of Science.
Demonstrator—1892—James A. Schofield, A.R.S.M., F.C.S.
Junior Demonstrator—1898—Charles Walker.

CLINICAL MEDICINE—Lecturer—1889—R. Scot-Skirving, M.B., Ch.M. (Edin.)

CLINICAL SURGERY—Lecturers—1895—Charles P. B. Clubbe, M.R.C.S., L.R.C.P.—1897—John F. McAllister, M.D., B.S. (Melb.)

(*a*) M.B., Ch.M., Honours 1883. Late Demonstrator of Anatomy, University of Edinburgh.
(*b*) Associate of the Royal School of Mines, London; late University Demonstrator of Chemistry, Cambridge.

ENGINEERING—Challis Professor—1884 (*c*) William H. Warren, Wh. Sc., M. Inst. C.E.

P. N. Russell Assistant Lecturer in Mechanical Engineering and Drawing—(*d*) S. Henry Barraclough, B.E. (Sydney), M.M.E. (Cornell), Assoc. M. Inst. C.E.

GEOLOGY AND PHYSICAL GEOGRAPHY—Professor—1891—(*e*) T. W. Edgeworth David, B.A. (New College, Oxford).

Demonstrator—1898—W. G. Woolnough, B.Sc.

WILLIAM HILTON HOVELL LECTURER IN GEOLOGY AND PHYSICAL GEOGRAPHY—T. W. Edgeworth David, B.A. (New College, Oxford)

GREEK—Professor—1885—(*f*) Walter Scott, M.A. (Merton College, Oxford), Dean of the Faculty of Arts.

HISTORY—Challis Professor—1891—G. Arnold Wood, M.A. (Balliol College, Oxford)

LATIN—Professor—1891—Thomas Butler, B.A. (Sydney)
Assistant Lecturer—1891, Frederick Lloyd, B.A., LL.B.

LAW—Challis Professor—1890—Pitt Cobbett, M.A., D.C.L. (University College, Oxford), Dean of the Faculty of Law.
Acting Professor for Lent and Trinity Terms—1898—Professor Jethro Brown, M.A., LL.D.

EQUITY, PROBATE, BANKRUPTCY AND COMPANY LAW—Challis Lecturer—1890—G. E. Rich, M.A.

LAW OF PROCEDURE, EVIDENCE AND PLEADING—Challis Lecturer—1890—C. A. Coghlan, M.A., LL.D.

LAW OF STATUS, CIVIL OBLIGATIONS AND CRIMES—Challis Lecturer—1890—F. Leverrier, B.A., B.Sc.

LOGIC AND MENTAL PHILOSOPHY—Challis Professor—1890—(*g*) Francis Anderson, M.A. (Glasgow).

MATERIA MEDICA AND THERAPEUTICS—Lecturer—1883—Thomas Dixson, M.B., Ch.M. (Edin.)

(*c*) Member Inst. Civil Engineers, London; Member of the American Society of Civil Engineers; Whitworth Scholar; Society of Arts Technological Scholar.
(*d*) Late Science Research Scholar of Her Majesty's Commissioners of the Exhibition of 1851.
(*e*) Late Scholar of New College, Oxford, and late member of the Geological Survey of New South Wales.
(*f*) Late Fellow of Merton College, Oxford.
(*g*) Late Clarke Philosophical Fellow, University of Glasgow.

MATHEMATICS—Professor—1877—(*h*) Theodore T. Gurney, M.A. (St. John's College, Cambridge)

Assistant Lecturers—1886—A. Newham, B.A. (St. John's College, Cambridge), Evening Lecturer. 1887—E. M. Moors, M.A., F.I.A.

MEDICAL JURISPRUDENCE AND PUBLIC HEALTH—Lecturer—1883—W. H. Goode, M.A., M.D., Ch.M. (Dub.)

MEDICAL TUTOR—1887—E. J. Jenkins, M.A., M.D. (Oxon.).

METALLURGY—P. N. Russell Lecturer—1898—James Taylor, B.Sc., A.R.S.M.

MIDWIFERY—Lecturer—1897—James Graham, M.D., Ch.M. (Edin.).

DISEASES OF WOMEN—1897—Joseph Foreman, M.R.C.S.

MINING—P. N. Russell Lecturer—1892—Edward F. Pittman, A.R.S.M.

MODERN LITERATURE—Challis Professor—1887—(*i*) Mungo W. MacCallum, M.A. (Glasgow).

Assistant Lecturers—French and German—1889—(*j*) Emil J. Trechmann, M.A. (Oxon.), Ph.D. (Heidelberg). English—1894—Ernest R. Holme, B.A.

OPHTHALMIC MEDICINE AND SURGERY—Lecturer—1889—(*k*) F. Antill Pockley, M.B., Ch.M. (Edin.)

PATHOLOGY—Lecturer—1883—(*l*) W. Camac Wilkinson, B.A. (Syd.), M.D. (Lond.), M.R.C.P. (Lond.)

PHYSICS—Professor—1886—(*m*) Richard Threlfall, M.A. (Caius College, Cambridge).

Demonstrator—1890—James A. Pollock, B.Sc. (Sydney).

PHYSIOLOGY—Professor—1883—(*n*) T. P. Anderson Stuart, M.D., Ch.M. (Edin.), Dean of the Faculty of Medicine.

Demonstrator—1898—Herbert Hawker.

PRINCIPLES AND PRACTICE OF MEDICINE—Lecturer—1883—James C. Cox, M.D. (Edin.), F.R.C.S. (Eng.)

PRINCIPLES AND PRACTICE OF SURGERY—Lecturer—1890—Alexander MacCormick, M.D. (Edin.)

(*h*) Late Scholar and Fellow of St. John's College, Cambridge, and Bell University Scholar.
(*i*) Late Professor of English Literature in University College, Aberystwyth, Wales; late Luke Fellow, University of Glasgow.
(*j*) Late Lecturer in Modern Languages at the University College of North Wales, Bangor.
(*k*) M.B., Ch.M., First Class Honours, University Medalist; Scholar and Prizeman, Edin., 1884.
(*l*) M.B. First Class Honours Medicine, University Scholarship and Gold Medal.
(*m*) Late Demonstrator in Physics, Cavendish Laboratory, Cambridge.
(*n*) M.B., Ch.M., First Class Honours, Ettles Scholar, 1880; M.D., Thesis Gold Medal 1882, Edin.; late Assistant to Professor of Physiology, Edinburgh.

PSYCHOLOGICAL MEDICINE—Lecturer—1889—Chisholm Ross, M.D. (Syd.)

SURGICAL TUTOR—1898—Henry V. Critchley Hinder, M.B., Ch.M.

SURVEYING—P. N. Russell Lecturer—1890—George H. Knibbs, L.S., F.R.A.S.

TUTOR TO THE WOMEN STUDENTS—1892—Jane F. Russell, M.A. (Syd.)

CURATORS OF MUSEUMS.

MUSEUM OF NORMAL AND MORBID ANATOMY—Sydney Jamieson, B.A., M.B., Ch.M.

MACLEAY MUSEUM OF NATURAL HISTORY—George Masters.

EXAMINERS FOR 1897-98.

EXAMINERS IN ARTS.

The Professors.	The Lecturers.

EXAMINERS IN LAW.

The Professor.	A. J. Kelynack, B.A., LL.B.
The Lecturers.	Harold M. Cockshott.

EXAMINERS IN MEDICINE.

The Professors.
The Lecturers.
Fourness Barrington, F.R.C.S. (Eng.), M.B., Ch.M. (Edin.)
William Chisholm, B.A., M.D. (Lond.)
Thomas Fiaschi, M.D. (Pisa.)
P. Sydney Jones, M.D. (Lond.)
Stanhope H. McCulloch, M.B., Ch.M. (Edin.)
The Hon. Charles K. Mackellar, M.B., Ch.M. (Glas.)
The Hon. H. N. MacLaurin, M.A., M.D. (Edin.), LL.D.
W. Odillo Maher, M.D., Ch.M. (Q.U.I.), M.R.C.S. (Eng.)
F. Norton Manning, M.D. (St. And.)
F. Milford, M.D. (Heidelberg.)
John Morton, M.B., Ch.M.
A. Watson Munro, M.B., Ch.M. (Edin.)
G. E. Rennie, B.A., M.D., (Lond.)
The Hon. Sir Arthur Renwick, B.A., M.D. (Edin.), Kt.
Sir Alfred Roberts, M.R.C.S. (Eng.)
E. C. Stirling, M.D. (Cantab.), F.R.C.S. (Eng.), F.R.S.
J. Ashburton Thompson, M.D.

EXAMINERS IN SCIENCE.

The Professors.
The Lecturers.
Professor W. C. Kernot, M.A., C.E.

REGISTRAR AND LIBRARIAN, 1882—H. E. Barff, M.A.

CHIEF CLERK AND ACCOUNTANT, 1887—Robert A. Dallen.

ASSISTANT LIBRARIAN, 1888—Caleb Hardy, B.A.

SECRETARY OF THE UNIVERSITY EXTENSION BOARD—A. W. Jose.

CLERK, 1887—William S. Mayer.

JUNIOR ASSISTANT IN THE LIBRARY—W. J. Binns.

ESQUIRE BEDELL, 1897—John Mitchell Purves, M.A.

UNIVERSITY SOLICITOR, 1886—Hon. James Norton, LL.D., M.L.C.

AUDITOR, 1892—J. C. Dibbs.

YEOMAN BEDELL—S. Craddock.

OVERSEER OF THE UNIVERSITY PARK AND GROUNDS—Henry Goodhew.

MEMBERS OF THE UNIVERSITY.

MEMBERS OF CONVOCATION.

Abbott, George H., B.A., 1887, M.B., Ch.M.
Abbott, Henry Palmer, B.A., 1893
Abbott, Thos. K., B.A., 1888
Affleck, Ada C., M.B., Ch. M.
Allan, Edith Jeannie, B.A., 1895
Allen, Arthur Wigram, B.A., 1883§
Allen, George Boyce, B.A., 1877
Allen, Reginald C., B.A., 1879
Amess, William, B.A., 1883
Anderson (*née* Amos), Jeanie Cairns, B.A., 1890
Amphlett, Edward Albin, B.E., 1889
Anderson, Francis, M.A.§¶
Anderson, Henry C. L., M.A.†
Anderson, Hugh Miller, B.A., 1890
Anderson, William A. S., B.A., 1892
Andrews, Ernest Clayton, B.A., 1894
Andrews, William, M.B., 1887§
Anstey, George Webb, B.A., 1893
Armstrong, Isabella, B.A., 1895
Armstrong, Laurens F. M., B.A., 1884, LL.B.
Armstrong, Tancred de Carteret, B.A., 1891
Armstrong, William G., B.A., 1884, M.B., Ch.M.
Arnott, Robert Fleming, B.E., 1895
Aspinall, Arthur Ashworth, B.A., 1889
Atkins (*née* Kennedy), Annie Augusta, B.A., 1893
Atkins, William L., B.A., 1893
Ayres, Charles, B.A., 1882
Backhouse, Alfred P., M.A.†
Bancroft, Peter, M.B., Ch.M.
Barber, Richard, M.A.
Barbour, George Pitty, M.A.
Barff, Henry E., M.A.*
Barker, Thomas Chas., B.A., 1886
Barker, Henry Auriol, B.A., 1881§
Barlee, Frederick R., M.A.
Barnes, Edmund H., M.B., Ch.M.
Barnet, Donald McKay, B.A., 1890
Barraclough, Francis Egerton, B.A., 1895
Barraclough, Samuel H., B.E., 1892¶
Barret, James, M.D.
Barrington, Fourness, F.R.C.S., M.B., Ch.M.‡
Barton, Edmund, M.A.†
Barton, H. Francis, M.A.
Barry, Alfred, LL.D.§
Barton, Joanna, B.A., 1893
Bates (*née* Abigail), Eliza L., B.A., 1893
Bavin, Thos. Rainsford, B.A., 1894
Baylis, Harold M., B.A., 1883
Beardsmore, Emily Maud, B.A., 1894
Beardsmore, Robert Henry, B.A., 1895
Beegling, Daniel, B.A., 1885
Beehag, Samuel Alfred, B.A., 1886
Belgrave, T. B., M.D.§
Bennet, Francis Alexander, M.D.§
Bennett, Agnes Elizabeth L., B.Sc., 1894
Bennetts, Harold Graves, M.B., Ch.M.
Berne, Percy Witton, B.A., 1883
Binney, Ed. Harold, M.B., Ch.M.
Biffin, Harriett E., M.B., Ch.M.
Birch, William John, B.E., 1891
Blacket, Arthur R., B.A., 1872
Blacket, Cuthbert, B.A., 1891
Blair, John, M.D.
Blatchford, Torrington, B.A., 1894
Blumer, Charles, B A., 1894
Blumer, George Alfred, M.A.
Board, Peter, M.A.
Bode, Arnold G. H., B.A., 1888
Boelke (*née* Robinson), Grace Fairley, M.B., Ch.M.
Boelke, Paul, M.B., Ch.M.
Böhrsmann, Rudolph H., M.B., Ch.M.

* Superior Officer. † Fellow of the Senate. ¶ Public Teacher.
§ Admitted *ad eundem gradum*. ‡ Examiner.

Booth, Mary, B.A., 1890
Bowden, John Ebenezer, M.A.
Bowker, Richard Rythor S., M.D.§
Bowmaker, Ruth, M.A.
Bowman, Alexander, B.A., 1859
Bowman, Alister S., B.A., 1878
Bowman, Andrew, M.A.
Bowman, Archer, B.E., 1889
Bowman, Arthur, B.A., 1880
Bowman, Edward, M.A.
Bowman, Ernest M., B.A., 1880
Boyce, Francis Stewart, B.A., 1893
Bradfield, John Job Crew, M.E.
Brearley, Joseph Henry Draper, B.Sc., 1894, B.E.
Brennan, Christopher J., M.A.
Brennan, Francis P., M.A.
Brennan, Sarah O., M.A., B.Sc.
Brereton, John Le Gay, B.A., 1894
Brierley, Frank Nunan, M.A.
Britten, Herbert E., B.A., 1888
Britton, Theodosia Ada, B.A., 1891
Brodie, Isabella Esther, B.A., 1895
Broughton, Alfred, M.A.
Brown, Alfred, B.A., 1866
Brown, Mary E., B.A., 1885
Brown, Sophia, B.A., 1894
Brown, William Vernon, B.A., 1894
Browne, Wm. C., B.A., 1864
Bruce, Mary H., B.A., 1887
Buchanan, Chas. Arthur, B.A., 1889
Buckland, Thos., B.A., 1878
Bucknell, D'Arcy H., M.A.
Bucknell, Louis Geoffrey, B.E., 1891
Bundock, Charles W., B.A., 1878
Bundock, Francis F., B.A., 1877
Burdekin, Sydney, B.A., 1860
Burfitt, Walter F., B.A., 1894
Butler, Spencer Joseph St. Clair, B.A., 1893
Butler, Thomas, B.A., 1876¶†
Butler, Francis J., B.A., 1882
Byrne, James Kevin, B.A., 1894
Byrne, William Edmund, B.A., 1892
Cadman, Enoch William, M.A.
Cahill, Annie Lucille, B.A., 1894
Cakebread, Wm. Jowers, B.A., 1894
Callachor, Hugh B., B.A., 1863
Cameron, Archibald Peter, B.A., 1894
Campbell, Allan, B.A., 1874
Campbell, Charles Robert, B.A., 1893
Campbell, Edward, M.A.
Campbell, George P., B.A., 1885
Campbell, Gerald R., M.A.
Campbell, Joseph, M.A.
Canaway, Arthur P., B.A., 1894§
Cape, Alfred John, M.A.
Cargill, John Sydney, B.A., 1889
Carlile-Thomas, Julia, M.B., Ch.M.
Carlisle, W. W., B.A., 1878
Carlos, Joseph, B.A., 1893§
Carruthers, Joseph H., M.A.
Challands, Fred., M.B., Ch.M.
Chapman, Alfred Ernest, B.A., 1893
Carvosso, Albert B., B.A., 1884
Chisholm, Wm., B.A., 1875, M.D.§‡
Clarke, Francis W., B.A., 1884
Closs, Wm. John Leech, B.A., 1890
Clubbe, Chas. P. B., M.R.C.S., L.R.C.P.¶
Clune, Michael J., M.A.
Cobbett, Pitt, M.A., D.C.L.¶†
Cocks (*née* Proctor), Lizzie, M.A.
Cocks, Nicholas John, M.A.
Cockshott, Harold M. ‡
Coffey, Francis Louis Verhulst, B.A., 1894
Coghlan, Charles A., M.A., LL.D.¶
Coghlan, Iza Frances Josephine, M.B., Ch.M.
Cohen, John J., M.A.
Collingwood, David, M.D.§
Combes, Jane Frances, B.A., 1895
Conlon, William Aloysius, B.A., 1891
Connellan, John, B.A., 1892
Connolly, John, B.A., 1894
Connor, Thomas John, B.A., 1895
Cooke, Clarence Hudson, B.A., 1892
Cooley, Percy Glover, M.B., Ch.M.
Cooper, David John, M.A.
Cooper, Pope Alexander, M.A.
Copland, Frank Fawcett, B.A., 1894
Corbett, Wm. F., B.A., 1883
Corbin, Albert George, B.Sc., 1895
Corlette, Jas. Christian, M.A.
Corlette, Cyril E., M.D., Ch.M.
Cormack, Alex. John, M.A.

† Fellow of the Senate. ‡ Examiner. ¶ Public Teacher.
§ Admitted *ad eundem gradum*.

Cosh, James, M.A.§
Cosh, James, jun., B.A., 1891
Cosh, John Inglis Clark, M.B., Ch.M.
Cowan, David, B.A., 1894
Cowlishaw, Wm. Patten, M.A.
Cowper, Sedgwick Spelman, M.A.
Cox, Frederick Henry, M.B., 1895
Cox, Harold, B.A., 1889
Cox, James C., M.D.¶
Coyle, William Thomas, B.A., 1891
Craig, Alex. Donald, B.A., 1893, B.E.
Craig, Charles, B.A., 1892
Craig, Robert Gordon, M.B., Ch.M.
Crane, Charles, B.A., 1882
Crane, John T., B.Sc., 1887
Crawley, Aubrey Joseph Clarence, M.B., Ch.M.
Creagh, Albert J., B.A., 1889
Creagh, William John, B.A., 1892
Cribb, John Geo., M.A.
Cripps, Esther Fischer, B.A., 1891
Crocker, Herbert D., M.A.
Crompton, William, M.A.
Cullen, Wm. P., M.A., LL.D.†
Cullinane, John Aloysius, B.A., 1895
Curlewis, Herbert Raine, B.A., 1890
Curnow, William Leslie, B.A., 1890
Curtis, William C., M.A.
Daley, Frank H., B.A., 1889
Dalmas, Lizzie, B.A., 1895
Dalton, Gerald T. A., M.A.
Daly, May Edith, B.A., 1895
D'Arcy-Irvine, Malcolm Mervyn, B.A., 1889
Dare, Henry H., M.E.
Dargin, Sydney, B.A., 1871
D'Arcy, George Synnott, B.A., 1895
D'Arcy, John Synnott, B.A., 1890
Dash, Ebenezer, B.A., 1894
David, T. W. Edgeworth, B.A.¶
Davidson, Leslie G., M.B., Ch.M.
Davies, Arthur Bernard, B.A., 1894
Davies, Wyndham John E., B.A., 1893
Davis, Henry, B.A., 1890
Dawson, Arthur F., M.A.
Deane, Hy., M.A.§
Deane, William Smith, M.A.
Delohery, Cornelius, M.A.
Dennis, James, M.A.
Dey, Robert, M.B., Ch.M.
Dick, James Adam, B.A., 1886
Dick, Robert, M.B., Ch.M.
Dick, William Thomas, B.A., 1890
Dimond, Margaret Cecilia, B.A., 1893
Dixon, Graham Patrick, M.B., Ch.M.
Dixon, James Thomson, B.E, 1895
Dixon, Herbert Hutchinson, B.A., 1894
Dixson, Thos., M.B., Ch.M.¶
Doak, Frank Wiseman, B.A., 1891
Doak, Walter James, B.E., 1895
Docker, Ernest B., M.A.
Doig, Alexander John, B.A., 1895
Donovan, John J., LL.D.
Dove, William Richard Norton, B.A., 1893
Doust, Edith Lucy, M.A.
Dowe (*née* Molster), Eliza, B.A., 1893
Dowe, Philip William, B.A., 1893
Doyle, John, B.A., 1891§
Drummond, Shafto L., B.A., 1893
Dudley, Joseph T., B.A., 1885
Dunlop, John W., B.A., 1895
Dunlop, Norman John, B.A., B.Sc., M.B., Ch.M.
Dunne, John D., B.A., 1873
Dunstan, Ephraim, M.A.
Eames, Jane, B.A., 1895
Edmunds, John Michael, B.A., 1892
Edmunds, Walter, M.A., LL.B.
Edwards, David Sutherland, B.A., 1894
Edwards, Edwd. Samuel, M.A.
Edwards, J. Ross, M.A.
Edwards, John, B.A., 1891
Elder, Francis R., B.A., 1877
Elkin, Jonathan Bevan, B.A., 1895
Elliott, Millicent V., B.A., 1895
Ellis, Ethel, B.A., 1894
Ellis, Henry A., M.B., 1887§
Ellis, Lawrence Edward, M.B., Ch.M.
Ellis, Mary, B.A., 1894
Elphinstone, James, B.A., 1881
Emanuel, Nathaniel, B.A., 1867

† Fellow of the Senate. ¶ Public Teacher.
§ Admitted *ad eundem gradum*.

England, Theo., B.A., 1885
England, Thos. H., B.A., 1885
Enright, Walter John, B.A., 1893
Evans, Ada Emily, B.A., 1895
Faithfull, Geo. Ernest, M.A.
Faithfull, Henry Montague, M.A.
Faithfull, Wm. Percy, M.A.
Farrell, Robert M., M.B., Ch.M.
Feez, Arthur H., B.A., 1880
Ferguson, David, B.A., 1886
Fiaschi, Thomas, M.D.‡
Fidler, Carleton B., B.A., 1888
Finn, William George, B.A., 1895
Finney, Charlotte, B.A., 1895
Finney, Joseph, B.A., 1894
Fisher, Donnelly, M.A.
Fitz, Norman, B.E., 1888
Fitzgerald, Edmund, B.A., 1866
Fitzgerald, John Thomas, B.A., 1890
Fitzgerald, Robert Marsden, M.A.
Fitzhardinge, Grantley Hyde, M.A.
Fitzpatrick, Thomas John Augustine, B.A., 1893
Flannery, George Ernest, B.A., 1892, LL.B.
Flashman, James Froude, M.D., Ch.M., B.A., B.Sc.
Fleming, Howard G. T., B.A., 1894
Fletcher, Archibald William, B.A., 1886, B.Sc.
Fletcher, Chas. R., B.A., 1881
Fletcher, Frank E., M.A.
Fletcher, Joseph J., M.A.
Fletcher, Katherine Elizabeth, B.A., 1895
Fletcher, Michael Scott, B.A., 1893
Flint, Chas. A., M.A.
Flynn, John E., M.A.
Flynn, Joseph Alban, M.A.
Flynn, William J., B.A., 1884
Forde, James, B.A., 1891, B.Sc.
Fordyce, Henry St. C., M.B., Ch.M.
Foreman, Joseph, M.R.C.S.¶
Forster, Charles E., B.A., 1876
Fosbery, Eustace E., M.A.
Fosbery, Vincent F., B.A., 1886
Fox, Harold S., B.A., 1885
Fraser, Robert W., B.A., 1885
Francis, Henry Ralph, M.A.
Freehill, Francis B., M.A.
Freshney, Reg., M.B., Ch.M.
Fuller, George W., M.A.
Fullerton, Alexander Y., B.A., 1885
Gardiner, Andrew, M.A.§
Garland, James Robert, M.A.
Garnsey, Arthur Henry, M.A.
Garnsey, Edward R., B.A., 1885
Garrick, Joseph Hector, M.A.
Garran, Andrew, LL.D.
Garran, Robert R., B.A., 1888
Geddes, Samuel, B.A., 1885
George, John, B.A., 1893
Gerber, Edward W. T., B.A., 1892; LL.B.
Gibbes, Alfred George, M.A.
Gibbes, William C. V., B.A., 1868
Gill, Alfred Chalmers, B.A., 1893
Gillies, James, B.A., 1889
Goldsmid, Albert, M.B., 1895
Goode, Wm. H., M.A., M.D.¶
Gordon, George Acheson, B.A., 1895
Gorman, John R., B.A., 1866
Graham, James, M.B., 1886§¶
Gray, Arthur St. J., M.A.§
Green, Arthur V., LL.D.
Green, Terence Albert, M.B., 1893
Greenlees, Gavin, B.A., 1895
Greenway, Alfred R., B.A., 1870
Griffith, Alfred John, M.A.
Griffith, James Shaw, B.A., 1895
Griffith, Sir Samuel Walker, M.A.
Gurney, Theodore T., M.A.¶
Hadley, Alfred Edward, B.A., 1893
Hall, Alfred Ernest, B.A., 1893
Hall, Edwin Cuthbert, M.B., Ch.M.
Hall, William Hessel, M.A.
Hall, George R. P., B.Sc., M.B., Ch.M.
Halliday, George C., B.A., 1884
Halliday, John Charles W., M.B., Ch.M.
Halloran, Aubrey, B.A., 1892; LL.B.
Halloran, Ida, B.A., 1893
Halloran (*née* Guérin), Bella, M.A.§
Hammond, Alfred de Lisle, M.A.
Handcock, Charles Lancelot, M.B., Ch.M.

‡ Examiner. ¶ Public Teacher. § Admitted *ad eundem gradum*.

Hardy, Caleb, B.A., 1893
Hargraves, Edward John, B.A., 1859
Harker, Constance Elizabeth, B.A., 1895
Harriott, Charles Warre, B.A., 1889
Harriott, Georgina Jane, B.A., 1894
Harris, Edward, M.A.§
Harris, George, B.A., 1891, LL.B.
Harris, John, B.A., 1892
Harris, Lawrence Herschell Levi, M.B., Ch.M.
Harris, Matthew, B.A., 1863
Harris, William Henry, M.B., Ch.M.
Harvey, Revina, B.A., 1895
Harvey, William George, B.A., 1894
Haswell, William A., M.A., D.Sc.¶
Hawker, Herbert ¶
Hayes, David John, B.A., 1894
Hayley, Percy Reginald, B.E., 1893
Healy, Patrick J., M.A.
Helsham, Chas. Howard, B.A., 1892
Henderson, G. Cockburn, B.A., 1893
Henderson, John Niven, M.B., Ch.M.
Henderson, Robert Newburn, B.A., 1895
Henry, Arthur, M.B., Ch.M.
Henry, Arthur G., M.B., Ch.M.
Hester, Jeaffreson W., M.B., Ch.M.
Higgins, Frederick Charles, M.B., Ch.M.
Higgins, Michael A., B.A., 1879
Higgins, Percy Reginald, B.A., 1893
Hill, Evelyn, M., B.A., 1895
Hill, James P., F.L.S.¶
Hill, Thomas, M.A.
Hilliard, Arthur Vaughan, B.A., 1890
Hills, Henry H., M.A.
Hinder, Henry V. C., M.B., Ch.M.¶
Hinder, Robert John, B.A., 1889
Hobbs, John William, B.A., 1894
Hodge, Ernest Arthur, B.A., 1895
Hodgkins, Amy Alice, B.A., 1895.
Hodgson, Evelyn G., M.A.§
Hogg, James E., M.A.§
Hogg, Kate Emily, B.A., 1894
Hollis, Leslie Thomas, M.B., Ch.M.
Holme, Ernest Rudolph, B.A., 1891¶
Holme, John Barton, B.A., 1893
Holmes, William Fredk., B.A., 1894
Holt, Arthur Christian, B.A., 1895
Hood, Dannina, B.A., 1894
Hopkins, Francis Irvine, B.A., 1893
Hopman, John Henry, B.A., 1894
Horniman, Alex., B.A., 1866
Houison, Andrew, B.A., 1869
Houison, J., B.A., M.D.
Howard, John Bruton, B.A., 1895
Huggart, Alfred Theodore, B.A., 1892
Hughes, Charles Michael, B.A., 1886
Hughes, James O'Donoghue A., B.A., 1894
Hughes, Michael O'Gorman, B.A., 1890, B.Sc., M.B.
Hungerford, Hedley Heber, B.A., 1886
Hunt, Claude L. W., M.B., Ch.M.
Hunt, Digby St. Clair W., B.A., 1895
Hunt, Edward, B.A., 1859
Hunt, Fanny E., B.Sc., 1888
Hunt, Harold W. G., B.A., 1888
Hunter, John, M.A.
Hunter, Mary Alison Miles, B.A., 1895
Hurst, George, M.A.
Hynes, Sarah, B.A., 1891
Iceton, Edward Arthur, M.A.
Iceton, Thomas Henry, M.A.
Innes (*née* Lichtscheindl), Rosa, B.A., 1894
Jackson, Clements F. V., B.E., 1895
Jackson, Henry Latimer, M.A.§
Jackson, John Wm., M.B., Ch.M.
Jackson, Robert, M.A.
Jacobs, James, B.A., 1894
James, Arthur Henry, B.A., 1893
James, Augustus G. F., B.A., 1888
James, George Alfred, B.A., 1893
James, William Edwin, B.A., 1894
Jamieson, George Wellington, B.A., 1893
Jamieson, Sydney, B.A., 1884
Jefferis, James, LL.D.
Jenkins, Charles J., B.A., 1887
Jenkins, Charles Warren B., B.E., 1895
Jenkins, E. J., M.D.§¶
Johnson, James Wm., M.A.

§ Admitted *ad eundem gradum*. ¶ Public Teacher.

Johnson, Martin Luther, B.A., 1893
Johnston, Alex. W., M.A.
Johnston, John, B.A., 1887
Johnston, Stephen Jason, B.A., 1894
Johnstone, Henry T., B.A., 1885
Jones, Albert E., LL.B., 1889§
Jones, Ernest Trevor, B.A., 1884
Jones, G. E. Russell, M.A.
Jones, P. Sydney, M.D.†‡
Jones, Rees Rutland, M.A.
Jones, Richard Theophilus, M.D.
Jones, Thomas, B.A., 1895
Jones, Thomas E., B.A., 1884
Joseph, Horace B., B.A., 1887
Kater, Norman William, M.B., Ch.M.
Kater, Henry Herman, B.A., 1894
Kay, Robert, M.A.
Kellett, Frederick, M.A.
Kelly, Thomas, B.A., 1890
Kelly, Patrick J., M.B., 1889
Kelynack, Arthur James, B.A., 1889, LL.B.‡
Kelynack, Harold Leslie, B.A., 1893
Kemmis, William Henry, B.A., 1890
Kemp, Richard Edgar, M.A.
Kendall, Frank Louis, B.A., 1893
Kendall, Theodore M., B.A., 1876
Kenna, Patrick J., B.A., 1882
Kennedy, Emily Clara, B.A., 1895
Kennedy, Philip, B.A., 1895
Kent, Fredk. Deacon, M.A.
Kent, Harry Chambers, M.A.
Kernot, Professor, M.A., C.E. ‡
Kershaw, Joseph Cuthbert, B.A., 1894
Kidston, Robert Matthew, B.A., 1892
Kilgour, Alexander James, B.A., 1894
King, Cecil J., M.A.
King, Copland, M.A.
King, Frederick Hart, M.A.
King, George C., B.A., 1887
King, (*née* Russell), Lillian, B.A., 1891
King, R. W., B.A., 1884§
King, Walter U. S., M.A.
Kinross, Rev. John, D.D., B.A., 1869‖
Kinross, Robert Menzies, B.A., 1889, M.B., Ch.M.
Knaggs, Saml. Thos., M.D.§
Knox, Adrian, LL.B., 1895
Knox, Edward William†
Knibbs, George H.¶
Knight, Arthur, B.A., 1894
Lamrock, Arthur Stanton, B.A., 1891
Lander, William H., M.A.
Lane, Frederick George, B.A., 1895
Lang, John Gavin, M.A.
Langton, Frederick W., B.A., 1887
Lasker, Samuel, B.A., 1892
Lawes, Charles Herbert Essery, M.B., Ch.M.
Layton, John Edward, B.A., 1893
Leahy, John Patrick Daunt, B.A., 1890, M.B., Ch.M.
Ledger, William Henry, B.E., 1893
Lee, Herbert Ernest, B.A., 1886
Lee, William, M.A.
Legge, J. Gordon, M.A., LL.B.
Leibius, G. Hugo, B.A., 1888
Lenthall, Ellen Melicent, B.A., 1893
Leverrier, Frank, B.A., 1884, B.Sc.¶
Levy, Daniel, B.A., 1893
Lewis, Henry Clyde, B.A., 1893
Liddell, Andrew Innes, M.A.
Lingen, John Taylor, M.A.§
Linsley, Wm. H., B.A., 1880
Lipscomb, Thomas Walter, M.B., Ch.M.
Lister, Henry, M.B., 1892
Litchfield, William Frederick, M.B., 1893
Littlejohn, Edward S., B.A., 1887
Liversidge, Archibald, M.A., LL.D., F.R.S.†¶
Lloyd, Frederick, M.D.
Lloyd, Frederick, B.A., 1890, LL.B.¶
Lloyd, Thomas, B.A., 1878
Lomer, Carrie, M.A.
Long, George Edward, M.A.
Loxton, Edward James, M.A
Loyden, James, B.A., 1894
Luker, Donald, M.B., Ch.M.
Lukin, Gresley W. H., M.A.

† Fellow of the Senate. Head of College. ‡ Examiner. ¶ Public Teacher.
§ Admitted *ad eundem gradum*.

Lyden, Michael J., M.D.§
Lynch, Michael D., B.A., 1870
Lynch, William, B.A., 1863
Lyon, Pearson, B.A., 1890
McAllister, John F., M.D.¶
Macansh, Andrew W., B.A., 1885
MacCallum, Mungo W., M.A.¶
Macarthy, Herbert T. S., B.A., 1860
McCarthy, Arthur W., B.A., 1881
McClelland, Hugh, B.A., 1881
McClelland, Walter, Cecil, B.Sc., M.B., Ch.M.
McCook, Adam Stuart, B.A., 1895
MacCormick, Alex., M.D.§¶
McCoy, William Taylor, B.A., 1894
MacCreadie, John Laing M., M.B., Ch.M.
McCulloch, Percy V., B.A., 1881
McCulloch, Stanhope H., M.B., Ch.M.‡
McDermott, Vesian B., B.A., 1887
McDonagh, John M., B.A., 1879
McDonald, Fanny Elizabeth, B.A., 1895
MacDonald, James M., M.A.
MacDonald, Louisa, M.A.§‖
McDonnell, Æneas J., M.D., Ch.M.
McDonnell, Randal C. W., B.A., 1888
McEvilly, Augustus, B.A., 1886
McEvilly, Ulric, B.A., 1883
McGlynn, Rebecca Mary, B.A., 1894
McGuinn, Denis, B.A., 1884
McIntosh, Harold, B.A., 1889
McIntyre, William Donald, B.A., 1890
McIntyre, Aug. T., B.A., 1879
McIntyre, Duncan A., B.A., 1888
Mack, Sidney, B.A., 1890
McKay, William J., B.Sc., 1887, M.B., Ch.M.
Mackellar, Hon. Chas. K., M.D.‡
McKinnon, Roger R. S., M.B., Ch.M.
Maclardy, J. D. S., M.A.
McLaren, John Gilbert, B.A., 1895
McLaughlin, Daniel, B.A., 1890
MacLaurin, Hon. Henry Normand M.A., M.D., LL.D.†‡
MacLean, Fredk. S., B.A., 1887
McLeod, James, B.A., 1879
McManamey, James Frazer, B.A., 1881
McManamey, John Frazer, B.A., 1889
McManamey, William Frazer, B.A, 1892
McMaster, Donald Æneas D., B.A., 1894
McMullen, Frank, B.A., 1894
McTaggart, Norman J. C., B.E., 1892
McNeil, Andrew, B.A., 1889
McNevin, Arthur Joseph, B.A, 1895
McNevin, Thomas Butler, B.A., 1893
MacPherson, John, M.A., B.Sc., M.B., Ch.M.
MacPherson, Peter, B.A., 1889
McMurray, Wahab, M.D.§
Maher, Charles H., B.A., 1877
Maher, Matthew E., B.A., 1867
Maher, Thomas Francis, B.A., 1893
Maher, W. Odillo, M.D.§‡
Main, John, B.A., 1892
Maitland, Herbert Lethington, M.B., Ch.M.
Mallarkey, Ethel May, B.A., 1895
Maloney, Andrew William, B.A., 1893
Mann, William J. G., M.A.
Mannell, Francis Worthington, B.A., 1892
Manning, Frederick Norton, M.D.‡
Manning, Charles James M.A.
Manning, James N., M.A., LL.D.
Manning, Reg. K., B.A., 1887
Manning, William Alexander, M.A.
Manning, W. Hubert, M.A.
Manning, William Ernest, B.A., 1892
Marden, John, LL.D.
Marks, Hyam, B.A., 1892
Marks, Florence, B.A., 1893
Marks, Leah, B.A., 1893
Marks, Percy J., B.A., 1887
Marrack, Jno. Rea M., M.A.

* Fellow of the Senate. ‡ Examiner. ¶ Public Teacher.
§ Admitted *ad eundem gradum*.

Martin (*née* Johnston), Ella Russell, B.A., 1890
Martin, Lewis Ormsby, B.A., 1893
Martyn, Sydney Charles, B.A., 1889
Massie, Richard de Winton, B.A. 1886
Mate, William H., B.A., 1864
Mathison, Walter, B.A., 1880
Maxwell, Henry Francis, B.A., 1895
Maynard, Ethel Margaret, B.A., 1894
Mayne, Wm. M., M.A.
Mayne, J. O'Neill, B.A., 1884
Maze, William A. A., B.A, 1892
Meagher, Louis Felix, B.A., 1889
Meares, Hercules, B.A., 1893; LL.B.
Meares, Matilda, M.A.
Meillon, John, M.A., LL.B.
Meillon, Joseph, B.A., 1863
Mell, Cecil Newton, B.A., 1894
Menzies, Guy Dixon, M.B., Ch.M.
Merewether, E. A. M., B.A., 1884, B.E.
Merewether, Hugh H. M., B.A., 1894, LL.D.
Merewether, Walton L., M.A.
Merewether, William D. M., B.A., 1895, LL.B.
Metcalfe, George, M.A.
Miles, James Albert, B.A., 1894
Milford, Frederick, M.D.§‡
Millard, Alfred C., B.A., 1885
Millard, Godfrey William, M.A.
Millard, Reginald J., M.B., Ch.M.
Miller, Richard J., B.A., 1885
Mills, Arthur E., M.B., Ch.M.¶
Mills, Percy Harcourt, B.A., 1893
Mitchell, David Scott, M.A.
Molineaux, Amy Atherton, B.A., 1891
Moloney, Thos. P., B.A., 1885
Monnington, Alfred, M.A.§
Montague, James H., M.A.
Montgomerie, John, B.A., 1889
Moore, David C., B.A., 1883
Moore, Frank Joseph S., B.A., 1883
Moore, George, M.D.
Moore, John, B.A., 1883
Moore, Samuel, M.A.
Moore, Verner, B.A., 1884
Moore, Walter Albert, B.A., 1894
Moors, E. M., M.A.¶
Morgan, Fredk. A., B.A., 1888
Morgan, Thos. H. D., B.A., 1892
Morrice, John, B.A., 1874
Morris, John James, B.A., 1895
Morris, Robt. N., B.A., LL.D.
Morrish, Francis, B.A., 1882
Mort, H. Wallace, M.A.
Morton, Gavin, M.B., Ch.M.
Morton, John, M.B., Ch.M.‡
Morton, Selby, M.D.
Moulton, James E., B.A, 1892
Mullins, George Lane, M.D.§
Mullins, John Lane, M.A.
Munro, Wm. J., B.A., 1880
Munro, A. Watson, M.B., Ch.M.‡
Murray, Charles Edward Robertson, M.A.
Murray, Donald, M.A.
Murray, George Lathrop, M.B., Ch.M.
Myers, David M., B.A., 1866
Nardin, Ernest Willoughby, B.E., 1894
Nathan, Edw. Alleyne, M.A., LL.B.
Neill, Leopold Edward Flood, B.A., 1886, M.B., Ch.M.
Nelson, Duncan John, B.A., 1895
Nettleship, Edward, B.A., 1895
Newham, Arthur, B.A.¶
Newman, George Hine, B.A., 1887
Newman, Kelsey Illidge, B.A., 1894
Newton, Alice Sarah, M.B., Ch.M.
Newton, Henry, B.A., 1889
Nicholls, William Hunt Ward, B.A., 1891
Noake, Reginald, B.A., 1877
Noble, Edmund Murray, M.A.
Nolan, Herbert Russell, M.B., 1890
Norton, Hon. James, LL.D.*
O'Brien, Agnes Gertrude, B.A., 1895
O'Brien, Francis, M.A.
O'Brien, The Right Rev. Monsignor Jas. J., D.D.‖
O'Brien, Kathleen Moira, B.A., 1894

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* Superior Officer. ‡ Examiner. ¶ Public Teacher.
‖ Head of College. § Admitted *ad eundem gradum.*

O'Brien, Lucius, B.A., 1865
O'Brien, Ormond, B.A., 1876
O'Brien, Patrick Daniel, B.A., 1894
O'Connor, Arthur Charles, M.B., Ch.M.
O'Connor, The Hon. R. E., M.A.†
O'Conor, Broughton B., B.A., 1892, LL.B.
O'Donohue, John P. Markham, B.A., 1895
Oliver, Alexander, M.A.†
Oliver, James, M.A.
Oram, A. Murray, M.D.§
O'Keefe, John A., B.A., 1887
O'Mara, Michael, M.A.
O'Neill, James Bernard, B.A., 1895
O'Reilly, Hubert de Burgh, B.A., 1892, LL.B.
O'Reilly, Walter Wm. Joseph, M.D.§
Pain, Allan Franklyn, B.A., 1894
Pain, A. W., B.A., 1884§
Pain, Ernest Maynard, M.B., Ch.M.
Paine, Bennington Haille, B.A., 1893
Paine, George Henry, B.A., 1894
Parish, Walter G., M.A.
Park, Joseph, M.B., Ch.M.
Parker, William A., B.A., 1892
Paterson, Jas. Stewart, LL.D.
Paton, Arthur T., B.A., 1887
Pattinson, Anthony Walton, B.A., 1894
Peden, John B., B.A., 1892
Perkins, Alfred Edward, M.A., M.B., Ch.M.
Perkins, Joseph A. R., B.A., 1892
Perry, John, M.A.
Perské, Hermann, B.A., 1887
Philp, Richard, M.A.§
Pickburn, James P., B.A., 1892, LL.B.
Piddington, Albert Bathurst, B.A., 1883
Pike, George H., M.A.
Pilcher, Geo. de Vial, B.A., 1859
Pilcher, Chas. E., B.A., 1865
Pincombe, Torrington Hawke, B.A., 1890
Pittman, Edward F., A.R.S.M.¶
Plomley, Francis James, M.A.
Plume, Henry, M.A.§
Pockley, F. Antill, M.B., 1888§¶
Pollock, James Arthur, B.Sc., 1889¶
Poolman, Arthur Edward, B.A., 1883
Pope, Roland J., B.A., 1885
Powell, Theodore, M.A.
Pratt, Frederick V., M.A.
Prentice, Arthur J., B.A., 1892
Pring, Robert Dorlow, M.A.
Pritchard, Alice, B.A., 1895
Pritchard, William Clowes, B.A., 1888
Purcell, Winifred Dalton, B.A., 1895
Purser, Cecil, B.A., M.B., Ch.M.
Purves, John Mitchell, M.A.
Quaife, Frederick Harrison, M.A.
Quaife, William F., B.A., 1879
Quigley, James, B.A., 1890
Ralston, Alexander G., M.A.
Ramsay, James, B.A., 1885
Raves, Helen Alice, B.A., 1894
Read, William Henry, M.B , Ch.M.
Redshaw, George, B.A., 1895
Rennie, Edw. Henry, M.A.
Rennie, George E., B.A., 1882, M.D.‡
Renwick, Hon. Sir Arthur, B.A., 1857, M.D.†‡
Renwick, Herbert John, B.A., 1893
Reynolds, Arthur J. P. G., B.A., 1890
Rich, George E., M.A.¶
Richards, Samuel J., M.B., Ch.M.
Richardson, Charles Noel Derwent, B.A., 1893
Richardson, Hy. A., B.A., 1867
Richardson, Robt., B.A., 1870
Rigg, Thomas, M.A.
Riley, Ernest Arthur, B.A., 1893
Riley, Patrick William, B.A., 1894
Riley, Valentine B., B.A., 1872
Roberts, Sir Alfred, M.R.C.S.‡
Roberts, Jas. W., B.E., 1892
Robertson, Joseph, M.A.
Robinson, Charles H. P., B.A., 1893
Robinson, George Frederick Greenwell, B.A., 1890

† Fellow of the Senate. ¶ Public Teacher. § Admitted *ad eundem gradum*.
‡ Examiner.

Robison, Erskine Hugh, B.Sc., M.B., Ch.M.
Robjohns, Henry T., M.A.
Robjohns, Leonard, B.A., 1894
Robson, Wm Elliott Veitch, B.A., 1889
Rofe, John F., M.A.
Roger, Robert, B.A., 1876
Rogers, Francis Edward, M.A., LL.B.†
Rolin, Tom, M.A.
Rooney, William J., B.A., 1892
Roseby, Gertrude Amy, B.A., 1895
Roseby, Minnie B.A., 1895
Roseby, Thomas, M.A., LL.D.
Roseby, Thomas Ernest, B.A., 1890
Ross, Chisholm, M.D.¶
Ross, Colin John, B.E., 1891§
Ross, William John Clunies, B.Sc., 1891§
Rourke, Ernest John, B.A., 1893
Rourke, George Augustus, B.A., 1893
Rourke, Lillie Agnes, B.A., 1895
Rowan, Thomas, M.D.
Rowland, Norman de Horne, B.A., 1895
Rudder, Sydney Llewellyn, B.A., 1891
Russell, Charles Townsend, B.A., 1891
Russell, Edward, M.A.
Russell, Ethel Albinia, B.A., 1893
Russell, Francis Alfred Alison, M.A.
Russell, Harry A., B.A., 1887
Russell, Henry Chamberlaine, B.A., 1859, C.M.G., F.R.S.†
Russell, Jane Foss, M.A.¶
Russell, John F. S., M.A.
Russell, William, M.A.
Rutledge, David Dunlop, M.A., M.B., Ch.M.
Rutledge, William F., B.A., 1871
Ryan, Gerald, B.A., 1893
Rygate, Chas. D. H., B.A., 1883
Rygate, Henry B., B.A, 1885
Rygate, Philip William, M.A., B.E.
Saddington, Arthur G., B.A., 1887
Salting, George, B.A., 1857
Salting, William S., B.A., 1857
Sands, Jno. Marshall, B.A., 1889
Saunders, Arthur, B.A., 1893
Sawkins, Frederick John T., M.B., Ch.M.
Saxby, George Campbell, B.A., 1891
Scarvell, Edric Sydney, B.A., 1893
Schofield, James A., A.R.S.M., F.C.S.¶
Scot-Skirving, Robert, M.B., 1888§¶
Scott, Edward Henry, M.B., Ch.M.
Scott, Walter, M.A.¶†
Scoular, David, B.A., 1895
Seale, Herbert Percy, B.E., 1894
Seaward, William T., B.A., 1892
Sellors, Richard P., B.A., 1890
Sendall, Alfred E., B.A., 1888
Serisier, Lavigne Ernest, B.A., 1891
Shand, Alexr. B., B.A., 1884
Shaw, Frederick C. S., M.B., Ch.M.
Shaw, Henry Giles, M.A.
Shaw, John A. K., B.A., 1885
Sharp, Rev. Canon W. Hey, M.A.‖§
Sharpe, Ernest, B.A., 1865
Sheldon, Herbert, M.B., Ch.M.
Sheldon, Stratford, B.Sc., M.B., Ch.M.
Sheppard, Arthur Murray, M.B., Ch.M.
Sheppard, Edmund Haslewood, B.A., 1882
Sheppard, George, B.A., 1873
Sheridan, Francis B., B.A., 1874
Sheridan, John Patrick, B.A., 1890
Sherlock, John Bolt, B.A., 1895
Shewcroft, Alfred John, B.A., 1893
Shirley, John, B.Sc., 1887§
Shirlow, Wm. J., M.B., Ch.M.
Shirlow, Syd. S., M.B., Ch.M.
Simpson, Archd. H., M.A.§†
Simpson, Edward S., B.E., 1895
Sloman, Charles Wansbrough, B.A., 1893
Sloman, John, B.A., 1872
Sly, George J., M.A., LL.D.
Sly, Joseph D., M.A., LL.D.
Sly, Richard Meares, M.A., LL.D.
Smairl, Joseph Henry, M.A.
Smith, Archibald, B.A., 1889

† Fellow of the Senate. ‖ Head of College. ¶ Public Teacher.
§ Admitted *ad eundem gradum*.

Smith, Emma Isabel, B.A., 1893
Smith, Grafton Elliott, M.D., Ch.M.
Smith, Norman, B.A., 1894
Smith, Patrick, M.D.
Smith, Robert, M.A.
Smith, William, B.A., 1893
Smyth, Frank L. S., M.A.
Somerville, George B., B.A., 1882
Spark, Ernest J. T., M.B., Ch.M.
Squire, Hilton Bell, B.A., 1893
Stack, John, M.A.
Stacy, Harold Skipton, M.B., Ch.M.
Stanley, George P., M.B., Ch.M.
Starkey (*née* Artlett), Ettie, B.A., 1888
Steel, Robert, M.A.
Stephen, Cecil Bedford, M.A.†
Stephen, Edward Milner, B.A., 1891
Stephens, Charles T., B.E., 1892
Stephenson, John Hunter, M.A.
Stewart, Alexander, B.A., 1890
Stewart, Charles, M.D.
Stirling, E. C., M.D.‡
Stobo (*née* Seldon), Florence Mary, B.A., 1894
Stokes, Edward S., M.B., Ch.M.
Stonham, John, M.A.
Stonham, Kathleen, B.A., 1895
Street, Charles James, B.A., 1894
Street, Philip Whistler, B.A., 1883
Stuart, T. P. Anderson, M.D.§¶†
Studdy, Albert J., B.A., 1888
Studdy, Annie Avice Matilda, B.A., 1891
Studdy, William B., M.B., Ch.M.
Sulman, John, F.R.I.B.A.¶
Sullivan, Henry, B.A., 1872
Sullivan, James, B.A., 1894
Sullivan, James, B.A., 1867
Sullivan, Reginald, B.A., 1892
Sutherland, Constance A., M.A.
Sutherland, Elmina Louise, B.A., 1891
Sutherland, Peter, B.A., 1890
Swanson, Edmund Clement, B.A., 1893
Sweet, Geoffrey Bruton, M.B., 1893
Swyny, William Frank, B.A., 1894
Symonds, Daisy, B.A., 1893

Tange, Charles L., B.A., 1880
Tarplee, W. F., B.A., 1884
Taylor, Charles, M.D.
Taylor, James, B.Sc., A.R.S.M.¶
Taylor, Hugh W., M.A.
Taylor, James Wilson, M.A.§
Taylor, John M., M.A., LL.B.
Taylor, Sarah, B.A., 1893
Teece, Richard, F.I.A., F.F.A.†
Telfer, James Barnet, B.A., 1893
Thallon, Jas. B., B.A., 1876
Thomas (*née* Waddell) Annie, B.A., 1895
Thomas, Richard Weld, B.A., 1893
Thompson, Alexander, B.A., 1895
Thompson, I. Florence, M.A.
Thompson, James A., M.A.
Thompson, J. Ashburton, M.D.‡
Thompson, Jos., M.A., LL.B.
Thompson, Robert Alfred, B.A., 1891
Thompson, Sydney A., B.A., 1887
Thompson, Wm. Mann, M.A., B.E.
Thomson, Alec., B.A., 1891, LL.B.
Thorburn, James Thomas, B.A., 1886
Thorne, George, B.A., 1865
Threlfall, Richard, M.A.¶
Tidswell, Frank, M.B., Ch.M.
Tighe, William, B.A., 1892, LL.B.
Tole, Joseph, B.A., 1868, LL.B.
Tom, Wesley, B.A., 1860
Townley, Percy Langford, B.A., M.B., Ch.M.
Tracey, Fredk., M.A.
Trebeck, Tom Beal, M.A.
Trechmann, Emil J., M.A., Ph.D.¶
Trindall, Richard B., B.A., 1885, M.B., Ch.M.
Uther, Allen Hammill, B.A., 1891, LL.B.
Uther, Jennie Bertha, B.A., 1894
Vallack, Arthur Styles, M.B., Ch.M.
Veech, Michael, M.B., Ch.M.
Veech, Louis Stanislaus, B.A., 1890, LL.B.
Vicars, James, M.E.
Vivers, Alfred James Lovell, B.A., 1895

‡ Examiner. † Fellow of the Senate. ¶ Public Teacher.
§ Admitted *ad eundem gradum*.

Waddy, Percival Richard, B.A., 1891, LL.B.
Waldron, George C., M.A.
Waldron, Thomas W. King, B.A., 1893
Walker, Charles ¶
Walker, James Ernest, B.A., 1894
Walker, Samuel Herbert, B.A., 1894
Walker, William A., B.A., 1888
Wallace, F. Ernest, B.A., 1889
Walton, William Bain, M.B., Ch.M.
Walsh, William M. J., M.A.
Ward, Thomas W. C., B.A., 1884, B.E.
Wardrop, Gabriel, B.A., 1893
Warren, William Edward, M.D.§
Warren, William Henry, M.I.C.E.¶
Wassell, Joseph Leathom, M.B., Ch.M.
Waterhouse, John, M.A.
Watkins, John Leo, M.A.
Watson, William Geo., M.A.
Watson, Robert S., B.A., 1887
Watt, Andrew Robert James, B.A., 1893, LL.B.
Watt, Charles Prosper, B.A., 1893
Watt, John Alexander, M.A., B.Sc.
Waugh, Robert, M.A.
Wearne, Amy Isabel, B.A., 1893
Wearne, Minnie F., M.A.
Wearne, Richard Arthur, B.A., 1895
Weigall, Albert Bythesea, M.A.
Weigall, A. Raymond, B.E., 1894
Weigall, Harold Walter, B.A., 1895
Wentworth, Fitzwilliam, M.A.
White, Charles Alfred, B.A., 1895
White, James Smith, M.A., LL.D.
White, Norman Frederick, B.E., 1894
White, W. Moore, LL.D.§
Whitfeld, Eleanor Madeline, B.A., 1895
Whitfeld, Lewis, M.A.
Whiting, Joseph, B.A., 1895
Wilkinson, Fredk. B., M.A.
Wilkinson, Henry L., B.A., 1880
Wilkinson, W. Camac, B.A., 1878, M.D.¶
Williams, A. Lukyn, M.A.§
Williams, James L., B.A., 1892
Williams, John Alfred, B.A., 1894
Williams, William, B.A., 1891
Williams, William, B.A., 1895
Williams, William Henry, B.A., 1894
Williamson, Mark A., B.A., 1879
Willis, Robert Spier, M.A.
Wilson, Ella, M.A.
Wilson, Frederick James, B.A., 1893
Wilson, Jas. T., M.B., Ch. M.¶
Wilson, Roger, B.A., 1877
Windeyer (*née* Robinson), Mabel Fuller, B.A., 1890
Windeyer, Richard, B.A., 1891
Windeyer, William Archibald, B.A., 1893
Wise, Bernhard R., B.A., 1885§
Wolstenholme, Harry, B.A., 1890
Wood, Ebenezer C., M.A., B.E. B.Sc.
Wood, Fredk. Ernest, B.A., 1890
Wood, Frederick William, B.A., 1894
Wood, George Arnold, M.A.¶
Wood, James Patrick, B.E., 1895
Wood, Harrie Dalrymple, B.A., 1893
Woodd, Henry A., B.A., 1887
Woodthorpe, Robert A., M.A.
Woodward, Frederick P., B.A., 1892
Woolcock, John L., B.A., 1883
Woolnough, Geo., M.A.
Woolnough, Walter George, B.Sc. ¶
Wootton, Ernest, B.A., 1892
Worrall, Ralph, M.D.§
Wright, Stewart, B.A., 1882
Wyatt, Arthur H., M.A.
Yarrington, Clive T. L., M.A.
Yarrington, W. H. H., M.A LL.B.
Yeomans, Allan, M.A.
Zlotkowski, Frederick Sobieski Wladimir, M.B., Ch.M.

¶ Public Teacher. § Admitted *ad eundem gradum.*

GRADUATES.

MASTERS OF ARTS.

Anderson, Francis, 1890§
Anderson, Henry C. L., 1878
Backhouse, Alfred P., 1873
Barber, Richard, 1889
Barbour, George Pitty, 1889
Barff, Henry E., 1882
Barlee, Frederick Rudolph, 1884
Barton, Edmund, 1870
Barton, H. Francis, 1878
Blumer, George Alfred, 1897
Board, Peter, 1891
Bowden, John E., 1863
Bowmaker, Ruth, 1895
Bowman, Andrew, 1864
Bowman, Edward, 1864
Brennan, Christopher J., 1897
Brennan, Francis P., 1882
Brennan, Sarah O., 1891
Brierley, Frank Nunan, 1893
Broughton, Alfred, 1870
Bucknell, D'Arcy H., 1886
Cadman, Enoch William, 1898
Campbell, Edward, 1884
Campbell, Gerald R., 1885
Campbell, Joseph, 1882
Cape, Alfred John, 1867
Carruthers, Joseph H., 1878
Clune, Michael J., 1875
Cocks (*née* Proctor) Lizzie, 1898
Cocks, Nicholas John, 1892
Coghlan, Charles A., 1879
Cohen, John J., 1881
Cooper, David J., 1871
Cooper, Pope A., 1874
Cormack, Alexander J., 1886
Corlette, James Christian, 1880
Cosh, James, 1881§
Cowlishaw, William Patten, 1862
Cowper, Sedgwick S., 1870
Cribb, John George, 1893
Crocker, Herbert D., 1886
Crompton, William, 1876
Cullen, William P., 1882
Curtis, William C., 1859
Dalton, Gerald T. A., 1882
Dawson, Arthur F., 1877
Deane, Henry, 1893§
Deane, William Smith, 1884
Delohery, Cornelius, 1888
Dennis, James, 1897
Dillon, John T., 1876
Docker, Ernest B., 1865
Doust, Edith Lucy, 1898
Dunstan, Ephraim, 1870
Edmunds, Walter, 1879
Edwards, J. Ross, 1884
Edwards, Edwd. Samuel, 1898
Faithfull, George E., 1869
Faithfull, Henry M., 1871
Faithfull, William P., 1868
Fisher, Donnelly, 1875
Fitzgerald, Robert M., 1859
Fitzhardinge, Grantley H., 1869
Fletcher, Frank E., 1883
Fletcher, Joseph J., 1876
Flint, Charles Alfred, 1884
Flynn, John, 1879
Flynn, Joseph A., 1881
Fosbery, Eustace E., 1881
Francis, Henry R., 1870
Freehill, Francis B., 1876
Fuller, George W., 1882
Gardiner, Andrew, 1888§
Garland, James R., 1862
Garnsey, Arthur Henry, 1896
Garrick, Joseph H., 1871
Gibbes, Alfred George, 1875
Gray, Arthur St. J., 1887§
Griffith, Alfred John, 1896
Griffith, Samuel W., 1870
Hall, William Hessell, 1890
Halloran, (*née* Guèrin), Bella, 1892§
Hammond, A. de Lisle, 1884
Healy, Patrick J., 1877
Hill, Thomas, 1878
Hills, Henry H., 1880
Hodgson, Evelyn G., 1881§
Hogg, James E., 1890§
Hunter, John, 1869
Hurst, George, 1882
Iceton, Edward Arthur, 1870
Iceton, Thomas H., 1872
Jackson, Henry Latimer, 1886§
Jackson, Robert, 1880

§ Admitted *ad eundem gradum*.

Johnson, James W., 1859
Johnston, Alexander W., 1876
Jones, Griffith E. R., 1877
Jones, Rees R., 1872
Kay, Robert, 1876
Kellett, Frederick, 1895
Kemp, Richard E., 1873
Kent, Frederick D., 1874
Kent, Harry C., 1875
King, Cecil J., 1887
King, Copland, 1887
King, Frederick H., 1876
King, Walter Uther S., 1884
Lander, William H., 1882
Lang, John Gavin D., 1884
Lee, Edward, 1859
Lee, William, 1878
Legge, J. Gordon, 1887
Liddell, Andrew I., 1875
Lingen, John Taylor, 1881§
Lomer, Caroline, 1891
Long, George E., 1867
Loxton, Edward James, 1888
Lukin, Gresley W. H., 1891
MacDonald, Jas. M., 1879
Macdonald, Louisa, 1892§
Maclardy, J. D. St. Clair, 1883
MacPherson, John, 1895
Mann, William J. G., 1882
Manning, Charles James, 1869
Manning, Jas. Napoleon, 1885
Manning, William A., 1875
Manning, W. Hubert, 1878
Marrack, John Rea Melville, 1884
Mayne, Wm. M., 1884
Meares, Matilda, 1892
Meillon, John, 1888
Merewether, Walton L., 1879
Metcalfe, George, 1868
Millard, Godfrey William, 1896
Mitchell, David S., 1859
Monnington, Alfred, 1888§
Montague, James H., 1877
Moore, Samuel, 1882
Mort, H. Wallace, 1881§
Mullins, John L., 1879
Murray, Charles E. R., 1865
Murray, Donald, 1892
Nathan, Edward A., 1882
Noble, Edmund Murray, 1890
O'Brien, Francis, 1868
O'Connor, Richard E., 1873
O'Mara, Michael, 1877
Oliver, Alexander, 1869
Oliver, James, 1885
Parish, Walter G., 1866
Perkins, Alfred Edward, 1886
Perry, John, 1876
Philp, Richard, 1888§
Pike, George H., 1891
Plomley, Francis James, 1876
Powell, Theodore, 1876
Pring, Robert D., 1875
Purves, John M., 1873
Quaife, Frederick H., 1862
Ralston, Alexander G., 1883
Rennie, Edward H., 1876
Rich, George E., 1885
Rigg, Thomas, 1890
Robertson, Joseph, 1877
Robjohns, Henry T., 1891
Rofe, John F., 1885
Rogers, Francis E., 1863
Rolin, Tom, 1885
Roseby, Thomas, 1871
Russell, Edward, 1880
Russell, Frank A. A., 1894
Russell, Jane Foss, 1889
Russell, John Frazer S., 1896
Russell, William, 1882
Rutledge, David D., 1875
Rygate, Philip William, 1886
Sharp, William Hey, 1881§
Shaw, Henry Giles, 1894
Simpson, Archd. H., 1895§
Sly, George J., 1874
Sly, Joseph D., 1872
Sly, Richard M., 1876
Smairl, Joseph Henry, 1896
Smith, Robert, 1878
Smyth, Frank L. S., 1879
Stack, John, 1860
Steel, Robert, 1879
Stephen, Cecil B., 1864
Stephenson, John Hunter, 1892
Stonham, John, 1896
Sutherland, Constance Adelaide, 1889
Taylor, Hugh W., 1884
Taylor, James Wilson, 1887§

§ Admitted *ad eundem gradum*.

Taylor, John Michael, 1891
Thompson, I. Florence, 1887
Thompson, James A., 1882
Thompson, Joseph, 1875
Thompson, William M., 1875
Tracey, Frederick, 1885
Trebeck, Tom Beal, 1884
Waldron, George C., 1881
Walsh, Wm. M. J., 1889
Waterhouse, John, 1876
Watkins, John L., 1876
Watson, William George, 1873
Watt, John Alexander, 1892
Waugh, Robert, 1879
Wearne, Minnie, 1892
Weigall, Albert B., 1869
Wentworth, Fitzwilliam, 1876
White, James Smith, 1871
Whitfeld, Lewis, 1882
Wilkinson, Frederick Bushby, 1884
Williams, A. Lukyn, 1881§
Willis, Robert Spier, 1862
Wilson, Ella, 1895
Wood, Ebenezer Clarence, 1886
Woodthorpe, Robert A., 1890
Woolnough, George, 1873
Wyatt, Arthur H., 1869
Yarrington, Clive Tennyson L., 1895
Yarrington, William Henry H., 1886
Yeomans, Allan, 1871

BACHELORS OF ARTS.

Abbott, George H., 1887
Abbott, Henry Palmer, 1893
Abbott, Thomas K., 1888
Abigail, Ernest Robert, 1896
Allan, Edith Jeannie, 1895
Allen, Arthur W., 1883§
Allen, George B., 1877
Allen, Reginald C., 1879
Amess, William, 1883
Anderson, Catherine, 1893
Anderson, Hugh Miller, 1890
Anderson (*née* Amos), Jeanie Cairns, 1890
Anderson, Maud Edith, 1896
Anderson, William Addison S., 1892
Andrews, Ernest Clayton, 1894
Anstey, George Webb, 1893
Armstrong, Isabella, 1895
Armstrong, Laurens F. M., 1884
Armstrong, Margaret Jane, 1897
Armstrong, Tancred de C., 1891
Armstrong, William G., 1884
Arnold, Edwin Charles, 1896
Aspinall, Arthur Ashworth, 1889
Atkins (*née* Kennedy), Annie A., 1893
Atkins, William Leonard, 1893
Auld, John Hay Goodlet, 1897
Ayres, Charles, 1882
Barker, Henry Auriol, 1881§
Barker, Thomas Charles, 1886
Barnes, Pearl Ella, 1897
Barnet, Donald McKay, 1890
Barraclough, Francis Egerton, 1895
Barry, Hugh de Barri, 1898
Barton, Joanna, 1893
Barton, John a'Beckett D., 1896
Bates (*née* Abigail), Eliza L., 1893
Bavin, Gertrude Lillian, 1898
Bavin, Thos. Rainsford, 1894
Baylis, Harold M., 1883
Beardmore, Ada, 1896
Beardsmore, Emily Maud, 1894
Beardsmore, Robert Henry, 1895
Beaumont, Annie Holloway, 1898
Beegling, Daniel, 1885
Beehag, Samuel Alfred, 1886
Berne, Percy Witton, 1883
Bertie, Charlotte Maud, 1896
Black, Reginald Austin William, 1896
Blacket, Arthur R., 1872
Blacket, Cuthbert, 1891
Blatchford, Torrington, 1894
Blaxland, Henry Charles, 1897
Bloomfield, Elsie I'Anson, 1897
Bloomfield, William John, 1896
Blumer, Charles, 1894
Bode, Arnold G. H., 1888
Booth, Mary, 1890
Bowmaker, Theophilus Robert, 1896
Bowman, Arthur, 1880
Bowman, Ernest, 1880

§ Admitted *ad eundem gradum.*

Bowman, Alexander, 1859
Bowman, Alister S., 1878
Boxall, Nelson Leopold, 1896
Boyce, Francis Stewart, 1893
Brennand, Henry John W., 1896
Brereton, John LeGay, 1894
Britten, Herbert Edward, 1888
Britton, Theodosia Ada, 1891
Broderick, Cecil Thomas Hawkes, 1896
Brodie, Isabella Esther, 1895
Broinowski, Leopold T., 1897
Brook, Henry James Sidney, 1896
Broome, Edward, 1897
Brown, Alfred, 1866
Brown, George Edward, 1898
Brown, Lizzie Sherwood, 1898
Brown, Mary Elizabeth, 1885
Brown, Sophia, 1894
Brown, William Vernon, 1894
Browne, William C., 1864
Bruce, Mary H., 1887
Bruce, Mary Jane, 1896
Buchanan, Charles Arthur, 1889
Buckland, Thomas, 1878
Bundock, Charles, 1878
Bundock, Francis F., 1877
Bunting, Edith Annie, 1896
Burdekin, Sydney, 1860
Burfitt, Walter F., 1894
Bushnell, Pollie, 1896
Butler, Francis J., 1882
Butler, Spencer Joseph St. C., 1893
Butler, Thomas, 1876
Byrne, James Kevin, 1894
Byrne, Lily Comyn, 1896
Byrne, William Edmund, 1892
Cahill, Annie Lucille, 1894
Cakebread, William Jowers, 1894
Callachor, Hugh B., 1863
Cameron, Archibald Peter, 1894
Campbell, Allan, 1874
Campbell, Charles Robert, 1893
Campbell, George Polding, 1885
Canaway, Arthur P., 1894§
Cargill, John Sydney, 1889
Carlisle, William W., 1878
Carlos, Joseph, 1893§
Caro, Hilda, 1896
Carvosso, Albert B., 1884
Casey, Michael Alphonsus, 1896
Castling, James Robert, 1896
Chalmers, Stephen Drummond, 1897
Chapman, Alfred Ernest, 1893
Chisholm, William, 1875
Chubb, Montague Charles Lyttelton, 1896
Clarke, Francis William, 1884
Clines, Peter Joseph, 1896
Closs, Wm. John Leech, 1890
Clubb, Wallace, 1896
Coffey, Francis Louis Verhulst, 1894
Cole, Louisa, 1898
Combes, Jane Frances, 1895
Conlon, William Aloysius, 1891
Connellan, John, 1892
Connolly, John, 1894
Connor, Thomas John, 1895
Copland, Frank Fawcett, 1894
Cook, Sydney Leicester, 1898
Cooke, Clarence Hudson, 1892
Corbett, William Francis, 1883
Cordingley, Grace Marion, 1898
Cosh, James, 1891
Cowan, David, 1894
Cox, Harold, 1889
Coyle, William Thomas, 1891
Craig, Alexander Donald, 1893
Craig, Charles, 1892
Crane, Charles, 1882
Crawford, Stella Maud C., 1896
Creagh, Albert Jasper, 1889
Creagh, William John, 1892
Cripps, Esther Fischer, 1891
Cruise, Emily A., 1897
Cullinane, John Aloysius, 1895
Cumming, Jennie, 1896
Curlewis, Harold Burnham, 1897
Curlewis, Herbert Raine, 1890
Curnow, William Leslie, 1890
D'Arcy, George Synnott, 1895
D'Arcy, John Synnott, 1890
D'Arcy-Irvine, Malcolm M., 1889
Daley, Frank H., 1889
Dalmas, Lizzie, 1895
Daly, May Edith, 1895
Dash, Ebenezer, 1894
Dargin, Sydney, 1871
Davies, Arthur Bernard, 1894
Davies, Wyndham John E., 1893

§ Admitted *ad eundem gradum*.

Davis, Agnes Marianne Harrison, 1896
Davis, Henry, 1890
De Lissa, Ethel Naida, 1898
De Lissa, Horace, 1896
Dettmann, Herbert Stanley, 1897
Dey, Charlotte Johnston, 1898
Davison, Samuel Beaumont, 1896
Dick, James Adam, 1886
Dick, William Thomas, 1890
Dimond, Margaret Cecilia, 1893
Dixon, Herbert Hutchinson, 1894
Doak, Frank Wiseman, 1891
Doig, Alexander John, 1895
Dove, William R. Norton, 1893
Dowe (*née* Molster), Eliza, 1893
Dowe, Philip William, 1893
Dowling, Frank Vincent, 1898
Doyle, John, 1891
Drummond, Shafto Landour, 1893
Dudley, Joseph T., 1885
Dumolo, Nona, 1898
Dunlop, John W., 1895
Dunlop, Norman John, 1890
Dunne, John D., 1873
Dunnicliff, Mary Clifton, 1898
Eames, Jane, 1895
Edmunds, John Michael, 1892
Edmunds, May, 1897
Edwards, David Sutherland, 1894
Edwards, Edward Evan, 1898
Edwards, John, 1891
Elder, Francis R., 1877
Elkin, Jonathan Bevan, 1895
Elliott, Millicent V., 1895
Ellis, Ethel, 1894
Ellis, Mary, 1894
Elphinstone, James, 1881
Elphinstone, James Cooke, 1896
Emanuel, Nathaniel, 1867
England, Theophilus, 1885
England, Thomas H., 1885
Enright, Walter John, 1893
Evans, Ada E., 1895
Evans-Jones, David Pentland, 1898
Feez, Arthur H., 1880
Ferguson, David, 1886
Fidler, Carleton B., 1888
Fidler, Isabel Margaret, 1898
Finn, William George, 1895
Finney, Charlotte, 1895
Finney, Joseph, 1894
Fitzgerald, Edmund, 1866
Fitzgerald, John Timothy, 1890
Fitzhardinge, Maude Yeomans, 1898
Fitzpatrick, Bernard Joseph, 1897
Fitzpatrick, Thomas John A., 1893
Flannery, George Ernest, 1892
Flashman, James Froude, 1892
Flavelle, Lucy Isabel, 1896
Fleming, Howard George T., 1894
Fletcher, Archibald William, 1886
Fletcher, Charles R., 1881
Fletcher, J. A., 1879
Fletcher, Katherine Elizabeth, 1895
Fletcher, Michael Scott, 1893
Flynn, William J., 1884
Forde, James, 1891
Foreman, Henry James Clifton, 1896
Forster, Charles E., 1876
Forsyth, Walter George, 1898
Fosbery, Vincent F., 1886
Fox, Harold S., 1885
Fraser, Robert W., 1885
Freeman, Ambrose William, 1896
Fullerton, Alex. Y., 1885
Garnsey, Edward R., 1885
Garran, Robert R., 1888
Geddes, Samuel, 1885
George, John, 1893
Gerber, Edward William T., 1892
Gibbes, William C. V., 1868
Gill, Alfred Chalmers, 1893
Gillies, James, 1889
Gordon, Emily Isabel, 1898
Gordon, George Acheson, 1895
Gorman, John R., 1866
Grassick, Charles C., 1897
Greenlees, Gavin, 1895
Greenway, Alfred R., 1870
Gregson, William Hilder, 1898
Griffith, James Shaw, 1895
Griffiths, Frederick Guy, 1898
Grogan, Albert Thomas Henry, 1897
Hadley, Alfred Edward, 1893
Hall, Alfred Ernest, 1893
Halliday, George C., 1884
Halloran, Aubrey, 1892
Halloran, Henry, 1896
Halloran, Ida, 1893
Hammond, John Harold, 1896
Hansard, Edith Hirst, 1897

Hardy, Caleb, 1893
Hargraves, Edward John, 1859
Harker, Constance Elizabeth, 1895
Harriott, Charles Warre, 1889
Harriott, Georgina Jane, 1894
Harris, George, 1891
Harris, John, 1892
Harris, Marian, 1898
Harris, Matthew, 1863
Harvey, Revina, 1895
Harvey, William George, 1894
Harwood, Marian Fleming, 1898
Hay, Mary Catherine, 1897
Hayes, David John, 1894
Hedberg, John Alfred, 1896
Heden, Ernest Charles, 1898
Helsham, Charles Howard, 1892
Henderson, George Cockburn, 1893
Henderson, Robert Newburn, 1895
Higgins, Michael A., 1879
Higgins, Percy Reginald, 1893
Hill, Evelyn M., 1895
Hill, George Arthur, 1897
Hilliard, Arthur Vaughan, 1890
Hinder, Robert John, 1889
Hipsley, Alice Ellen, 1898
Hobbs, Edwin, 1897
Hobbs, John William, 1894
Hodge, Ernest Arthur, 1895
Hodgkins, Amy Alice, 1895
Hogg, Kate Emily, 1894
Holliday, Andrew, 1898
Holme, Ernest Rudolph, 1891
Holme, John Barton, 1893
Holmes, William Frederick, 1894
Holt, Arthur Christian, 1895
Holt, Wilfrid John, 1898
Hood, Dannina, 1894
Hopkins, Francis Irvine, 1893
Hopman, John Henry, 1894
Horniman, Alexander, 1866
Houison, Andrew, 1869
Houison, James, 1863
Houison, Stephen James, 1898
Howard, John Bruton, 1895
Hudson, William, 1897
Huggart, Alfred Theodore, 1892
Huggart, William Charles, 1898
Hughes, Charles Michael, 1886
Hughes, Hugh Jason, 1897
Hughes, James O'Donoghue A., 1894
Hughes, Michael O'Gorman, 1890
Hungerford, Hedley Heber, 1886
Hunt, Digby St. Clair W., 1895
Hunt, Edward, 1859
Hunt, Harold W. G., 1888
Hunt, Hugh Alton Stanislaus, 1897
Hunter, Mary Alison Miles, 1895
Hunter, Thomas Brown, 1898
Hynes, Sarah, 1891
Innes (*née* Lichtscheindl), Rosa, 1894
Jackson, Frederick Charles, 1897
Jacobs, James, 1894
James, Arthur Henry, 1893
James, Augustus G. F., 1888
James, George Alfred, 1893
James, William Edwin, 1894
James, Thomas, 1896
Jamieson, George Wellington, 1893
Jamieson, Sydney, 1884
Jarvie, Bennie, 1898
Jenkins, Charles J., 1887
Johnson, Martin Luther, 1893
Johnston, John, 1887
Johnston, Mary Eleanor, 1896
Johnston, Stephen Jason, 1894
Johnstone, Henry Thomas, 1885
Jones, Cortis Harry Fredk., 1897
Jones, Thomas, 1895
Jones, Thomas E., 1884
Jones, Ernest Trevor, 1884
Jones, Evan John, 1894
Joseph, Horace B., 1887
Kater, Henry Herman, 1894
Kelly, Thomas, 1890
Kelynack, Arthur James, 1889
Kelynack, Harold Leslie, 1893
Kemmis, William Henry, 1890
Kendall, Frank Louis, 1893
Kendall, Theodore M., 1876
Kenna, Patrick, 1882
Kennedy, Emily Clara, 1895
Kennedy, Philip, 1895
Kershaw, Joseph Cuthbert, 1894
Kidston, Robert Matthew, 1892
Kilgour, Alexander James, 1894
King, George C., 1887
King (*née* Russell), Lillian, 1891
King, R. W., 1884§
Kinross, John, 1869

§ Admitted *ad eundem gradum*.

Kinross, Robert Menzies, 1889
Klein, James Augustus, 1897
Knight, Arthur, 1894
Lamrock, Arthur Stanton, 1891
Lance, Elisabeth Ada, 1898
Lane, Frederick George, 1895
Langley, Isabella Edwardes, 1897
Langton, Frederick W., 1887
Lasker, Samuel, 1892
Layton, John Edward, 1893
Leahy, John Patrick Daunt, 1890
Lee, Herbert Ernest, 1886
Leibius, G. Hugo, 1888
Lenthall, Ellen Melicent, 1893
Leverrier, Frank, 1884
Levy, Daniel, 1893
Lewis, Henry Clyde, 1893
Littlejohn, Edward S., 1887
Linsley, William H., 1880
Lloyd, Frederick, 1890
Lloyd, Thomas, 1878
Louis, Philip Herbert, 1897
Loyden, James, 1894
Lynch, Michael D., 1870
Lynch, William, 1863
Lyon, Pearson, 1890
Macansh, Andrew W., 1885
Macarthy, Herbert T. S., 1860
McCarthy, Arthur W., 1881
McCook, Adam Stuart, 1895
McCoy, William Taylor, 1894
McCulloch, Percy V., 1881
McDermott, Vesian B., 1887
McDonagh, John M., 1879
Macdonald, Fannie Elizabeth, 1895
McDonnell, Randal C. W., 1888
McDowall, James, 1896
McEvilly, Augustus, 1886
McEvilly, Ulric, 1883
McGlynn, Rebecca Mary, 1894
McGuinn, Denis, 1884
McIntosh, Harold, 1889
McIntyre, Aug. T., 1879
McIntyre, Duncan A., 1888
McIntyre, William Donald, 1890
Mack, Sidney, 1890
McKay, James, 1896
McLaren, Alexander Duncan, 1896
McLaren, John Gilbert, 1895
McLaughlin, Daniel, 1890
MacLean, Frederick S., 1887
McLelland, Hugh, 1881
McLeod, James, 1879
McMahon, Gregan, 1896
MacManamey, James Fraser, 1881
MacManamey, John Fraser, 1889
MacManamey, William Fraser, 1892
MacMaster, Donald Æneas D., 1894
MacMullen, Frank, 1894
McNeil, Andrew, 1889
McNevin, Arthur Joseph, 1895
McNevin, Thomas Butler, 1893
MacPherson, Peter, 1889
Maffey, Reginald William H., 1896
Maher, Charles H., 1877
Maher, Matthew E., 1867
Maher, Thomas Francis, 1893
Main, John, 1892
Mallarky, Ethel May, 1895
Maloney, Andrew William, 1893
Mannell, Francis Worthington, 1892
Manning, Reginald K., 1887
Manning, William Ernest, 1892
Marks, Hyam, 1892
Marks, Percy J., 1887
Marks, Florence, 1893
Marks, Leah, 1893
Martin (*née* Johnston), Ella R., 1890
Martin, Lewis Ormsby, 1893
Martyn, Sydney Charles, 1889
Massie, Richard de Winton, 1886
Mate, William H., 1864
Mathison, Walter, 1880
Mayne, J. O'Neill, 1884
Maxwell, Henry Francis 1895
Maynard, Ethel Margaret, 1894
Maze, William Archibald A., 1892
Meagher, Louis Felix, 1889
Meares, Hercules, 1893
Meillon, Joseph, 1863
Mell, Cecil Newton, 1894
Merewether, Edwd. A. M., 1884
Merewether, Hugh H. M., 1894
Merewether, William D. M., 1895
Miles, James Albert, 1894
Miller, James W., 1896
Millard, Alfred Charles, 1885
Miller, Richard J., 1885
Mills, Percy Harcourt, 1893
Mitchell, Ernest Meyer, 1896
Mitchell, Ethel Robertson, 1898
Molineaux, Amy Atherton, 1891
Moloney, Thomas Patrick, 1885
Molster, Sarah, 1897

Monaghan, John Graham, 1897
Monahan, William Willis, 1897
Montefiore, Hortense Henriette, 1896
Montgomerie, John, 1889.
Moore, David C., 1883
Moore, Frank Joseph Sarsfield, 1883
Moore, John, 1883
Moore, Verner, 1884
Moore, Walter Albert, 1894
Morgan, Frederick A., 1888
Morgan, Thomas H. D., 1892
Morrice, John, 1874
Morris, John James, 1895
Morris, Robert N., 1870
Morrish, Francis, 1882
Moulton, James Egan, 1892
Moustaka, Orea Emma Hellas, 1897
Mullens, Arthur Frank Macquarie 1896
Munro, William J., 1880
Murray, Florence Jane, 1896
Murray, Mercy M. H., 1897
Musmann, Carl Ernst Gottlieb, 1897
Myers, David M., 1866
Neill, Leopold Edward Flood, 1886
Nelson, Duncan John, 1895
Nettleship, Edward, 1895
Newman, George Hine, 1887
Newman, Kelsey Illidge, 1894
Newton, Henry, 1889
Nicholls, William Hunt Ward, 1891
Noake, Reginald, 1877
Noakes, Mabel Alicia, 1896
O'Brien, Agnes Gertrude, 1895
O'Brien, Kathleen Moira, 1894
O'Brien, Lucius, 1865
O'Brien, Ormond, 1876
O'Brien, Patrick Daniel, 1894
O'Conor, Broughton B., 1892
O'Donohue, John P. Markham, 1895
O'Keefe, John A., 1887
O'Neill, James Bernard, 1895
O'Reilly, Hubert de Burgh, 1892
Osborne, Henry Stuart, 1896
O'Sullivan, Daniel, 1897
Pain, Allan Franklyn, 1894
Pain, A. W., 1884§
Paine, Bennington Haille, 1893
Paine, George Henry, 1894
Paris, Jane Elizabeth, 1897
Parker, William Arthur, 1892
Paton, Arthur T, 1887
Pattinson, Anthony Walton, 1894
Peden, John Beverley, 1892
Penman, John Edwards Foggon, 1897
Perkins, Joseph Abraham R., 1892
Perskè, Hermann, 1887
Phillips, Catherine Agnes, 1896
Pickburn, James Prosper, 1892
Piddington, Albert Bathurst, 1883
Pilcher, Charles E., 1865
Pilcher, George de Vial, 1859
Pilcher, Norman George Stafford, 1898
Pincombe, Torrington Hawke, 1890
Poolman, Arthur Edward, 1883
Pope, Roland James, 1885
Potts, Cuthbert, 1898
Prentice, Arthur James, 1892
Pritchard, Alice, 1895
Pritchard, William C., 1888
Purcell, Philip Francis, 1898
Purcell, Winifred Dalton, 1895
Purser, Cecil, 1885
Quaife, William F., 1879
Quigley, James, 1890
Ramsay, James, 1885
Raves, George Alfred, 1897
Raves, Helen Alice, 1894
Redshaw, George, 1895
Reidy, John James Gralton, 1896
Rennie, George Edward, 1882
Renwick, Arthur, 1857
Renwick, Herbert John, 1893
Reynolds, Arthur J. P. G., 1890
Richardson, Charles Noel D., 1893
Richardson, Henry A., 1867
Richardson, Robert, 1870
Riley, Ernest Arthur, 1893
Riley, Patrick William, 1894
Riley, Spencer George Birkenhead, 1897
Riley, Valentine B., 1872
Robinson, Charles H. P., 1893
Robinson, George Frederick G., 1890
Robjohns, Leonard, 1894
Robson, William Elliott V., 1889
Roger, Robert, 1876
Rooney, William James, 1892
Roseby, Gertrude Amy, 1895

§ Admitted *ad eundem gradum*.

Roseby, Minnie, 1895
Roseby, Thomas Ernest, 1890
Rossiter, Florence Annie, 1898
Roth-Schmidt, Frederica, 1897
Rourke, Ernest John, 1893
Rourke, George Augustus, 1893
Rourke, Lillie Agnes, 1895
Rowland, Norman de Horne, 1895
Rudder, Sydney Llewellyn, 1891
Russell, Charles Townsend, 1891
Russell, Ethel Albinia, 1893
Russell, Harry A., 1887
Russell, Henry C., 1859
Rutledge, William F., 1871
Ryan, Gerald, 1893
Rygate, Charles D. H., 1883
Rygate, Henry Bertram, 1885
Saddington, Arthur G., 1887
Salting, George, 1857
Salting, William, 1857
Sands, John Marshall, 1889
Saunders, Arthur, 1893
Saunders, Eva Florence, 1897
Saxby, George Campbell, 1891
Scarvell, Edric Sydney, 1893
Scoular, David, 1895
Seaward, William T., 1892
Sellors, Rich. Pickering, 1890
Sendall, Alfred E., 1888
Serisier, Lavigne Ernest, 1891
Shand, Alexr. B., 1884
Sharp, Walter Alex. Ramsay, 1897
Sharpe, Ernest, 1865
Sharpe, William George, 1897
Shaw, John A. K., 1885
Sheridan, John Patrick, 1890
Sheppard, Edmund Haslewood, 1882
Sheppard, George, 1873
Shewcroft, Alfred John, 1893
Sheridan, Francis B., 1874
Sherlock, John Bolt, 1895
Sloman, Charles Wansbrough, 1893
Sloman, John, 1872
Smith, Archibald, 1889
Smith, Emma Isabel, 1893
Smith, Norman, 1894
Smith, William, 1893
Somerville, George B., 1882
Squire, Hilton Bell, 1893
Stacy, Fitzroy Somerset, 1897
Starkey (*née* Artlett), Ettie, 1888
Stephen, Edward Milner, 1891
Stephen, John William Farish, 1897
Stewart, Alexander, 1890
Stewart, Donald Grant, 1896
Stobo (*née* Seldon), Florence Mary, 1894
Stoney, Edmund Haighton, 1898
Stonham, Kathleen, 1895
Street, Charles James, 1894
Street, Philip Whistler, 1883
Studdy, Albert John, 1888
Studdy, Annie Avice Matilda, 1891
Sullivan, Henry, 1872
Sullivan, James, 1867
Sullivan, James, 1894
Sullivan, Reginald, 1892
Sutherland, Elmina Louise, 1891
Sutherland, Peter, 1890
Swanson, Edmund Clement, 1893
Swanwick, Kenneth ffoulkes, 1896
Swyny, William Frank, 1894
Symonds, Bertha Violet, 1897
Symonds, Daisy, 1893
Tange, Charles L., 1880
Tarplee, William F., 1884
Taylor, Elizabeth Ironside, 1896
Taylor, Sarah, 1893
Telfer, James Barnet, 1893
Thallon, James B., 1876
Thomas (*née* Waddell), Annie, 1895
Thomas, Richard Weld, 1893
Thompson, Alexander, 1895
Thompson, Robert Alfred, 1891
Thompson, Sydney A., 1887
Thomson, Alec., 1891
Thorburn, James Thos., 1886
Thorne, George, 1865
Thornton, Septimus, 1896
Tighe, William, 1892
Tole, Joseph, 1868
Tom, Wesley, 1860
Townley, Percy L., 1886
Trindall, Richard B., 1885
Uther, Allen Hammill, 1891
Uther, Jennie Bertha, 1894
Veech, Louis Stanislaus, 1890
Vivers, Alfred James Lovell, 1895
Waddell, George Washington, 1896
Waddy, Percival Richard, 1891
Waldron, Thomas W. King, 1893
Walker, James Ernest, 1894
Walker, Samuel Herbert, 1894

Walker, William A., 1888
Wallace, Donald, 1897
Wallace, Frank Ernest, 1889
Ward, Ruby Estelle, 1897
Ward, Thomas W. C., 1884
Wardrop, Gabriel, 1893
Warren, Ernest William, 1898
Watt, Andrew Robert James, 1893
Watt, Charles Prosper, 1893
Watson, Robert S., 1887
Wearne, Amy Isabel, 1893
Wearne, Richard Arthur, 1895
Weigall, Harold Walter, 1895
White, Charles Alfred, 1895
Whitfeld, Eleanor Madeline, 1895
Whitfeld, Hubert Edwin, 1897
Whiting, Joseph, 1895
Wilkinson, Henry L., 1880
Wilkinson, W. Camac, 1878
Williams, Alfred James, 1898
Williams, James Leslie, 1892
Williams, John Alfred, 1894
Williams, William, 1891
Williams, William, 1895
Williams, William Henry, 1894
Williamson, Mark A., 1879
Wilson, Frederick James, 1893
Wilson, Roger, 1877
Windeyer (*née* Robinson), Mabel Fuller, 1890
Windeyer, Richard, 1891
Windeyer, William Archibald, 1893
Wise, Bernhard R., 1885§
Wolstenholme, Harry, 1890
Wood, Frederick Ernest, 1890
Wood, Frederick William, 1894
Wood, Harrie Dalrymple, 1893
Woodd, Henry A., 1887
Woodward, Frederick P., 1892
Woolcock, John L., 1883
Wootton, Ernest, 1892
Wright, Stewart, 1882
Yarnold, Alfred Henry, 1896
Yeates, Ainslie Arthur, 1898

DOCTORS OF LAW.

Barry, Alfred, 1884§
Coghlan, Charles A., 1885
Cullen, William P., 1887
Donovan, John J., 1867
Garran, Andrew, 1870
Green, Arthur V., 1887
Jefferis, James, 1885
Manning, J. Napoleon, 1892
Marden, John, 1890
Morris, Robert Newton, 1886
Paterson, James S., 1866
Roseby, Thomas, 1873
Sly, George J., 1878
Sly, Joseph D., 1873
Sly, Richard M., 1877
White, James Smith, 1874
White, W. Moore, 1882§

BACHELORS OF LAW.

Armstrong, Laurens F. M., 1890
Bavin, Thomas Rainsford, 1897
Boyce, Francis Stewart, 1896
Brierley, Frank Nunan, 1897
Butler, Spencer Joseph St. Clair, 1896
Clines, Peter Joseph, 1898
Coffey, Francis Louis Verhulst, 1896
Creagh, William John, 1897
Cullinane, John Aloysius, 1897
Curlewis, Herbert Raine, 1892
Davies, Arthur Bernard, 1897
Davies, Wyndham John E., 1895
Edmunds, Walter, 1881
Elphinstone, James Cooke, 1898
Flannery, George Ernest, 1894
Gerber, Edward W. T., 1894
Gill, Alfred Chalmers, 1895
Halloran, Aubrey, 1894
Hammond, John Harold, 1898
Harris, George, 1893
Higgins, Percy Reginald, 1895
Holme, John Barton, 1895
Jones, Albert E., 1889§
Kelynack, Arthur James, 1892
Kershaw, Joseph Cuthbert, 1896
Knox, Adrian, 1895§
Legge, James Gordon, 1890
Levy, Daniel, 1895
Lloyd, Frederick, 1893
Mack, Sidney, 1892

§ Admitted *ad eundem gradum*.

Martin, Lewis Ormsby, 1895
Meares, Hercules, 1894
Meillon, John, 1892
Merewether, Hugh Hamilton Mitchell, 1898
Merewether, William David Mitchell, 1898
Mills, Percy Harcourt, 1897
Nathan, Edward Alleyne, 1891
O'Brien, Patrick Daniel, 1897
O'Conor, Broughton B., 1895
O'Reilly, Hubert de Burgh, 1894
Parker, William Arthur, 1898
Peden, John Beverley, 1898
Pickburn, James Prosper, 1894
Quick, John, 1881§
Rogers, Francis E., 1867
Scarvell, Edric Sydney, 1896
Taylor, John Michael, 1893
Thompson, Joseph, 1869
Thomson, Alec., 1894
Tighe, William, 1894
Tole, Joseph, 1869
Uther, Allen Hammill, 1893
Veech, Louis Stanislaus, 1893
Waddy, Percival Richard, 1893
Waldron, Thomas W. King, 1895
Walker, James Ernest, 1896
Watt, Andrew R. J., 1894
Wood, Harrie Dalrymple, 1896
Yarrington, W. H. H., 1887

DOCTORS OF MEDICINE.

Bennet, Francis Alexander, 1896§
Barret, James, 1873
Belgrave, T. B., 1882§
Blair, John, 1877
Bowker, Richard Ryther S., 1881§
Chisholm, William, 1887§
Collingwood, David, 1886§
Corlette, Cyril Ernest, 1895
Flashman, James Froude, 1897
Houison, James, 1870
Jenkins, Edward Johnstone, 1886§
Jones, Richard T., 1874
Knaggs, Samuel T., 1882§
Lloyd, Frederick, 1872
Lyden, Michael John, 1892§
McDonnell, Æneas J., 1896
McMurray, Wahab, 1892§
Maher, W. Odillo, 1884§
Milford, Frederick, 1882§
Moore, George, 1872
Morton, Selby, 1877
Mullins, George Lane, 1890§
Oram, Arthur Murray, 1882§
O'Reilly, Walter William J., 1882§
Ross, Chisholm, 1886
Rowan, Thomas, 1882
Smith, Grafton Elliott, 1895
Smith, Patrick, 1870
Stewart, Charles, 1872
Stuart, T. P. Anderson, 1889§
Taylor, Charles, 1872
Warren, William Edward, 1882§
Worrall, Ralph, 1888§

BACHELORS OF MEDICINE.

Abbott, George Henry, 1891
Affleck, Ada C., 1898
Andrews, William, 1887§
Armstrong, William G., 1888
Bancroft, Peter, 1888
Barnes, Edmund Horatio, 1897
Bennetts, Harold Graves, 1896
Biffin, Harriett Eliza, 1898
Binney, Edward Harold, 1893
Bode, Frederick F. O., 1896
Böhrsmann, Gustav Hall, 1898
Böhrsmann, Rudolph Hermann, 1894
Boelke (*née* Robinson), Grace Fairley, 1893
Boelke, Paul, 1893
Bowker, Cedric Victor, 1898
Broinowski, Gracius Herbert, 1897
Burkitt, Edmund Henry, 1896
Carlile-Thomas, Julia, 1898
Challands, Frederick, 1892
Chenhall, William Thomas, 1897§
Coghlan, Iza Frances Josephine, 1893
Conlon, William Aloysius, 1896
Cooley, Percy Glover, 1898

§ Admitted *ad eundem gradum*.

Cope, Herbert Roger, 1898
Cosh, John Inglis Clark, 1897
Cox, Frederick Henry, 1895
Craig, Robert Gordon, 1894
Crawley, Aubrey Joseph C., 1896
Davidson, Leslie G., 1888
Deck, George Henry Baring, 1896
Dey, Robert, 1898
Dick, Robert, 1892
Dixon, Graham Patrick, 1897
Dunlop, Norman John, 1896
Ellis, Henry A., 1887§
Ellis, Lawrence Edward, 1898
Farrell, Robert Meredith, 1897
Fordyce, Henry St. Clair, 1895
Freshney, Reginald, 1892
Goldsmid, Albert, 1895
Graham, James, 1886§
Green, Terence Albert, 1893
Hall, Edwin Cuthbert, 1898
Hall, George Reginald Percy, 1895
Halliday, John Charles W., 1896
Handcock, Charles Lancelot, 1894
Harris, Lawrence Herschell Levi, 1896
Harris, William Henry, 1897
Henderson, John Niven, 1893
Henry, Arthur, 1889
Henry, Arthur G., 1888
Hester, Jeaffreson W., 1889
Higgins, Frederick Charles, 1897
Hinder, Henry V. C., 1889
Hollis, Leslie Thomas, 1890
Hughes, Michael O'Gorman, 1895
Hunt, Claude Leopold W., 1891
Kater, Norman William, 1898
Kelly, Patrick J., 1889
Kinross, Robert Menzies, 1894
Jackson, John William, 1895
Lancaster, Llewellyn Bentley, 1896
Lawes, Charles H. E., 1892
Leahy, John P. D., 1892
Lipscomb, Thomas Walter, 1898
Litchfield, William Frederick, 1893
Lister, Henry, 1892
Luker, Donald, 1894
McClelland, Walter Cecil, 1896
MacCreadie, John Laing Martin, 1894
McKay, William John, 1891
Mackinnon, Roger Robert S., 1894
MacPherson, John, 1898
Maitland, Herbert L., 1892
Menzies, Guy Dixon, 1896
Millard, Reginald Jeffrey, 1891
Mills, Arthur Edward, 1889
Morton, Gavin, 1890
Morton, John, 1890
Murray, George Lathrop, 1894
Neill, Leopold E. F., 1890
Newton, Alice Sarah, 1898
Nolan, Herbert Russell, 1890
Oakes, Arthur, 1881§
O'Connor, Arthur Charles, 1896
O'Keefe, John James, 1898
Pain, Ernest Maynard, 1897
Park, Joseph, 1892
Perkins, Alfred E., 1888
Pockley, Frank Antill, 1888§
Pulleine, Robert Henry, 1898
Purser, Cecil, 1890
Read, William Henry, 1898
Richards, Samuel J., 1893
Robison, Erskine Hugh, 1896
Rutledge, David D., 1888
Sawkins, Frederick John T., 1892
Scot-Skirving, Robert, 1888§
Scott, Edward Henry, 1893
Shaw, Frederick C. S., 1892
Sheldon, Herbert, 1898
Sheldon, Stratford, 1896
Sheppard, Arthur Murray, 1890
Spark, Ernest James T., 1895
Stacy, Harold Skipton, 1898
Stanley, George Percival, 1891
Stevens, William Woodburn, 1898
Stokes, Edward Sutherland, 1891
Studdy, William Bradridge, 1895
Sweet, Geoffrey Bruton, 1893
Terrey, Hedley, 1897
Tidswell, Frank, 1892
Throsby, Herbert Zouch, 1898
Townley, Percy Langford, 1890
Trindall, Richard B., 1889
Vallack, Arthur Styles, 1893
Veech, Michael, 1894
Wade, Robert Blakeway, 1896
Walton, William Bain, 1898
Wassell, Joseph Leathom, 1897
Zlotkowski, Frederic Sobieski Wladimir, 1896

§ Admitted *ad eundem gradum*.

MASTERS OF SURGERY.

Abbott, George Henry, 1891
Affleck, Ada C., 1898
Armstrong, William G., 1888
Bancroft, Peter, 1888
Barnes, Edmund Horatio, 1897
Bennetts, Harold Graves, 1896
Biffin, Harriett Eliza, 1898
Binney, Edward Harold, 1893
Boelke (*née* Robinson), Grace Fairley, 1893
Boelke, Paul, 1893
Böhrsmann, Rudolph Hermann, 1894
Carlile-Thomas, Julia, 1898
Challands, Frederick, 1892
Coghlan, Iza Frances Josephine, 1893
Cooley, Percy Glover, 1898
Corlette, Cyril Ernest, 1892
Cosh, John Inglis Clark, 1897
Craig, Robert Gordon, 1894
Crawley, Aubrey Joseph C., 1896
Davidson, Leslie G., 1888
Dey, Robert, 1898
Dick, Robert, 1892
Dixon, Graham Patrick, 1897
Dunlop, Norman John, 1896
Ellis, Lawrence Edward, 1898
Farrell, Robert Meredith, 1897
Flashman, James Froude, 1894
Fordyce, Henry St Clair, 1895
Freshney, Reginald, 1892
Hall, Edwin Cuthbert, 1898
Hall, George R. P., 1895
Halliday, John Charles W., 1896
Handcock, Charles Lancelot, 1894
Harris, Lawrence Herschell L., 1896
Harris, William Henry, 1897
Henderson, John Niven, 1893
Henry, Arthur, 1889
Henry, Arthur G., 1888
Hester, Jeaffreson W., 1889
Higgins, Frederick Charles, 1897
Hinder, Henry V. C., 1889
Hollis, Leslie Thomas, 1890
Hunt, Claude Leopold W., 1891
Jackson, John W., 1895
Kater, Norman William, 1898
Kinross, Robert Menzies, 1894
Lawes, Charles H. E., 1892
Leahy, John P. D., 1892
Lipscomb, Thomas Walter, 1898
Luker, Donald, 1894
MacCreadie, John Laing Martin, 1894
McClelland, Walter Cecil, 1896
McDonnell, Æneas J., 1889
McKay, William John S., 1891
Mackinnon, Roger R. S., 1894
MacPherson, John, 1898
Maitland, Herbert L., 1892
Menzies, Guy Dixon, 1896
Millard, Reginald Jeffrey, 1891
Mills, Arthur Edward, 1889
Morton, Gavin, 1890
Morton, John, 1890
Murray, George Lathrop, 1894
Neill, Leopold E. F., 1890
Newton, Alice Sarah, 1898
O'Connor, Arthur Charles, 1896
Pain, Ernest Maynard, 1897
Park, Joseph, 1892
Perkins, Alfred E., 1888
Purser, Cecil, 1890
Read, William Henry, 1898
Richards, Samuel J., 1896
Robison, Erskine Hugh, 1896
Rutledge, David D., 1888
Sawkins, Frederick John T., 1892
Scott, Edward Henry, 1893
Shaw, Frederick C. S., 1892
Sheldon, Herbert, 1898
Sheldon, Stratford, 1896
Sheppard, Arthur Murray, 1890
Smith, Grafton Elliott, 1893
Spark, Ernest J. T., 1895
Stacy, Harold Skipton, 1898
Stanley, George Percival, 1891
Stokes, Edw. Sutherland, 1891
Studdy, William B., 1895
Sweet, Geoffrey Bruton, 1893
Tidswell, Frank, 1892
Townley, Percy Langford, 1890
Trindall, Richard B., 1889
Vallack, Arthur Styles, 1893
Veech, Michael, 1894
Walton, William Bain, 1898
Wassell, Joseph Leathom, 1897
Zlotkowski, Frederic Sobieski Wladimir, 1896

BACHELORS OF SCIENCE.

Bennett, Agnes Elizabeth L., 1894
Brearley, Joseph Henry Draper, 1894
Brennan, Sarah Octavia, 1898
Burfitt, Walter Fitzmaurice, 1898
Corbin, Albert George, 1895
Crane, John T., 1887
Davis, Agnes Marianne Harrison, 1898
Dunlop, Norman John, 1895
Flashman, James Froude, 1893
Fletcher, Archibald W., 1888
Forde, James, 1893
Hall, George Reginald Percy, 1893
Horton, Marion Charlotte, 1897
Hughes, Michael O'Gorman, 1893
Hunt, Fanny E., 1888
Leverrier, Frank, 1885
MacMaster, Donald Æneas Dunlop, 1897
McClelland, Walter Cecil, 1894
McKay, William J. S., 1887
MacPherson, John, 1896
Pollock, James Arthur, 1889
Robison, Erskine Hugh, 1894
Ross, William John Clunies, 1891§
Sheldon, Stratford, 1894
Shirley, John, 1887§
Watt, John Alexander, 1894
Wood, E. Clarence, 1885
Woolnough, Walter George, 1898

MASTERS OF ENGINEERING.

Bradfield, John Job Crew, 1896
Dare, Henry Harvey, 1894
Vicars, James, 1892

BACHELORS OF ENGINEERING.

(Civil Engineering.)

Amphlett, Edward Albin, 1889
Amphlett, Henry Martin, 1897
Arnott, Robert Fleming, 1895
Barraclough, Saml. Hy., 1892
Birch, William John, 1891
Bowman, Archer, 1889
Boyd, Robert James, 1898
Brearley, Joseph Henry D., 1895
Bucknell, Louis Geoffrey, 1891
Colyer, Moreton John Godden, 1896
Craig, Alex. Donald, 1895
Deane, Henry James, 1897
Doak, Walter James, 1895
Fitz, Norman V., 1888
Hayley, Percy Reginald, 1893
Hole, William Francis, 1896
Jackson, Clements F. V., 1895
Ledger, William Henry, 1893
McTaggart, Norman J. C., 1892
Merewether, Edward A. M., 1885
Roberts, James Waller, 1892
Ross, Colin John, 1891§
Rowlands, Harold Berkeley, 1897
Rygate, Philip W., 1885
Sawyer, Basil, 1896
Seale, Herbert Percy, 1894
Shortland, William Arthur, 1897
Smail, Herbert Stuart Inglis, 1897
Stephens, Charles Thomas, 1892
Strickland, Tom Percival, 1897
Thompson, Wm. Mann, 1886
Wallach, Bernard, 1897
Ward, Thos. Wm. Chapman, 1886
Warren, Ernest William, 1897
White, Norman Frederick, 1894
Wood, E. Clarence, 1885
Wood, James Patrick, 1895
Woore, John Morris Simeon, 1896

(Mining Engineering.)

Black, Reginald Austin William, 1898
Dixon, James Thomson, 1895
Jenkins, Charles Warren B., 1895
Nardin, Ernest Willoughby, 1894
Palmer, Thomas Henry, 1898
Piddington, Francis Llewellyn, 1898
Reid, Norman, 1898
Simpson, Edward S., 1895
Twynam, Henry, 1896
Weigall, Arthur Raymond, 1894
Wilson, John Bowie, 1897

§ Admitted *ad eundem gradum*.

UNDERGRADUATES.

FACULTY OF ARTS.

FIRST YEAR.

Adams, Frances Lucy
Anderson, Virginia
Armstrong, Ina Beatrice Harvey
Armstrong, John Nicholas Fraser
Barton, Edward Maurice Darvall
Bowmaker, Jessie
*Bligh, Erasmus Algernon Robert
Bruce, Annie
Browne, Joseph Alexander
Bruce, Grace Mitchell
Buchanan, George Arthur
Calvert, Cecil Harnett
*Caro, Philip
Chalmers, George
Chambers, George Alexander
Connolly, Thomas Patrick
Crowley, Archibald
Dey, David Dewar
Dight, Clarence Charles
Docker, Alfred Brougham
De Lambert, Aurèle Wm. Labat
Dyer, Ernest Joseph
Ewing, Francis Peter
Fahey, Bartley Francis
Fiaschi, Carlo Ferrucio
Flowers, James
Freeman, Charles Cuthbert
Fry, Florence Mildred
Geale, William James
Gillespie, Arthur Paul
Godsall, Robert Spencer
Goergs, Karl Randolph
Gould, Hubert John
*Hall, Ernest Kingsbury
Hambley, William Herbert
Heery, David James
Henning, Cedric Thornton Biddulph
Hill, John Goodwin Watson
Holt, Edith Jane Katherine
Isitt, Kate Evelyn
Jarrett, Marjorie Kate
Mack, Augustus Charles
MacDonald, Sydney Gray
McEwen, Calveley Colleton
MacInnes, Angus
*Mackellar, Keith Kinnaird
Mackenzie, Morrison
Maclean, Charles Hector R.
Marks, Reginald Arthur
Mills, Elsie Ada Harland
Moseley, Arthur Henry
Noake, Reginald Robert
O'Reilly, John Francis
Osborne, Duncan Campbell
Osborne, Oliver Throsby
O'Sullivan, Eugene Francis
Palmer, Selina Elizabeth
Paxton, Betha
Perkins, Richard
Pitt, Arthur Gladstone Matchen
*Platt, Cecil Percival
Plomley, Reginald Clive
Poole, William
Power, Percy Horne
Renton, William John
Reynolds, Reginald Blair
Robson, Hilda
Rundle, George Walter
Ryan, James William
Skuthorpe, Garnett
Slattery, John Nagle
Stephenson, Anita Leila
Stoddart, Raymond
Stoyles, Herbert George
Studdy, Marguerite Mary Elizabeth
Suttor, Frederick Australis
Taylor, Thomas Manning
Todd, Frederick Augustus
Ure, Sarah Louisa
Vickery, Ebenezer Frank
Wall, Arthur Percy
Weston, Percy Leonard
White, Alfred Beecher Stewart
Wilson, David
Wilson, George Harry
Woodd, George Napoleon
Youdale, Ada Gertrude

* Unmatriculated.

SECOND YEAR.

Bailey, Margaret Anne
Boyd, William Sprott
*Brown, James Marshall
Brownlie, Elizabeth Alice Dalziel
Butler, Patrick James
Carlile-Thomas, Ella
Clark, Francis George
Crawford, Thomas Simpson
Eldridge, Ada Maitland
Fell, Catherine Isabella
Fleming, William Montgomerie
Frank, Mathilde Johanna Hilda
Gillam, Dora Alice
Griffith, Edward Percival Thomson
Heery, Thomas
Henry, Ada
Hill, James Henry Fraser
Hutchison, George Thomas
*Jones, Mabel Mary
Lehane, Thomas Joseph
McCook, William Henry
McGrath, Ernest John
McLintock, William Colin Scott
McMahon, William Daniel
Manning, Henry Edward
Merrington, Ernest Northcroft
Mutton, Isaiah
Newsham, Alice Isabel
Peterson, George Edward
Poidevin, Leslie Oswald Sheridan
Pratt, Walter Henry
*Riley, Percy Robert
Robson, Reginald Norman
Roseby, Sarah Mabel
Rutherford, Florence Marian
Rutherford, George Washington
Sadler, Alexander
Scrutton, Caroline Maude
Sheridan, Muriel Eulalie Bingham
Small, Ethel Ella
Smee, Reginald
Stephen, Henry Montagu
Thawley, Joseph
Turner, Emily May
Uther, Mary Handfield
Walker, Annie Letty
Ward, Leonard Keith
West, Edith Annie
Wilson, Gwendolene Lilian
Wilton, Edward Nowill
Young, James

THIRD YEAR.

Bonamy, Nellie Mildred Blanche
Buchanan, Charles Pakenham
Butler, Stanley William Beauchamp
Cadden, Leslie George Barton
Clipsham, Gertrude Mary
Cribb, Estelle Muriel Bridson
Curtis, William John
d'Apice, Antoine William M.
Davies, Edith Warlow
Durack, Jerry Joseph E.
Elphinstone, Elsie Mary
Galt, James
Hadley, Charles William
Lafferty, Terence Matthew
Lee, Thomas Nelson
Mackintosh, Bertha Adeline Hilda
MacLaurin, Henry Normand
Marr, Fannie Augusta
†Mitchell, Ethel Robertson, B.A
Nicholson, George Gibb
Page, Arthur Ernest
Parsons, Emily Waugh
Parsons, Joseph
Perkins, Frederick Thomas
Read, Elizabeth Jane
Sawkins, Dansie Thomas
Saywell, Thomas Stanley
Sinclair, Colin Archibald
Slack, Ida Leslie
Teece, Richard Clive
Tozer, Seymour Darvall
Turner, Annie Elizabeth
Verge, John
Walsh, John James
Williams, Leslie Ballesat
Williamson, Percy Leyden
Withycombe, Ernest John
Yarnold, Isabel May

* Unmatriculated. † Attending special course.

EVENING STUDENTS.

FIRST YEAR.

Artlett, William Langridge
*Campbell, Thomas Fraser
Fetherstone, Leslie
Fletcher, William Arnold
Graham, Albert Nelson
*Little, Vivian Agincourt Spence
Neale, Charles Norman
*Petersen-Schrader, Cyril Philip
*Smith, Richard Parry
Younger, Walter Laurie

SECOND YEAR.

Armitage, Charles Horsfall
Binns, William Johnstone
De Lepervanche, Eustace Mézières
Gough, Norman John
*Grieve, John Thomas
Jones, James Patteson
Maloney, John W.
Nolan, John Henry Monteith
Maxted, Henry Lewis
Walker, John William
Walsh, James Joseph

THIRD YEAR.

§Anderson, Catherine, B.A.
Clegg, William Carnegie
Damiano, Beatrice Ellinor
Day, Leo Septimus
Dickinson, Edward Moseley
Deane, Claude Smith
Grieve, Robert Henry
Liggins, Jessie Hunsdon
McEvoy, Bernard Patrick
Mulholland, John Joseph
§McLaren, Alexander Duncan, B.A.
Studds, Harold Augustus
Sullivan, Denis Joseph
Walton, George Henry Montague

FACULTY OF LAW.

FIRST YEAR.

Rogers, William Arnott Halse

THIRD YEAR.

Buchanan, Charles Pakenham
Butler, Stanley William Beauchamp
Byrne, James Kevin, B.A.
Clegg, William Carnegie
Connellan, John, B.A.
d'Apice, Antoine William M.
Davidson, Colin George Watt
Dick, William Thomas, B.A.
Evans, Ada Emily, B.A.
Evans-Jones, David Pentland, B.A.
Holliday, Andrew, B.A.
Lafferty, Terence Matthew
Pilcher, Norman Geo. Stafford, B.A.
Saywell, Thomas Stanley
Swanwick, Kenneth Ffoulkes, B.A.
Tozer, Seymour Darvall

FOURTH YEAR.

Broderick, Cecil Thomas Hawkes, B.A.
Craig, Charles, B.A.
Dettmann, Herbert Stanley, B.A.
Forsyth, Walter George, B.A.
Monahan, William Willis, B.A.
Warren, Ernest William, B.A., B.E.

FIFTH YEAR.

Barraclough, Francis Egerton, B.A.
Bloomfield, William John, B.A.
*Gaden, Leslie David
Kilgour, Alexander James, B.A.
Mitchell, Ernest Meyer, B.A.
Sullivan, Reginald, B.A.
Waddell, George Washington, B.A.
Wallace, Frank Ernest, B.A.

* Unmatriculated. § Attending special course.

FACULTY OF MEDICINE.

FIRST YEAR.

Aiken, Percy Norman
Clifford, James Percy
Clouston, Thomas Bennett
Cook, Sydney Leicester, B.A.
Cowlishaw, Leslie
Dansey, St. John Warburton
Davis, James Shedden
Dight, Arthur Raworth
Doyle, William Oscar
Finckh, Alfred Edmund
Fitzpatrick, Bernard Joseph, B.A.
Fox, Hedley Ebenezer
Higgins, Thomas Edward Charles
Hipsley, Percy Leslie
Johnson, Albert Francis
Johnston, Langloh Parker
Jones, Horace Arnold
Latham, Oliver
Mansfield, Walter Charles
Marsh, Harold Seaward
Mason, Thomas William
Mooney, Charles James
Newman, Ernest Ludlow
Osborne, John King
Patterson, Calrossy Charlotte
Plomley, Morris James
Riley, Spencer Birkenhead, B.A.
Sharp, Granville Gilbert
Smith, Stewart Arthur
Speare, Ernest Loftus
Stiles, Bernard Tarlton
Suckling, Frank Martin
Thomson, Jack Mowbray
Thomson, Jean Graeme
Vernon, Murray Menzies
Walton, John Francis
Woolnough, Robert Edmund

SECOND YEAR.

Adams, Francis Charles
Blaney, Henry Patrick
Bond, Lionel Wilfred
Bourne, Eleanor Elizabeth
†Bradley, John Houghton
Cahill, John Hampton
Carlile-Thomas, Ida Margaret
Conroy, Lionel Bigoe Henzell
Corfe, Anstruther John
Dight, Wilfred Billingsley
Elworthy, William Henry
Fitzpatrick, Edward Bede Lucien
Hansard, Norman William
Horton, William Henry
Holland, John Joseph
Humphery, Esca Morris
Johnson, Frederick James
Kendall, Herbert William
Langton, William Digan
Le Fevre, John Speechley
Llewellyn, Rees Frank
Miller, Robert Christy
Muscio, Allan
Page, Earle Christmas Grafton
Rees, Walter Llewellyn
Sadler, Henry Frank
Seldon, William
Tudor-Jones, Evan
Ure, Edith
Vivers, George Arthur
Wallace, Donald, B.A.
Watson, James Frederick
White, Margaret Isabel
Waugh, Richard

THIRD YEAR.

Anderson, Arthur
Anderson, Hugh Miller, B.A.
Barling, James Eric Vernon
Barton, John a'Beckett Darvall, B.A.
Bridge, Norbert Henry
Cameron, Donald Allan
Clarke, Gother Robert Carlisle
Combes, Edgar William Anthony
Cox, Harrie
Curtis, Albert
Garde, Henry Lee
Graham, Mabel Jessie
Greenham, Eleanor Constance
Griffiths, Frederick Guy, B.A.
Gullett, Lucy Edith

† Not passing through the regular course.

Hart, Basil Lloyd
Holt, Arthur Christian, B.A.
Jones, Philip Sydney
Lee, Henry Herbert
McCredie, Robert William
McDowall, St. Andrew Wm. Logan
Macintosh, Alexander Hay
Maffey, Reginald William H., B.A.
Pritchard, Alice, B.A.
Savage, Edward Joseph
Savage, Vincent Wellesley
Sharp, Walter Alexander Ramsay, B.A.
Stephen, Edgar Horatio Milner
Thomas, George Bowen
Webb, Fritz William

FOURTH YEAR.

Blue, Archibald Irwin
Burfitt, Walter Fitzmaurice, B.A., B.Sc.
Burge, Stephen Bruce
Busby, Hugh
Chisholm, Edwin Claude
Cleland, John Burton
Coen, Timothy Joseph
Davies, Reginald Laidlaw
Deck, John Northcote
Durack, William Joseph
Farrelly, John Thomas
Flashman, Charles Ernest
Forster, Redmond Clarence
Harris, Walter Eli
Holmes, Harry Glennie
King, Aubrey Arthur
Knight, Herbert James Percy
Lees, Geoffery John
McEvoy, John Joseph Stuart
McLean, George
Marr, Gordon W. S.
Oliver, William Reath
Paton, James Wright
Pockley, Eric Osbaldiston
Roseby, Edmund Rupert
Schwabe, James Harry
Tange, Frank Septimus

FIFTH YEAR.

Blackburn, Charles Bickerton
Brade, Gerald Francis
Brennand, Henry John Wolverton, B.A.
Cargill, William Duthie
Delohery, Henry Charles
Eichler, William Otto Heldmuth
Fairfax, Ernest Wilfred
Fletcher, Archibald William, B.A., B.Sc.
Hardman, Robert
Ludowici, Edward
Mackenzie, John
MacMaster, Donald Æneas Dunlop, B.A., B.Sc.
Magarey, Frank William Ashley
Marsden, Ernest Ambrose
Newton, William Thomas Joseph
Old, George Greensil
Roe, James Morris
Sandes, Francis Percival
Shorter, Herbert Leopold Ashton
Taylor, Charles James
West, Francis William
Windeyer, John Cadell
Willis, Charles Savill
Wilson, Thomas George

FACULTY OF SCIENCE.

FIRST YEAR.

*Couldery, Victor Carlton
*Cowles, Richard Edwin
*Davis, Una Carrie
Harris, Marian, B.A.
Heden, Ernest Charles, B.A.
Heery, Thomas
Jordan, George Edward Gustavus.
*Kinross, John James
*Meston, Leon Alexander
Mort, Harold Sutcliffe
Peterson, Arthur James
Petrie, James Matthew
Waterhouse, Gustavus Athol
Wilson, Richard Cunliffe
Woolnough, Robert Edmund

* Unmatriculated.

SECOND YEAR

*Buchanan, William Jameson | d'Apice, John Edmund F.

THIRD YEAR.

†Durack, Jerry Joseph E. | Harker, George
†Golding, Albert

Department of Engineering.

FIRST YEAR.

Boyd, Arthur | *Horsburgh, James
Boyd, William Sprott | *Joubert, Numa Ferdinand
Cameron, Colin Bowman | *Lyne, John
Delohery, Ernest Cecil | Macky, Robert Mitchell
Dight, Arthur Hilton | Myers, Harold Walter
Garry, John Joseph Patrick | Newman, James Malcolm
Gregson, William Hilder, B A. | Poole, William
Grut, Charles Frederick de Jersey | Potts, Cuthbert, B.A.
Heden, Ernest Charles, B.A. | Roseby, Leslie Samuel
Henning, Edmund Tregenna | Spier, Reginald Vincent

SECOND YEAR.

CIVIL ENGINEERING.

Horn, William Rowatt | Hunt, Theodore William
Hawken, Roger W. | Madsen, John Percival Vissing

MINING ENGINEERING.

Ball, Lionel Clive | Mort, Selwyn Robert
Barker, Reginald Frederick | Slee, Richard Thilthorpe
More, George Allan | Winton, Louis Joseph

THIRD YEAR.

CIVIL ENGINEERING.

Beaver, William Richard | Mathison, Walter Charter
Durack, Jerry Joseph E.

MINING ENGINEERING.

†Allen, Charles Peele | Morris, John Fossbrook
†Gibson, Charles George | Waterhouse, Gustavus Athol
Jack, Robert Lockhart

* Unmatriculated. † Not passing through the regular course.

AFFILIATED COLLEGES.

By the Act 18 Victoria, No. 37, provision is made for the Foundation of Colleges within the University in connection with the various religious denominations, in which students of the University may enjoy the advantages of residence, instruction in the doctrine and discipline of their respective Churches, and tuition supplementary to the lectures of the University Professors.

No student can be admitted to any such College unless he immediately matriculates in the University, submits to its discipline, and attends the statutory lectures; nor can he continue a member of the College longer than his name remains upon the University books.

ST. PAUL'S COLLEGE.

Incorporated by an Act 18 Victoria, in connection with the Church of England. In the terms of the Act the Visitor is the Archbishop of Sydney. The Corporation consists of a Warden, who must be in Priests' Orders, and eighteen Fellows, six of whom must be in Priests' Orders, and the remainder must be laymen. The Fellows, with the Warden, form the Council in which the Government of the College is vested.

VISITOR.

THE LORD ARCHBISHOP OF SYDNEY.

WARDEN.

The Rev. Canon William Hey Sharp, M.A., Th.Soc.

VICE-WARDEN.

J. B. Peden, B.A., LL.B.*

BURSAR.

F. B. Wilkinson, M.A.

* University Medal for Law, 1898.

FELLOWS.

Norton, Hon. J., M.L.C., LL.D.
Günther, Ven. Archdeacon, M.A.
Stephen, Hon. S. A., M.L.C.
Cox, Hon. G. H., M.L.C.
Weigall, A. B., M.A.
Jenkins, E. J., M.D.
Simpson, Mr. Justice A.H., M.A.
Chisholm, W., M.D.
Backhouse, His Hon. Judge, M.A.
Robson, E. I., M.A.
Abbott, Hon. Sir J. P., M.L.A.
Wilkinson, F. B., M.A.
Stanton, Right Rev. G. H., D.D., Bishop of Newcastle.
Abbott, Rev. T. K., B.A.
Millard, G. W., M.A.
Champion, Rev. A. H., M.A.
Carr Smith, Rev. W. I.
Corlette, Rev. Canon, J. C., D.D.

M.A.

Rogers, F. E.
Cowlishaw, W. P.
Bowden, J. E.
Cowper, S. S.
Want, R. C.
Bowman, A.
Stephen, C. B.
Innes, G. A. C.
Long, G. E.
Manning, W. A.
Watson, W.
Faithfull, W. P.
Purves, J. M.
Faithfull, H. M.
Kemp, R. E.
Liddell, A. I.
Pring, R. D.
Powell, T.
Lee, W.
Dawson, A. F.
Taylor, Rev. H. W.
Campbell, Rev. J.
Hills, H.
Wilkinson, F. B.
Russell, F. A. A.
Millard, G. W.

B.A.

Hargraves, E. J.
Hunt, E.
Sharpe, E.
Greenway, A. R.
Dargin, S.
Blacket, A. R.
Riley, V. B.
Campbell, A.
Morrice, J.
Thallon, J. B.
Wilson, Rev. R.
Noake, Rev. R.
Forster, C. E.
Bundock, F.
Buckland, T.
Elder, Rev. F. R.
Bundock, C. W.
Feez, A.
Tange, C.
Wilkinson, H. L.
Piddington, A. B.
Baylis, H. M.
Street, P. W.
Merewether, E. A. M.
Macansh, A. W.
Clarke, Rev. F. W.
Millard, A. C.
Trindall, R. B.
Jenkins, Rev. C. J.
Woodd, Rev. H. A.
Abbott, Rev. T. K.
Bode, Rev. A. G. H.
Britten, H. E.
Newton, Rev. H.
D'Arcy-Irvine, M. M.
McIntosh, H.
Roseby, T. E.
Blacket, Rev. C.
Uther, A. H.
Stephen, E. M.
Doak, F. W.
Windeyer, R.
Armstrong, T. de C.
Russell, C. T.
Peden, J. B.
Helsham, C. H.

NOTE.—The Warden will be glad to receive information tending to complete or correct the list of Graduates who have passed through the College.

Tighe, W.
Williams, J. L.
Rutter, G. F.
Abbott, H. P.
Dove, W. N.
Dowe, Rev. P. W.
Thomas, Rev. R. W.
Waldron, T. W. K.
Wood, H. D.
Merewether, H. H. M.
Cakebread, W. J.
Kater, H. H.
Rowland, N. de H.
Merewether, W. D. M.
Holt, A. C.
Maxwell, H. F.
Barton, J. A'B. D.
Castling, J. R.
Chubb, M. C. L.
Hobbs, E.
Blaxland, H. C.
Campbell, Rev. J., M.A.
Houison, S. J.
Gregson, W. H,
Pilcher, N. G. S.
Evans Jones, D. P.*
Brown, G. E.

LL.B.

Uther, A. H.
Waldron, T. W. K.
Tighe, W.
Wood, H. D.
Peden, J. B.
Merewether, H. H. M.
Merewether, W. D. M.

M.D.

Chisholm, W.
Corlette, C. E.

M.B. and Ch.M.

Armstrong, W. G.
Bancroft, P.
Hester, J. W.
Hunt, C. L. W.
Millard, R. J.
Scott, E. H.
Spark, E. J. T. S.
Rutter, G. F.
Burkitt, E. H.
Bode, F. F. O.
Kater, N. W.

B.E.

Merewether, E. A. M.
White, N. F.
Sawyer, B.

B.Sc.

Crane, J. T.
McKay, W. J.
Rutter, G. F.

STUDENTS.

Barton, E. M. D.
Gregson, W. H., B.A.
Hart, B. L.
Ludowici, E.†
Marsh, H. S.
Mutton, I.
Osborne, J. K.
Osborne, O. T.
Perkins, F. T.
Pilcher, N. G. S., B.A.‡
Sharp, G. G.§
Rutherford, G. W.
Stephen, H. M.‖
Verge, J.
Watson, J. F.
White, A. B. S.
Wood, G. N.¶

* University Medal for Classics, 1898. † Lithgow Scholarship, 1894.
‡ Lithgow Scholarship, 1895; Frazer Scholarship, 1898; University Medal for Logic and Mental Philosophy, and Prize for Philosophy, 1898.
§ Morehead Exhibitioner. ‖ Salting Exhibitioner. ¶ Queensland Exhibitioner.

ENDOWMENTS AND PRIZES.

1.—Edward-Aspinall Scholarship. — This Scholarship is awarded to a student of the Second Year who shall have taken at least a second class in the University Examinations, and shall have been placed in the first class in the Annual College Examination in Divinity. The principal is £500.

2.—Kemp Scholarship.—The sum of £400 was bequeathed to the Warden and Fellows by the late Mrs. C. Kemp, to found a Scholarship in memory of her husband, the late Rev. C. Kemp.

3.—Augusta Priddle Memorial Scholarship.—The sum of £600 was paid to the Warden and Fellows by the late Rev. C. F. D. Priddle, to found a memorial Scholarship. The scholarship is tenable for three years, and is awarded to a resident student who intends to take Holy Orders, and is the son of a clergyman licensed in N. S. Wales.

4.—Starling Foundation.—The sum of £1000 has been paid to the Warden and Fellows to form a foundation for the assistance of resident students who intend to take Holy Orders.

5.—Henry William Abbott Scholarship.—The sum of £1000 has been paid to the Bishop of Sydney under the will of the late T. K. Abbott, Esq., the interest of which is appropriated for the maintenance of a Scholarship, to be held by a resident student who is preparing to take Holy Orders.

6.—Mitchell Prize.—This Prize was founded by the late Hon. James Mitchell. Books to the value of £10 are awarded to the Bachelor of Arts of the College who shall, within twelve months after taking that Degree, pass the best examination (of sufficient merit) in the doctrines and history of the Church of England.

7.—A Prize of books is given by the Council to the student who shows the greatest proficiency in the College Divinity Examination.

ST. JOHN'S COLLEGE.

Incorporated by Act 21 Victoria, in connection with the Roman Catholic Church. In the terms of the Act, the Visitor is the Roman Catholic Archbishop of Sydney. The Corporation consists of a Rector (who must be a duly approved Priest), and eighteen Fellows, of whom six must be duly approved Priests,

and twelve Laymen. These eighteen Fellows, with the Rector, form the Council, in which the government of the College is vested.

VISITOR.

THE ROMAN CATHOLIC ARCHBISHOP OF SYDNEY.

1894.—His Eminence Cardinal Moran.

THE PRESENT SOCIETY.

RECTOR.

The Right Rev. Monsignor O'Brien.

FELLOWS.

Clune, M. J., M.A.
Dalton, G. T., M.A.
Donovan, John J., LL.D.
Flynn, J. E., M.A.
Freehill, F. B., M.A.
Gallagher, Very Rev. J.
Heydon, The Hon. C.
Healy, Very Rev., Dean
Kelly, T., B.A.
Le Rennetel, Very Rev. P., S.M.
Maher, W. Odillo, M.D.
Manning, Sir W. P.
Mullins, J. L., M.A.
Sheehy, The Very Rev. Dr., V.G.
Slattery, T., K.C.S.G.
Toohey, J., K.C.S.G., M.L.C.

M.D.

Maher, W. Odillo.

M.B., Ch.M.

Crawley, A. J. C.
Newell, B. A.
Veech, M.

M.B.

Lister, H.

LL.D.

Coghlan, C. A.

LL.B.

Edmunds, W.
Toole, J. A.
Veeeh, L.
Watt, A. R. J.

M.A.

Brennan, F. P.
Coghlan, C. A.
Clune, M. J.
Dalton, G. T.
Flynn, J. E.
Flynn, J. A.
Freehill, F. B.
Healy, P. J.
Mullins, J. L.
O'Connor, Richard E.
O'Mara, M.
Quirk, Rev. D. P.
Walsh, W. M. J.

B.A.

Browne, W. C.
Butler, T.
Butler, F. J.
Callachor, Rev. H. B.
Casey, M.
Connellan, J.
Corbett, W.
Coffey, F. L. V.
Cullinane, J. A.
Daley, F. H.

B.A.—*continued.*

Enright, W. J.
Flynn, W. F.
Fitzpatrick, T. J. A.
Gorman, J. R.
Higgins, M. A.
Kelly, T.
Kenna, P. J.
Leverrier, F.
Leahy, J. P.
Lynch, W.
Lloyd, T.
Macnamara, P. B.
McNevin, T.
Maher, M. E.
Maher, C. H.
Mayne, J.
Mayne, W. M.
M'Donagh, J.
McEvilly, A.
McEvilly, U.
McGuinn, D.
Meagher, L. F.
Meillon, J.
Moloney, T. P.
Morris, J. M.
O'Brien, P. D.
O'Donohue, J. P. M.
O'Keefe, J. A.
Sheridan, F. B.
Shorthill, J. R.
Sullivan, H.
Sullivan, J. J.
Swanson, E. C.
Tole, J. A.
Veech, L. S.
Watt, A. R. J.

UNDERGRADUATES.

Blaney, H. P.
Clifford, J. P.
Connolly, T. P.
Durack, J. J.
Elworthy, W. H.
Fahey, B.
Farrelly, J. T.
Fitzpatrick, E. B.
Garry, J. J. P.
Godsall, R.
Heery, T.
Johnson, A. F.
Lehane, T. J.
Marsden, E. A.
Power, P.
Walsh, J. J.

LECTURERS.

Sacred Scripture	The Rev. the Rector.
Logic and Geology	Rev. C. O'Connell, S.J.
Classics	J. Carlos, B.A.
Mathematics	H. de B. O'Reilly, B.A.

ENDOWMENTS AND PRIZES.

The O'Connell Scholarship (value £44).—Open for competition to resident students who have newly matriculated in 1879 and the years following. (Subscribers—Sir P. A. Jennings, K.C.M.G., and others.) The origin of this Scholarship was the O'Connell Centenary Celebration.

Fahey, B.

The Dunne Scholarship (value £44).—Donor—the late Very Rev. P. Dunne, D.D., of Hobart.

Power, P.

ST. ANDREW'S COLLEGE.

Incorporated by Act of Parliament, 31 Victoria, in connection with the Presbyterian Church of New South Wales. The Moderator for the time being of the General Assembly of the Presbyterian Church is Visitor. The Corporation consists of a Principal, who must be a duly ordained Presbyterian Minister, holding and prepared to subscribe (when called upon to do so) the Standards of the Presbyterian Church of New South Wales, and twelve Councillors, of whom four, but not more, must be ordained Ministers of the same Church. These twelve Councillors, with the Principal, form the Council, in which the government of the College is vested.

VISITOR.

THE MODERATOR OF THE GENERAL ASSEMBLY.
The Right Rev. John Burgess, M.A.

PRINCIPAL.

The Rev. John Kinross, B.A., D.D. (Edin.).

MATHEMATICAL LECTURER.

Wyndham J. E. Davies, B.A., LL.B.

HON. TREASURER.

J. T. Walker.

SECRETARY.

William Wood.

COUNCILLORS.

Bowman, E., M.A., LL.B.
Cameron, Rev. James, M.A., D.D.
Campbell, John
Clouston, Rev. T. E., B.A.
Cosh, Rev. J., M.A., D.D.
Dymock, D. L.
Fuller, G. W., M.A.
Garland, John, M.A., LL.B.
Geikie, Rev. A. C., D.D., LL.D.
Goodlet, John Hay
Hay, John, LL.D.
Walker, J. T.

TRUSTEES.

Anderson, H. C. L., M.A.
MacLaurin, Hon. H. N., M.D., LL.D.
Bowman, Arthur, B.A.
Thomson, Dugald
Walker, J. T.

M.A.

Anderson, H. C. L.
Cohen, J. J.
Cribb, J. G.
Flint, C. A.
Fuller, G. W.
Hill, Rev. Thomas
Jackson, Rev. R.
Kay, Rev. Robert
Mann, W. J. G.
Marrack, J. R. M.
Moore, Rev. S.
Perkins, A. E.
Ralston, A. G.
Rygate, P. W.
Smairl, J. H.
Steel, Rev. Robert.
Thompson, J. A.
Waugh, Rev. Robert

M.B. and Ch.M.

Davidson, Leslie G.
Dick, Robert
Freshney, Reginald
Henderson, J.
Hollis, Leslie T.
Kinross, R. M.
Perkins, A. E.
Purser, C.
Sheppard, A. M.
Stokes, Edward S.
Townley, Percy L.

LL.B.

Gill, A. C.
Walker, J. E.

B.A.

Anderson, W. A. S.
Auld, J. H. G.
Barnet, Rev. Donald
Beegling, D. H.
Bowman, Alister S.
Bowman, Arthur
Bowman, Ernest
Campbell, C. R.
Cameron, A. P.
Copland, F. F.
Cosh, Rev. J., B.D.
Craig, A. D.
Crane, Rev. C.
Dettman, H. S.
Dick, J. A.
Dick, W. T.
Doig, A. J.
Dudley, J. T.
Edwards, J.
Edwards, D. S.
Edwards, E. E.
Elphinstone, James
Gill, A. C.
Gordon, G. A.
Halliday, G. C.
Hunt, Harold W. G.
Hunter, T. B.
Jamieson, S.
Kinross, R. M.
Linsley, W. H.
Lyon, Pearson
McCook, A. S.
McLelland, Hugh
Johnston, J.
McManamey, James F.
McNeil, A.
Manning, R. K.
Miller, Rev. R.
Moore, J.
Munro, W. J.
Nelson, D. J.
Paine, Bennington H.
Parker, W. A.
Perkins, J. A. R.
Perské, H.
Pope, Roland J.
Prentice, A. J.
Purser, Cecil
Quigley, J.
Ramsey, J. A.
Ralston, A. G.
Rygate, C. D. H.
Rygate, H. B.
Shand, A. B.
Sheppard, E. H.
Somerville, G. B.
Stacy, F. S.
Stewart, A.
Swanwick K. ff.
Thornburn, Rev. J. T.
Townley, Percy L.
Vivers, A. J. L.
Waddell, G. W.
Walker, J. E.
Walker, S. H.
White, Rev. C. A.
Whitfeld, H. E.
Woodward, F. P.

M.E.

Bradfield, John J. C.

B.E.

Bowman, Archer
Rowlands, H. B.

STUDENTS IN RESIDENCE.

Blue, A. I.
Boyd, A.
Cameron, C. B.
Cameron, D. A.
Chalmers, G.
Crawford, T. S.
Davies, R. L.
Griffiths, F. G.
Griffith, E. P. T.
Horn, W. R.
Jack, R. L.
Jones, H. A.
King, A. A.
Knight, H. J. P.
McDowall, St. A. W. L.
Renton, W. J.
Savage, Vincent W.
Teece, R. Clive
Thomson, J. M.
Tozer, S. D.

NON-RESIDENT.

Auld, J. H. G. (Divinity
Merrington, E. N. (2nd Arts)

ENDOWMENTS AND PRIZES.

I.—SCHOLARSHIPS.

1.—Bowman Scholarship.—A sum of £1000 was bequeathed in 1873, by the late Robert Bowman, Esq., M.D., of Richmond, for the foundation of a Scholarship.

2.—Frazer Scholarship.—In 1884, a sum of £1000 was bequeathed by the late Hon. John Frazer, M.L.C., for a Scholarship.

1898—John H. G. Auld, B.A. (Divinity)
E. N. Merrington (2nd Year)
George Chalmers (1st Year)

3.—The Gordon Scholarship.—A sum of £1000 was given in 1882, by the late S. D. Gordon, Esq., M.L.C., for the foundation of a Scholarship for students who have taken the B.A. Degree, or first class in Classics (Second Year).

1898—R. Clive Teece

4.—The Lawson Scholarship.—A sum of £1000 (in bank shares) was bequeathed in 1882, by the late George Lawson, Esq., of Yass, for the foundation of a Scholarship for students who have taken the B.A. Degree.

5.—The Struth Scholarship.—A sum of £1000 was given in 1884, by J. Struth, Esq., for the foundation of a Scholarship.

1898—T. S. Crawford
W. J. Renton

6.—The Horn Scholarships.—In 1883, the late Mr. John W. Horn, of Corstorphine, Edinburgh, bequeathed eighty shares of the A.G. Co., to found three Scholarships.

1898—S. D. Tozer.

7.—The Coutts Scholarship.—In 1884, the sum of £1000 was bequeathed by the late Rev. James Coutts, M.A., of Newcastle, for the foundation of a Scholarship. A student of the name of Coutts to have preference.

1898—F. G. Griffiths
W. R. Horn
A. Boyd

8.—The late Rev. Colin Stewart, M.A., in 1886, bequeathed his property to the College in trust for (among other objects) the founding of Scholarships.

9.—Cooerwull Scholarship.—£25 per annum to ex-students of Cooerwull Academy.

II.—Prizes.

1.—The Dean Prize.—A sum of £100 was given in 1879 by Alexander Dean, Esq., for the Foundation of an Annual Prize for General Excellence.

2.—Frazer Prize of £25, for Modern History.

1891—Parker, W. A.
1892—A. C. Gill, J. E. Walker } æq.
1893—A. C. Gill, J. E. Walker
1894—C. A. White
1895—A. J. Doig, G. W. Waddell } æq.
F. G. Griffiths (2nd)

Of the above Scholarships, the Frazer, Gordon, and Lawson are restricted to students for the Ministry of the Presbyterian Church. A first class in Classics or Mathematics, at the University Examinations, is a necessary qualification for the Gordon, but not for any of the other Scholarships.

THE WOMEN'S COLLEGE.

Incorporated by Act 53 Vict., No. 10, and not attached to any religious denomination. In the terms of the Act the Visitor is the Chancellor of the University, or in his absence, the Vice-Chancellor. The Corporation consists of the Principal, who must be a woman, and twelve elected Councillors, of whom four at least must be women, and two *ex-officio* Councillors, nominated by the Senate of the University. The Councillors, with the Principal, form the Council in which the Government of the College is vested.

According to the Act of Incorporation, the Women's College is a College within the University of Sydney, wherein may be

afforded residence and domestic supervision for women students of the University, with efficient tutorial assistance in their preparation for the University Lectures and Examinations. All students in the College not already matriculated shall, as soon as shall be practicable, matriculate in the University, and shall thereafter be required duly to attend the lectures of the University in those subjects, an examination and proficiency in which are required for Degrees, with the exception, if thought fit by any such student, of the Lectures on Ethics, Metaphysics and Modern History.

The Women's College is strictly undenominational, the Act of Incorporation providing "That no religious catechism or formulary, which is distinctive of any particular denomination, shall be taught, and no attempt shall be made to attach students to any particular denomination, and that any student shall be excused from attendance upon religious instruction or religious observances on express declaration that she has conscientious objections thereto."

The College fees are as follow:—

Resident Students.—£21 for each University Lecture Term, with £2 2s. a week for residence during vacation.

The fee of £21 for the Lecture Term covers all College dues, including fire and light.

The Council provides all necessary furniture, but each student may arrange and add to the furniture in her room as she pleases.

Non-Resident Students.—Term fee, £4 4s., or £12 12s. per annum.

VISITOR.

THE CHANCELLOR OF THE UNIVERSITY.

PRINCIPAL.

Miss L. Macdonald, M.A. (London)

COUNCILLORS.

Hon. W. P. Cullen, LL.D. (*ex officio*)
Miss Fairfax
Garran, R. R., B.A. (Hon. Sec.)
Mrs. H. E. Kater
Miss Macdonald, M.A.
Lady Manning
Rich, G. E., M.A.
Sir Arthur Renwick, B.A., M.D. (*ex officio*)
Miss J. F. Russell, M.A.
Scott, Professor, M.A. (Chairman)
Teece, R., F.I.A.
Walker, J. T. (Hon. Treasurer)
Wilson, Professor, M.B., Ch.M.
Miss Woolley

B.A.

Anderson, Maud E.
Cordingley, Grace
Dunnicliff, Mary C.
Fitzhardinge, Maude Y.
Harker, Constance E.
Hill, Evelyn M.
Lance, E. A.
Montefiore, Hortense H
Roseby, Minnie
Saunders, E. F.
Uther, J. B.
Whitfeld, Eleanor M.

B.Sc.

Horton, Marion C.

UNDERGRADUATES IN RESIDENCE.

Armstrong, I. B. H.
Bourne, Eleanor
Brownlie, E. A. D
Cribb, Estelle
Fell, Catherine
Greenham, Eleanor C.
Holt, Edith J. K.
Patterson, C. C.
Read, Elizabeth J.
Rutherford, F. M.
Stephenson, A. L.
Thomson, Jean G.
White, Margaret I.

EXHIBITIONS.

The Walker Exhibition.—An Exhibition of the value of £25, presented by Mrs. J. T. Walker, given to the student who on entering the College shows evidence of the highest attainments, provided that no student shall be eligible for the Exhibition unless she shall make it appear to the satisfaction of the Principal that she cannot, without such assistance, pay the expenses of residence in the College.

1892—Harker, Constance E.
1893—Montefiore, H. H.
1894—Saunders, Eva Florence
1895—De Lissa, Ethel N.

GRACE FRAZER SCHOLARSHIP.

The Grace Frazer Scholarship, of the value of £30 (being the interest of £1,000 invested in New South Wales Government Funded Stock), presented by Mrs. C. B. Fairfax, in memory of her late sister. Awarded upon conditions settled from time to time by the Council, but hitherto tenable for three years.

1892—Whitfeld, Eleanor Madeline
1895—Lance, Elisabeth A.
1898—Armstrong, Ina Beatrice Harvey

COUNCILLORS' SCHOLARSHIPS.

Two Scholarships, of £25 each, tenable for one year, presented by the Councillors, were awarded in Lent Term, 1893, on the results of the University Examinations.

1893—Harker, C. E.
Broad, A. W.

One Scholarship, of £25, tenable for one year, awarded on the same terms as the Walker Exhibition.

1895—Saunders, Eva F.
1896—Dunnicliff, Mary
1897—Read, E. J.
1898—Bourne, Eleanor

A Scholarship, of the value of £50, tenable for one year, presented by Miss Walker, of Yaralla, given on similar terms to the Walker Exhibition.

1895—Dunnicliff, Mary
1896—Read, Elizabeth J.
1897—Bourne, Eleanor E.
1898—Divided between Holt, E. J. K., and Stephenson, A. L.

PRINCE ALFRED HOSPITAL.

Established and maintained in accordance with the provisions of the "Prince Alfred Hospital Act," 36 Vic., and the "Prince Alfred Memorial Hospital Site Dedication Act," 36 Vic., No. 28.

The Hospital was framed as a general Hospital and Medical School for the instruction of students attending the Sydney University, and for the training of nurses for the sick.

The design was adapted to the site dedicated to the Hospital by the Government, aided by the co-operation of the Sydney University.

The Hospital is managed by a Board of fifteen Directors. The Chancellor of the University and the Dean of the Faculty of Medicine are Directors *ex officio*; three Directors are appointed by the Government, and the remaining ten are elected by the Governors and subscribers.

The Medical Officers are all appointed by a conjoint Board, consisting of the Senate of the University and the Directors of the Hospital. This conjoint Board likewise makes the By-laws regulating the mode in which the students shall have access to, and the course of studies to be pursued in the Hospital.

The University Lecturers in Medicine and Clinical Medicine are Honorary Physicians, the Lecturers in Surgery and Clinical Surgery are Honorary Surgeons, the Lecturer in Ophthalmic Medicine and Surgery is Honorary Ophthalmic Surgeon, and the Lecturer on Diseases of Women is Honorary Surgeon for Diseases of Women at the Prince Alfred Hospital.

All Physicians and Assistant Physicians must be Graduates in Medicine of the University of Sydney, or of some University recognised by the University of Sydney.

All Surgeons and Assistant Surgeons must possess a Degree in Surgery, or a Surgeon's diploma from some University or College of Surgeons recognised by the University of Sydney.

Clinical Lectures are delivered in accordance with the University curriculum. All Honorary and Resident Medical Officers are required to give such Clinical instruction to the Medical students as may be directed by the Conjoint Board.

PATRONS:

Her Majesty the Queen.
H.R.H. the Prince of Wales.
H.R.H. the Princess of Wales.
H.R.H. the Duke of Edinburgh.
H.R.H. the Duchess of Edinburgh.

DIRECTORS.

The Chancellor of the University of Sydney.
The Dean of the Faculty of Medicine.

James R. Fairfax, Esq.
Dr. Alfred Shewen
John F. Hoare, Esq.
Edward Knox, Esq.
Dr. James Graham, M.L.A.
The Hon. Henry E. Kater, M.L.C.
John Keep, Esq.
The Hon. Dr. Mackellar, M.L.C.
P. H. Moreton, Esq., M.L.A.
Sir Alfred Roberts
C. B. Stephen, Esq.
Professor Jas. T. Wilson
James T. Walker, Esq.

Honorary Treasurer: James R. Fairfax, Esq.

Honorary Secretary: Professor J. T. Wilson.

HONORARY CONSULTING PHYSICIANS.—P. Sydney Jones, M.D., (Lond.), Alfred Shewen, M.D. (Lond.).

HONORARY CONSULTING SURGEONS.—Sir Alfred Roberts, M.R.C.S. (Eng.), George T. Hankins, M.R.C.S. (Eng.).

HONORARY CONSULTING GYNÆCOLOGIST.—Jos. Foreman, L.R.C.P. (Edin.), M.R.C.S. (Eng.)

HONORARY PHYSICIANS.—James C. Cox, M.D. (Edin.); Robert Scot-Skirving, M.B., Ch.M. (Edin.); David Collingwood, M.D. (Lond.), F.R.C.S. (Eng.).

HONORARY SURGEONS.—Alexander MacCormick, M.D., Ch.M. (Edin.), M.R.C.S. (Eng.); Charles P. B. Clubbe, L.R.C.P. (Lond.), M.R.C.S. (Eng.); John F. McAllister, M.D., B.S. (Melb.).

HONORARY GYNÆCOLOGICAL SURGEONS.—Jos. Foreman, L.R.C.P. (Edin.), M.R.C.S. (Eng.); Edward T. Thring, F.R.C.S. (Eng.), L.R.C.P. (Lond.).

HONORARY OPHTHALMIC SURGEON.—F. Antill Pockley, M.B., Ch.M. (Edin.), M.R.C.S. (Eng.).

HONORARY ASSISTANT PHYSICIANS.—G. E. Rennie, M.D. (Lond.), M.R.C.S. (Eng.); Cecil Purser, M.B., Ch.M. (Syd.).

HONORARY ASSISTANT SURGEONS.—H. V. C. Hinder, M.B., Ch.M. (Syd.); Charles MacLaurin, M.B., Ch.M. (Edin.).

HONORARY ASSISTANT OPHTHALMIC SURGEON.—S. H. Hughes, F.R.C.S. (Eng.), L.R.C.P. (Lond.).

PATHOLOGIST.—G. E. Rennie, M.D. (Lond.), M.R.C.S. (Eng.).

MEDICAL TUTOR.—Edward Johnstone Jenkins, M.D. (Oxon.), M.R.C.P. (Lond.), M.R.C.S. (Eng.).

SURGICAL TUTOR.—H. V. C. Hinder, M.B., Ch.M. (Syd.).

MEDICAL SUPERINTENDENT.—F. J. T. Sawkins, M.B., Ch.M. (Syd.).

ANÆSTHETIST AND REGISTRAR.—E. M. Pain, M.B., Ch.M. (Syd.).

RESIDENT MEDICAL OFFICERS.—John Macpherson, M.B., Ch.M. (Syd.); R. H. Pulleine, M.B., (Syd.); N. W. Kater, M.B., Ch.M. (Syd.); L. E. Ellis, M.B., Ch.M. (Syd.); E. C. Hall, M.B., Ch.M. (Syd.); T. W. Lipscomb, M.B., Ch.M. (Syd.).

PRINCE ALFRED HOSPITAL.—MEDICAL SCHOOL.

Rules and Regulations for the Clinical Study and Training of the University Students of Medicine.

The Hospital shall be open to students for Clinical work, from 9 a.m. to 5 p.m. throughout the year.

In order to obtain the certificate of hospital practice necessary to qualify for admission to the Final Examination for the Degrees of Bachelor of Medicine and Master in Surgery of the University of Sydney, students are required to pass through the hospital curriculum of study and practice in the various departments according to the following scheme and time table of Clinical work.

The respective duties of all students, under the time table, shall be apportioned by the Medical Superintendent, and the necessary certificates will only be issued to those students who have shown punctuality, diligence, and efficiency in the performance of the duties assigned to them.

The Registrar shall report in writing to the Medical Superintendent each month as to the work done in his department by each Clinical Clerk and Surgical Dresser, and the Medical Superintendent shall obtain reports from the members of the Honorary and Resident Medical Staff concerning the character of the work done by the students under supervision.

The Medical Superintendent shall report to the House Committee upon the character of the work done by each fourth and fifth year student, at the first or second meeting after the end of each term.

Students attending the Hospital shall be arranged by the Medical Superintendent in four divisions in each year, A, B, C and D respectively, and a list of the names thus appointed to the various departments shall be hung up in the Board Room and the Entrance Hall of the Hospital.

Clinical Work Table.

FOURTH YEAR STUDENTS.

Group.	Long Vacation.	Lent Term.
A.	Casualty and Surgical Out Patients.	Surgical Ward Dressing. Clinical Surgery Lectures.
B.	Surgical Ward Dressing.	Casualty Dressing. Surgical Out Patients' Attendance.
C.	Attendance optional.	Surgical Ward Dressing. Clinical Surgery Lectures.
D.	Attendance optional.	Surgical Ward Dressing. Clinical Surgery Lectures.

Medical School.

FOURTH YEAR STUDENTS.

Group.	Trinity Term.	Michaelmas Term.
A.	Surgical Ward Dressing. Clinical Surgery Lectures.	Clinical Surgery Lectures (optional.)
B.	Surgical Ward Dressing. Clinical Surgery Lectures.	Surgical Ward Dressing (optional.) Clinical Surgery Lectures.
C.	Casualty Dressing. Surgical Out Patients' Attendance.	Surgical Ward Dressings. Clinical Surgery Lectures.
D.	Surgical Ward Dressing. Clinical Surgery Lectures.	Casualty Dressing. Surgical Out Patients' Attendance.

FIFTH YEAR STUDENTS.

Group.	Long Vacation.	Lent Term.
A.	Attendance optional.	Clinical Clerkship, General Medical Wards.
B.	Attendance optional.	Clinical Clerkship, General Medical Wards
C.	Clinical Clerkship, General Medical Wards. Clinical Clerkship, Gynæcological Ward. Medical Out Patients' Attendance.	Clinical Clerkship, General Medical Wards. Gynæcological Out Patients' Attendance
D.	Clinical Clerkship, General Medical Wards. Gynæcological Out Patients' Attendance	Clinical Clerkship, General Medical Wards. Clinical Clerkship, Gynæcological Wards. Medical Out Patients' Attendance.

Group.	Trinity Term.	Michaelmas Term.
A.	Clinical Clerkship, General Medical Wards. Clinical Clerkship, Gynæcological Ward. Medical Out Patients' Attendance.	Clinical Clerkship, General Medical Wards. Gynæcological Out Patients' Attendance.
B.	Clinical Clerkship, General Medical Wards. Gynæcological Out Patients' Attendance	Clinical Clerkship, General Medical Wards. Clinical Clerkship, Gynæcological Ward. Medical Out Patients' Attendance.
C.	Clinical Clerkship, General Medical Wards.	Attendance optional.
D.	Clinical Clerkship, General Medical Wards.	Attendance optional.

It shall be the duty of each Clinical Clerk to take the history of every patient admitted to the beds placed under his charge within forty-eight hours of admission, and to make all needful periodical reports upon the progress, symptoms, treatment, and results of each case.

It shall be the duty of each Surgical Dresser to take the history of every patient under his charge within twenty-four hours of admission, and to make all needful periodical reports upon the progress, symptoms, treatment and results of each case.

OTHER HOSPITALS

RECOGNISED BY THE UNIVERSITY AS PLACES WHERE STUDY MAY BE CARRIED ON IN CONNECTION WITH THE FACULTY OF MEDICINE.

THE SYDNEY HOSPITAL.

ST. VINCENT'S HOSPITAL.

THE BENEVOLENT ASYLUM.

THE HOSPITAL FOR SICK CHILDREN.

THE GLADESVILLE HOSPITAL FOR THE INSANE.

THE CALLAN PARK HOSPITAL FOR THE INSANE.

BENEFACTIONS

BESTOWED BY PRIVATE PERSONS.

Date.	Donor.	Amount. £ s. d.	Object of Foundation.
1853	Solomon Levey, Esq. ...	500 0 0	*Scholarship*—Originally for education of Orphans in the Sydney College; now for Natural Science in Second Year in the University.
	Thomas Barker, Esq ...	1,000 0 0	,, For Proficiency in Mathematics.
1854	Hon. Sir E. Deas-Thomson, C.B., K.C.M.G.	1,000 0 0	,, For Proficiency in Chemistry and Experimental Physics.
	W. C. Wentworth, Esq.	200 0 0	*Annual Prize*—For English Essay.
1857	Sir D. Cooper, Bart. ...	1,000 0 0	*Scholarship*—For Proficiency in Classics.
1858	S. K. Salting, Esq. ...	500 0 0	*Exhibition*—For a Student from the Sydney Grammar School.
1862	W. C. Wentworth, Esq.	445 0 0	*Fellowship*—For a Travelling Fellowship (amount to accumulate sufficiently).
1864	W. Lithgow, Esq. ...	1,000 0 0	*Scholarship.*
1867	Sir C. Nicholson, Bart.	200 0 0	*Annual Prize*—For Latin Verse.
	Educational Fund, devised by Dr. Gilchrist, of Sydney.		The right of the Presentation every other year to a Scholarship of £100 per annum, tenable for three years, and to be held at the University of London or of Edinburgh. Withdrawn by the Gilchrist Trustees in 1882.
1870	Earl Belmore	300 0 0	*Annual Prize*—For Agricultural Chemistry.
1872	Hon. John Fairfax ...	500 0 0	,, For Females at the Public Examinations.
1874	Mrs. Maurice Alexander	1,000 0 0	*Bursary.*
1880	,, ,,	1,000 0 0	,, To assist young men in entering a Learned Profession.
1874	Subscribers to testimonial to Rev. John West	200 0 0	*Annual Prize*—At Public Examinations.
	Edwin Dalton, Esq. ..	8,000 0 0	*Scholarships*—In memory of the Rev. Dr. Woolley.
1876	Hon. John Frazer ...	2,000 0 0	*Bursaries*—In memory of his deceased sons.
	Fitzwilliam Wentworth Esq.	2,000 0 0	,, In honour of his father, William Charles Wentworth.
	Mrs. Burdekin ..	1,000 0 0	*Bursary.*
	Mrs. Hunter-Baillie ...	1,000 0 0	,,
1877	,, ,, ...	1,000 0 0	,, For sons of Ministers of Religion.
1877 1888 1889	Hon. J. B. Watt ...	3,000 0 0	*Exhibitions*—For Students from Primary Schools.
	Professor Smith ...	350 0 0	*Lectureship*—In Geology.
1877	Sir Arthur Renwick, M.D.	1,000 0 0	*Scholarship*—In the Faculty of Medicine.

Date.	Donor.	Amount. £ s. d.	Object of Foundation.
1877	Andrew R. Cameron, Esq., M.D.	1,100 0 0	*Scholarship*—For General Proficiency.
	Mrs. Hovell	6,000 0 0	*Lectureship*—Geology and Physical Geography.
1878	Hon. George Allen ..	1,000 0 0	*Scholarship*—For Mathematics.
	Sir Charles Nicholson, Bart.		Collection of Egyptian Antiquities, etc.
	J. H. Challis, Esq. ..	750 0 0	For Great Northern Window in University Hall.
	Sir Charles Nicholson, Bart.	500 0 0	For Great Western Window.
	Sir Daniel Cooper, Bart.	500 0 0	For Great Eastern Window.
	Henry O'Brien, Esq. ...	100 0 0	For Side Windows in the Hall.
	Charles Newton, Esq....	100 0 0	
	Edward Knox, Esq. ..	100 0 0	
	William Long Esq. ...	100 0 0	
	John Dobie, Esq. ...	100 0 0	
	Robert Fitzgerald, Esq.	100 0 0	
	A. Moses, Esq.	100 0 0	
	John Reeve, Esq. ...	100 0 0	
	Thomas Barker Esq. ...	100 0 0	
	Henry and Alfred Denison, Esqs.	100 0 0	
	Thomas W. Smart, Esq.	100 0 0	
	Sir P. A. Jennings ..	1,100 0 0	Towards an Organ for the Great Hall.
	Sir A. Renwick, M.D....	125 0 0	For purchase of book, "Lepsius' Antiquities of Egypt and Æthiopia."
	Thomas S. Mort, Esq....	315 0 0	For a Travelling Fellowship,
	Thomas Walker, Esq.	700 0 0	Being the amount paid by him for the Library of the late Mr. Stenhouse, presented to the University.
	Freemasons under the English Constitution	1,000 0 0	*Scholarship*—For the sons of Freemasons.
1880	J. H. Challis, Esq. ..	250,000 0 0	*Bequest*—Property of the estimated value of £250,000, to be applied to the general purposes of the University.
1881	Thomas Walker, Esq...	500 0 0	Towards an Organ for the Great Hall.
	Fitzwilliam Wentworth, Esq.	415 0 0	To provide a Screen for the Organ Gallery.
	James Aitken, Esq. ...	1,000 0 0	*Bursary or Scholarship.*
	Thomas Walker, Esq.	5,000 0 0	*Bursaries.*
1882	Sir G. W. Allen ...	1,000 0 0	*Scholarship*—For Law.
1883	John Struth, Esq. ...	1,000 0 0	*Exhibition*—For Medical Students.
1885	Thos. Fisher, Esq. ..	30,000 0 0	For establishing and maintaining a Library in the University.
1886	Subscribers to Testimonial to Rev. Dr. Norbert Quirk	143 12 6	*Annual Prize*—For Mathematics.
	Professor Smith ...	100 0 0	,, For Physics
1887	G. S. Caird, Esq. ...	1,000 0 0	*Scholarship*—For Chemistry.
	Subscribers to Memorial of Late Professor Badham.	1,000 0 0	*Bursary.*
	G. P. Slade, Esq. -	250 0 0	For the Advancement of Science.
1888	William Roberts, Esq.	4,000 0 0	*Scholarship*—In memory of Mr. James King, of Irrawang, Raymond Terrace.
	Hon. Sir W. Macleay...		Museum of Natural History.
	Hon. Sir W. Macleay...	6,000 0 0	For establishing a Curatorship for the Macleay Museum of Natural History.

Date.	Donor.	Amount.			Object of Foundation.
		£	s.	d.	
1888	John Harris, Esq. ...	1,000	0	0	*Scholarship*—In Medicine.
	Lady Renwick	202	0	0	For a Window in the Medical School, in memory of her late father.
	P. S. Jones, Esq., M.D.	220	0	0	For Windows in the Medical School.
	G. Bennett, Esq., M.D.	140	0	0	
1889	The Trustees of the Council of Education Scholarship Fund	290	10	1	*Scholarship*—For sons of officers of the Department of Public Instruction.
	John Harris, Esq. ...	120	0	0	For a Window in the Medical School, in memory of the late Dr. Harris.
	F. J. Horner, Esq., M.A.	200	0	0	*Exhibition*—For Mathematics.
1890	The Trustees of the Will of the Hon. John Frazer, M.L.C.	2,000	0	0	*Scholarship*—For History.
	George Bennett, Esq., M.D.				John Gould's Works on Ornithology.
1891	William Grahame, Esq.	100	0	0	*Annual Prize*—In the Senior Public Examination.
1892	Rev. R. Collie, F.L.S. .	100	0	0	*Annual Prize*—For Botany.
1896	P. N. Russell, Esq. ...	50,000	0	0	For the endowment of the P. N. Russell School of Engineering.

A LIST OF DONATIONS TO THE LIBRARY,

APRIL, 1897, TO MARCH, 1898.

Twenty-eight Specimens of Educational Publications by Messrs. Macmillan & Co., two by Messrs. Collins Bros., one by Messrs. Blackie & Son.

Calendars and other Publications by the following Universities, &c.:—

Aberdeen, Allahabad, Auckland, Bendigo, Bombay, Calcutta, California, Canterbury (N.Z.), Cape of Good Hope Observatory, Columbia (New York), Cornell (Ithaca), Dalhousie (Nova Scotia), Dublin, Edinburgh, Glasgow, Graz, Grenoble, Harvard (Cambridge), Japan, Johns Hopkins (Baltimore), King's College (London), London, Lyon, McGill (Montreal), Madras, Melbourne, Nebraska, New Zealand, North Wales (Bangor), Panjab (Lahore), Pennsylvania, Pisa, Princeton, Royal College of Surgeons (London), Royal University of Ireland, St. Andrews, Sheffield, Toronto, Trinity College (Dublin), Trinity College (London), Trinity College (Melbourne), Victoria (Manchester), Yale University Observatory, Yorkshire College (Leeds).

Proceedings, Transactions, &c., from the following Societies, &c.:—

Academia Nacional de Ciencias (Cordoba), Australian Institute of Mining Engineers, Australian Museum, Biblioteca Nazionale Centrale di Firenze, British Museum, Cambridge Philosophical Society, Chicago Academy of Sciences, Clinical Society of London, Institute of Chemistry (London), Institute of Civil Engineers (London), Johns Hopkins Hospital (Baltimore), Linnean Society of New South Wales, Milwaukee Public Museum, New Zealand Institute, Public Library of New South Wales, Queensland Museum, Royal Academy of Medicine (Ireland), Royal Irish Academy, Royal Colonial Institute (London), Royal Societies of Canada, London, New South Wales, Queensland, South Australia, Tasmania, Victoria, St. Bartholomew's Hospital (London), Smithsonian Institution, Volta Bureau (Washington).

Publications of the Meteorological Department and the Archæological Survey of India; California State Mining Bureau; Geological Survey of Canada; Department of Agriculture, Bureau of Education, Coast and Geodetic Survey of the United States; Report of the United States Commission upon the Boundary between Venezuela and British Guiana.

Acts of the Parliament of Victoria, Report of the Minister of Public Instruction, by the Government of Victoria.

Proceedings and Acts of the S.A. Parliament, Debates in the Houses of Legislature and Meteorological Observations, by the Government of South Australia.

Ethnological Studies (Roth), by the Government of Queensland.

Report of the Minister of Public Instruction, Publications of the Department of Mines, by the Government of New South Wales.

Books, &c., were presented to the Library, in terms of the "Copyright Act, 1879," by Messrs. Angus & Robertson, Australian Publishing and Advertising Co., Messrs. James Best, C. Brennan, F. H. Cole, Mrs. J. Dibden, Mr. S. Elyard, Epsworth Printing and Publishing Co., Miss Lily Froude, Messrs. W. H. Glen & Co., Gordon & Gotch, Hayes Bros., Dr. R. Hodgson, Mr. P. P. Kemp, Mrs. Langer, Messrs. Marsden & Dalgleish, G. Metcalfe, Morgan & Co., S. Nathan, T. Neal, W. H. Paling & Co., H. E. C. Robinson, Geo. Robertson & Co., H. S. Shaw, W. E. Smith, and the Publishers of the Australasian Anthropological Journal, Australasian Independent, Australasian Medical Gazette, Australian Theosophist, Australasian United Service Gazette and Volunteer Record, Australian Economist, Australian Field, Australian Home Journal, Australian Pastoral Directory, Australian Photographic Journal, Australian Young Folks, Brewer, Building and Engineering Journal, Co-operator, Courier Australien, Dawn, Deutsch-Australische Post, Elector, Hebrew Standard of Australasia, Leisure Moments, New South Wales Cyclist, New South Wales Educational Gazette, Nepean Times, New South Wales Railway Budget, Oakshaw Annual, Sands' Sydney and Suburban Directory, Sydney Daily Telegraph, Sydney Mail, Sydney Morning Herald, Sydney Sheep and Carnival Guide, Stock and Station Journal, Town and Country Journal, Trades Directory of Sydney, Trades Protective Institute Reports, Yachtsman and Canoeist, Year Book of New South Wales.

REPORT OF THE SENATE OF THE UNIVERSITY

FOR THE YEAR ENDED 31ST DECEMBER, 1897.

1. The Senate of the University of Sydney, in pursuance of the provisions of section 22 of the Act of Incorporation, 14 Victoria, No. 31, has the honour to transmit the account of its proceedings during the year 1897, for the information of His Excellency the Governor and the Executive Council.

Matriculation.

2. The number of persons who qualified themselves for Matriculation in 1897 by passing one of the various University Examinations was 291. Of these, 87 passed the ordinary Matriculation Examination, 138 the Junior Public Examination, 12 the Law Matriculation Examination, 46 the Senior Public Examination, and 8 the Entrance Examination for Law, Medicine and Science. The number of students actually admitted to Matriculatlon, with a view to proceeding with the curriculum in one of the various Faculties, was 97.

Annual University Examinations.

3. The numbers of students who attended and passed the annual examinations in December, 1896, and March, 1897, after attending the prescribed courses of lectures, are shown in the following table:—

FACULTY OF ARTS.

	Candidates.	Passed.
First Year Examination	71	53
Second Year Examination	49	42
Third Year Examination	53	52

In addition to the students passing through the regular curriculum, 20 evening students and students of special subjects passed examinations in individual subjects.

FACULTY OF LAW.

Intermediate Examination	9	8
Final Examination	9	7

FACULTY OF MEDICINE.

	Candidates.	Passed.
First Year Examination	41	36
Second Year Examination..	24	20
Third Year Examination	26	23
Fourth Year Examination	27	22
Fifth Year Examination	13	10

FACULTY OF SCIENCE.

First Year Examination	2	2
Second Year Examination..	3	3
Third Year Examination	1	1

FACULTY OF SCIENCE—DEPARTMENT OF ENGINEERING.

First Year Examination	12	10
Second Year Examination..	8	6
Third Year Examination	9	8

Attendance at Lectures.

4. The following table shows the number of students attending lectures in the several Faculties :—

Faculty of Arts (day), 168 ; (evening), 59 ; total	227
Faculty of Law	41
Faculty of Medicine	147
Faculty of Science	10
Faculty of Science—Department of Engineering	30
	455

Included are 69 women who attended in the Faculty of Arts, 12 in Medicine, and 4 in Science ; total, 85.

The above also includes 31 unmatriculated students.

Degrees conferred.

5. The following degrees were conferred after examination :—

Master of Arts (M.A.):—George Alfred Blumer, B.A.; James Dennis, B.A. ; Frederick Vicary Pratt, B.A.

Bachelor of Arts (B.A.):—Margaret Jane Armstrong, John Hay Goodlet Auld, Pearl Ella Barnes, Henry Charles Blaxland, Elsie I'Anson Bloomfield, Leopold T. Broinowski, Edward Broome, Stephen Drummond Chalmers, Emily A. Cruise, Harold Burnham Curlewis, Herbert Stanley Dettmann, May Edmunds, Bernard Joseph Fitzpatrick, Charles C. Grassick, Albert Thomas Henry Grogan, Edith Hirst Hansard, Mary Catherine Hay, George Arthur Hill, Edwin Hobbs, William Hudson, Hugh Jason Hughes, Hugh Alton Stanislaus Hunt, Frederick Charles Jackson, Cortis

Harry Frederick Jones, James Augustus Klein, Isabella Edwardes Langley, Philip Herbert Louis, Sarah Molster, John Graham Monaghan, William Willis Monahan, Orea Emma Hellas Moustaka, Mercy M. H. Murray, Carl Ernst Gottlieb Musmann, Jane Elizabeth Paris, John Edwards Foggon Penman, George Alfred Raves, Spencer George Birkenhead Riley, Eva Florence Saunders, Frederica Roth-Schmidt, Walter Alexander Ramsay Sharp, William George Sharpe, Fitzroy Somerset Stacy, John William Farish Stephen, Bertha Violet Symonds, Donald Wallace, Ruby Estelle Ward, Hubert Edwin Whitfeld.

Bachelor of Law (LL.B.):—Thomas Rainsford Bavin, B.A., Frank Nunan Brierley, M.A., John Aloysius Cullinane, B.A.; Arthur Bernard Davies, B.A.; William John Creagh, B.A., Percy Harcourt Mills, B.A.; Patrick Daniel O'Brien, B.A.

Doctor of Medicine (M.D.):—James Froude Flashman, M.B., Ch.M.

Bachelor of Medicine (M.B.):—Edmund Horatio Barnes, Gracius Herbert Broinowski, John Inglis Clark Cosh, Graham Patrick Dixon, Robert Meredith Farrell, William Henry Harris, Frederick Charles Higgins, Ernest Maynard Pain, Hedley Terry, Joseph Leathom Wassell.

Master of Surgery (Ch.M.):—Edmund Horatio Barnes, John Inglis Clark Cosh, Graham Patrick Dixon, Robert Meredith Farrell, William Henry Harris, Frederick Charles Higgins, Ernest Maynard Pain, Joseph Leathom Wassell.

Bachelor of Science (B.Sc.): Marion Charlotte Horton, Donald Æneas Dunlop MacMaster, B.A.

Bachelor of Engineering (B.E.)—Civil Engineering:—Harry Martin Amphlett, Henry James Deane, Harold Berkeley Rowlands, William Arthur Shortland, Herbert Stewart Inglis Smail, Tom Percival Strickland, Bernard Wallach, Ernest William Warren. Mining Engineering:—John Bowie Wilson.

Ad eundem Degree.

6. The following *ad eundem* degree was conferred in accordance with the provisions of the "*Ad eundem* Degrees Act," 44 Victoria, No. 22:—

Bachelor of Medicine (M.B):—William Thomas Chenhall, M.B., Melbourne.

7. The total number of degrees conferred during the year was thus 88, divided as follows:—M.A., 3; B.A., 47; LL.B., 7; M.D., 1; M.B., 11; Ch.M., 8; B.Sc., 2; B.E., 9.

8. The degrees conferred by the University from its foundation to the end of 1897 are:—M.A., 259; B.A., 898; LL.D., 23; LL.B., 64; M.D., 38; M.B., 119; Ch.M., 83; B.Sc., 29; M.E., 3; B.E., 43. Total, 1,559.

Honours at Degree Examinations.

9. The following honours were awarded at Degree Examinations:—

FACULTY OF ARTS.

M.A. Examination.

CLASSICS AND PHILOLOGY—Class II.:—F. V. Pratt, B.A.

MODERN HISTORY—Class II:—J. Dennis, B.A.

B.A. Examination.

LATIN—Class I.:—H. E. Whitfeld, H. S. Dettmann. Class II.:—Margaret J. Armstrong, E. Hobbs.

GREEK—Class I.:—H. S. Dettmann and H. E. Whitfeld, *æq.* Class II.: E. Hobbs.

FRENCH—Class II.:—Margaret J. Armstrong, C. E. G. Musmann.

ENGLISH—Class I.:—H. S. Dettmann. Class II.:—Pearl E. Barnes. Class III.:—Eva F. Saunders.

GERMAN—Class I.:—H. S. Dettmann. Class II.:—C. E. G. Musmann.

HISTORY—Class I.:—S. D. Chalmers, W. W. Monahan. Class II.:—C. H. F. Jones.

MATHEMATICS—Class I.:—S. D. Chalmers.

LOGIC AND MENTAL PHILOSOPHY—Class I.:—D. Wallace, H. E. Whitfeld, J. W. F. Stephen. Class II.:—L. T. Broinowski.

GEOLOGY AND PALÆONTOLOGY AND OPTICAL PETROLOGY.—Class II.:—Isabella E. Langley.

FACULTY OF LAW.

LL.B. Examination.

CLASS I.:—T. R. Bavin. Class II.:—None.

FACULTY OF MEDICINE.

M.B. and Ch.M. Examination.

Class I.:—G. P. Dixon. Class II.:—E. M. Pain.

FACULTY OF SCIENCE.

B.Sc. Examination.

BIOLOGY (Vertebrate Zoology)—Class I.:—Marion C. Horton.

GEOLOGY, PALÆONTOLOGY AND PETROLOGY—Class I.: Marion C. Horton.

Department of Engineering.

CIVIL ENGINEERING, SURVEYING AND ARCHITECTURE—Class I.:—T. P. Strickland. Class II: W. A. Shortland, H. S. I. Smail.

Scholarships.

10. The following Scholarships were awarded:—

(a) *At the Matriculation Examination.*

Cooper Scholarship, No. II., for Classics—R. N. Robson, *prox. acc.*, A. G. de L. Arnold, Eleanor E. Bourne.

Aitken Scholarship for General Proficiency—W. R. Horn, *prox. acc.*, Eleanor E. Bourne.

Barker Scholarship, No. II., and *Horner* Exhibition for Mathematics—W. S. Boyd, *prox. acc.*, H. M. Stephen, W. R. Horn, H. S. Mort.

(b) *At the First Year Examination in Arts.*

Cooper Scholarship, No. III., for Classics—Gained by R. C. Teece, but awarded to J. J. Walsh, R. C. Teece being the holder of two Scholarships.

George Allen Scholarship for Mathematics—R. W. Hawken (Engineering), J. F. Morris (Engineering), E. C. G. Page,* D. T. Sawkins, *æq.*

(c) *At the Second Year Examination in Arts.*

Cooper Scholarship, No. I., for Classics—D. P. Evans-Jones.

Barker Scholarship, No. I., and *Norbert Quirk* Prize for Mathematics—F. G. Griffiths.

(d) *At the B.A. Examination.*

Frazer Scholarship for History—S. D. Chalmers.

(e) *At the Intermediate Examination in Law.*

G. Wigram Allen Scholarship for general proficiency—E. M. Mitchell, B.A.

(f) *At the First Year Examination in Medicine.*

Renwick Scholarship for general proficiency in the subject of the examination—A. H. Macintosh, *prox. acc.*, Mabel J. Graham.

(g) *At the Third Year Examination in Medicine.*

John Harris Scholarship for Anatomy and Physiology.—C. S. Willis.

(h) *At the First Year Examination in Science.*

Levey Scholarship for Chemistry and Physics—G. Harker.

(i) *Science Research Scholarship given by Her Majesty's Commissioners of the Exhibition of* 1851.

T. P. Strickland, B.E.

* E. C. G. Page did not comply with the conditions for holding a Mathematical Scholarship.

Prize Compositions.

11. The awards made for Prize Compositions were—

Wentworth Medals for English Essays—Subject: "The Relations of Poetry and Philosophy." Prize for Graduates—D. Cowan, B.A., *prox. acc.*, Elizabeth I. Taylor, B.A.; Prize for Undergraduates—F. V. Dowling.

University Prize for English Verse—Subject: "Mary, Queen of Scots" —J. Le Gay Brereton, B.A.

First Classes at Annual Examinations.

12. The following students were placed in the first class in Honours at the annual examinations, other than the final examinations for degrees :—

FACULTY OF ARTS.

First Year Examination.

LATIN—R. C. Teece, J. J. Walsh, J. Parsons.

GREEK—R. C. Teece, J. J. Walsh.

GERMAN—G. G. Nicholson, Margaret I. White, Elizabeth J. Read.

FRENCH—Margaret I. White, G. G. Nicholson, Elizabeth J. Read.

MATHEMATICS—R. W. Hawken (Engineering), J. F. Morris (Engineering), E. C. G. Page, D. T. Sawkins, *æq.*, G. A. Waterhouse (Engineering).

Second Year Examination.

LATIN—Isabel M. Fidler, D. P. Evans-Jones.

GREEK—D. P. Evans-Jones.

FRENCH—Isabel M. Fidler.

MATHEMATICS—F. G. Griffiths, B. Jarvie and H. B. Mathews, *æq.*

HISTORY—Elisabeth A. Lance, N. G. S. Pilcher.

LOGIC AND MENTAL PHILOSOPHY—N. G. S. Pilcher, F. V. Dowling, and Ethel N. De Lissa, *æq.*

FACULTY OF MEDICINE.

First Year Examination.

CHEMISTRY—Mabel J. Graham and A. H. Macintosh, *æq.*, E. V. Barling, F. G. Griffiths.

PHYSICS—A. H. Macintosh.

BIOLOGY—Mabel J. Graham, and A. H. Macintosh, *æq.*, E. V. Barling.

FACULTY OF SCIENCE.

First Year Examination.

CHEMISTRY—G. Harker.

Second Year Examination.

GEOLOGY—W. G. Woolnough.

DEPARTMENT OF ENGINEERING.

First Year Examination.

APPLIED MECHANICS, GEOMETRICAL AND MECHANICAL DRAWING—W. R. Beaver.

PHYSICS—W. R. Beaver, G. Harker (Science) and J. J. Durack, *æq.*

CHEMISTRY—W. R. Beaver.

Annual Prizes.

13. Annual Prizes were awarded as follows:—

University Prize for Physiography—G. Harker.

Professor MacCallum's Prizes for English Essays—First Year Margaret I. White and G. G. Nicholson, *æq.*; Second Year, F. V. Dowling; Third Year, H. S. Dettmann.

Professor Anderson's Prizes for Logic and Mental Philosophy—Second Year, N. G. S. Pilcher; Third Year, D. Wallace.

Professor Wood's Prize for History—Elisabeth A. Lance, *prox. acc.*, N. G. S. Pilcher.

Professor Haswell's Prize for Zoology—Mabel J. Graham.

Professor Haswell's Prize for Laboratory Notes—E. M. Humphrey.

Dr. Dixson's Prize for Materia Medica and Therapeutics—H. J. W. Brennand, B.A.

Dr. Wilkinson's Prize for Pathology—J. MacPherson, M.A., B.Sc.

Smith Prize for Physics—W. R. Beaver and G. Harker, *æq.*

Slade Prize for Practical Chemistry—R. L. Jack.

Professor David's Prizes for Geology—Second Year, W. G. Woolnough; Third Year, Marion C. Horton.

Collie Prize for Botany—Mabel J. Graham.

Bursaries.

14. The following bursaries were awarded, each consisting of a payment to the student of £50 per annum, or in the case of a half-bursary £25 per annum, for three years, together with exemption from the payment of lecture fees in the Faculty of Arts or that of pure Science:—

Ernest Manson Frazer Bursary. *W. C. Wentworth* Bursary No. I. *W. C. Wentworth* Bursary No. II. *Burdekin* Bursary. *Hunter-Baillie* Bursary, No. II. *J. B. Watt* Exhibition. *Walker* Bursary No. II. (half). *Walker* Bursary No. IV. *Walker* Bursary No. V.

The Struth Exhibition for a Medical student was also awarded.

The number of students permitted to attend lectures without paying fees was 52, including 43 State bursaries and holders of the University bursaries. The payments to bursars amounted to £747 10s., and to scholars £915 10s.

Three students of State Training Schools attended at a reduced scale of fees.

Public Examinations.

15. The Junior Public Examination was held in June, in Sydney, and at the following local centres :—

New South Wales.—Albury, Armidale, Araluen, Bathurst, Bega, Bourke, Bowral, Braidwood, Brushgrove, Bungendore, Camden, Carcoar, Casino, Cooma, Cootamundra, Cowra, Cudal, Deniliquin, Dubbo, Forbes, Glen Innes, Goulburn, Grafton Grenfell, Hay, Hillston, Hornsby Junction, Inverell, Kempsey (West), Kiama, Lismore, Lithgow, Liverpool, West Maitland, Moama, Molong, Moruya, Mount Victoria, Mudgee, Newcastle, Nowra, Orange, Parkes, Parramatta, Richmond, Singleton, Tamworth, Taree, Temora, Tenterfield, Wagga Wagga, Wellington, Wilcannia, Windsor, Wingham, Wollongong, Yass, and Young.

Queensland.—Brisbane, Bundaberg, Charters Towers, Ipswich, Mackay, Maryborough, Rockhampton, Toowoomba, Townsville, and Warwick.

There were 1,471 candidates, and 859 passed.

16. The Senior Public Examination was held in November, concurrently with an examination for Matriculation Honours and Scholarships in Sydney and at the following local centres :—

New South Wales.—Bathurst, Bowral, Goulburn, Parramatta.

Queensland.—Brisbane, Ipswich, Maryborough, Rockhampton, Townsville.

There were 119 candidates, and 101 were successful.

17. The prizes for general proficiency in the Senior and Junior Public Examinations were awarded as follows :—

Seniors.

John West Medal and *Grahame* Prize Medal—
Frederick Augustus Todd.

Fairfax Prize for Female Candidates—
Theodora Emilie Johanna Copas.

Juniors.

University Prize for Boys—
John Neville Griffiths.

Fairfax Prize for Girls—
Lilian Mary Armitage and Blanche Jennette Harkess, *aq.*, *prox. acc.*, Blanche Vavasour Sandford.

18. Three Law examinations were held similar and equal to that prescribed for Matriculation, for candidates for Articles of Clerkship with Solicitors. At these there were 34 candidates, and 12 passed.

Meetings of Senate.

19. The Senate held eleven ordinary meetings, two special meetings, one adjourned meeting in addition to the annual commemoration, and three meetings of the Conjoint Board, consisting of the Senate of the University and the Board of Directors of the Prince Alfred Hospital.

The attendances of the various Fellows were as follows:—

MacLaurin, the Hon. H. N., M.A., LL.D., M.D., M.L.C., Chancellor	17
Backhouse, His Honor Judge, M.A., Vice-Chancellor	17
*Anderson, H. C. L., Esq., M.A.	10
Barton, the Hon. E., M.A.	4
Butler, Professor, B.A.	17
Cobbett, Professor, M.A., D.C.L.	15
Cullen, the Hon. W. P., M.A., LL.D.	14
Jones, P. Sydney, Esq., M.D.	16
Knox, Edward W., Esq.	13
Liversidge, Professor, M.A., LL.D., F.R.S.	15
O'Connor, the Hon. R. E., M.A.	5
*Oliver, Alexander, Esq., M.A.	5
Renwick, the Hon. Sir Arthur, B.A., M.D.	14
Rogers, F. E., Esq., M.A., LL.B., Q.C.	12
Russell, H. C., Esq., B.A., C.M.G., F.R.S.	16
Scott, Professor, M.A.	17
†Simpson, His Honor Mr. Justice A. H., M.A.	—
Stephen, C. B., Esq., M.A.	9
*Stuart, Professor T. P. Anderson, M.A.	5
Teece, Richard, Esq., F.I.A.	11

20. Thirty-four meetings of Sub-Committees of the Senate for finance, by-laws, and other matters, were held during the year, the attendance of members being as follows:—The Chancellor

* Absent on leave. † Elected November 20, 1897.

(the Hon. Dr. MacLaurin), 33; the Vice-Chancellor (His Honor Judge Backhouse), 32; Professor Cobbett, 2; the Hon. Dr. Cullen, 3; Dr. P. Sydney Jones, 6; Edward W. Knox, Esq., 19; Professor Liversidge, 4; Alexander Oliver, Esq., 1; The Hon. Sir Arthur Renwick, 14; H. C. Russell, Esq., 4; Professor Scott, 3; C. B. Stephen, Esq., 12; R. Teece, Esq., 8.

The Chancellor and Vice-Chancellor, in addition, each attended 4 meetings of Faculties.

Vice-Chancellor.

21. The annual election to the office of Vice-Chancellor, in the month of April, resulted in the unanimous re-election of His Honor Judge Alfred Paxton Backhouse, M.A.

Vacancy in the Senate.

22. A vacancy occurred in the Senate through the death in October of the Hon. Sir William Charles Windeyer, M.A., LL.D.

Sir William Windeyer was the first graduate of the University, and he rendered valuable service during his tenure of office as a Fellow of the Senate from 1866 to the time of his death. He was Vice-Chancellor of the University in 1883, and he succeeded Sir William Manning as Chancellor in 1895, resigning that office in 1896, in consequence of his extended absence from the Colony.

The Senate passed the following resolution on the 11th of October:—

> That the Senate desires to place on record its sense of the great loss which the University has sustained by the death of the Hon. Sir William Charles Windeyer, M.A., LL.D., and its sympathy with his widow and family in their bereavement.

23. A Convocation for the election of a Fellow in the room of Sir William Charles Windeyer was held on Saturday, November 20th, and resulted in the election, without opposition, of His Honor Mr. Justice Archibald Henry Simpson, M.A.

Staff Appointments, &c.

24. A vacancy occurred in the beginning of the year through the resignation by Dr. C. J. Martin of the office of Demonstrator of Physiology, in consequence of his appointment as Acting

Professor of Physiology in the University of Melbourne. The vacancy was filled by the appointment of Mr. F. Tidswell, M.B., Ch.M. (Sydney). A further vacancy occurred at the end of the year in the same office, by reason of the appointment of Dr. Tidswell as an officer of the Board of Health. This vacancy had not been filled on the 31st of December.

Mr. E. F. Pittman, A.R.S.M., was reappointed Lecturer in Mining for the year 1897.

Mr. A. W. Jose was reappointed Secretary of the University Extension Board for the year 1897.

Mr. A. E. Mills, M.B., Ch.M., was appointed Demonstrator in Anatomy from March, 1897, in succession to Mr. G. L. Murray, M.B., Ch.M., whose term of office had expired.

Mr. H. B. Gritton was appointed Junior Demonstrator in Chemistry, in succession to Mr. J. M. Petrie, resigned.

The office of Esquire Bedell, rendered vacant by the death of John Kinloch, Esq., M.A., a distinguished graduate of the University, was filled by the appointment of John Purves, Esq., M.A.

The offices of Demonstrator in Geology and Lecturer in Metallurgy have been rendered vacant by the resignation from the end of the year of Mr. W. F. Smeeth, M.A., B.E., who has accepted an important Geological post in India. These vacancies had not been filled on the 31st of December.

By the termination of Dr. Hankins' office, by effluxion of time, of Honorary Surgeon at the Prince Alfred Hospital, the Lectureship in Clinical Surgery at the University held by him became vacant.

The office was filled by the appointment of Mr. J. F. McAllister, M.D., B.S., after his election by the Conjoint Board, as Honorary Surgeon at the Prince Alfred Hospital, in succession to Mr. G. T. Hankins, M.R.C.S. The office of Surgical Tutor, resigned by Dr. McAllister, had not been filled on the 31st of December.

The Lectureship in French and German, held by Dr. Rudolph Max, a valued officer of the University, was rendered vacant by his death in November. Mr. C. J. Brennan, M.A., was appointed to fill the vacancy, temporarily, until the end of the year.

Leave of Absence.

25. In May, leave of absence from the meetings of the Senate for a period of three months was granted to Alexander Oliver, Esq., in consequence of ill-health.

Leave of absence from his duties as Professor of Geology and William Hilton Hovell Lecturer in Geology and Physical Geography, was granted during Trinity Term to Professor David, to enable him to carry out an important scientific work at one of the Coral Islands of the Pacific. The work was undertaken by Professor David at the request of Members of the Royal Society of London, and with the assistance of the Government of New South Wales and of private persons who undertook to defray a portion of the necessary expenses. During his absence, the lectures on Geology and Palæontology were respectively delivered by Messrs. E. F. Pittman, A.R.S.M., Government Geologist, and Mr. W. S. Dun, Government Palæontologist, by kind permission of the Minister of Mines.

Leave of absence during Trinity and Michaelmas Terms of 1897 was granted to Dr. T. P. Anderson Stuart, Professor of Physiology, to enable him to visit Europe, and to attend the Meeting of the British Medical Association, held in Toronto, Canada, in the month of August. During his absence the duties of his Chair were performed by Dr. G. E. Rennie and Dr. F. Tidswell. Sir Arthur Renwick was appointed Acting Dean of the Faculty of Medicine during Professor Stuart's absence.

Leave has also been granted to Dr. W. A. Haswell, Professor of Biology, and Dr. Pitt Cobbett, Professor of Law, to enable them to visit Europe during Lent and Trinity Terms, 1898. The duties of the Professor of Law will be performed by Mr. Jethro Brown, Professor of Law in the University of Tasmania, and those of the Professor of Biology by Dr. Gregg Wilson, M.A., Senior Demonstrator in Zoology in the University of Edinburgh, who is at present in Sydney engaged in Scientific research. The Hon. Dr. Cullen was appointed Acting Dean of the Faculty of Law during Professor Cobbett's absence.

Leave for two Terms was also granted to Mr. E. J. Trechmann, M.A., Ph.D., Lecturer in French and German, whose health had been impaired by a serious illness, Mr. C. J. Brennan, M.A., being appointed to fulfil his duties.

All these arrangements have been made without additional cost to the University.

P. N. Russell School of Engineering.

26. The Senate has determined, with the approval of P. N. Russell, Esq., to establish a scholarship for the encouragement of higher education in mechanical engineering, to be called "The Peter Nicol Russell Scholarship for Mechanical Engineering."

The scholarship, which is of the annual value of £90, will be tenable for three years in the Department of Mechanical Engineering in the University, and will be awarded after competitive examination held in the month of November. Every candidate must produce evidence either (i.) that he has been engaged in an approved workshop for at least one year, and has in addition obtained certificates of the following courses in the Sydney Technical College:—

(*a*) Applied Mechanics, first and second year courses;
(*b*) Mechanical Drawing, first and second year courses;
(*c*) Mechanical Workshops, a two years' course;

or, (ii.) that he has been engaged, under approved conditions, in the study of practical mechanical engineering for at least three years, by apprenticeship or service in a mechanical workshop or drawing office, provided that one year at least shall have been spent in a workshop.

It has also been determined to award annually to a distinguished student in the Engineering School a gold medal, to be called the "P. N. Russell Medal." A medal die for this purpose has been engraved in London, bearing on one side a very skilful portrait of Mr. Russell, and on the other the arms of the University.

St. Paul's College.

27. His Honor Judge Backhouse, Vice-Chancellor, has been appointed a trustee of the St. Paul's College sub-grant of land in place of the Hon. Sir William C. Windeyer.

Women's College.

28. The Hon. Sir Arthur Renwick, M.D., and the Hon. W. P. Cullen, M.A., LL.D., have been appointed *ex-officio* members of the Women's College Council for a period of two years from August, 1897.

University Extension.

29. The report of the University Extension Board, presented to the Senate in the month of December, shows that courses of lectures were delivered during 1897 in Bathurst, Forbes, East Maitland, West Maitland, Newcastle, Orange and Parkes. As in previous years, the operations of the Board have been limited, in consequence of the small fund at its disposal. From the report of the Board, it appeared that no applications were received for courses of lectures to be delivered in Sydney or the suburbs.

Finance.

30. In consequence of a slight falling off in the fees received from students attending lectures at the University, the Senate has been unable to bring the expenditure of the year within the income, notwithstanding recent reductions which have been made in the expenditure. It has, therefore, become necessary to make some further reductions, which have not yet been definitely determined upon.

At the same time the Senate has felt that the General Purposes Fee of £1 per term bears hardly upon the students, and has in all probability contributed to the falling off in their numbers of recent years. It has therefore been determined for the year 1898 to discontinue this charge, and to make up the deficiency by further retrenchment, as well as by anticipating to a certain extent the income of a portion of the Challis Estate which has not yet fallen in to the University, and which at present remains in the hands of the English Trustees as a capital sum for the payment of annuities.

Address to Her Majesty the Queen.

31. An address of congratulation was presented to Her Majesty the Queen, through His Excellency the Governor, upon the completion of the sixtieth year of her beneficent reign; and a reply was received conveying Her Majesty's cordial thanks for the address, together with an expression of the interest which Her Majesty feels in the work of the Colonial Universities, and her pleasure at the success which crowns it.

Proposals of Convocation.

32. The resolutions passed at a meeting of Convocation, on the 18th of September, 1896, were considered by the Senate on several occasions.

After reference to the Legal Members, it was decided that the Senate had no legal power to make any by-law which would give effect to the resolutions of Convocation referring to the tenure of office of present and future members of the Senate, it being possible to effect a change in this respect only by Act of Parliament.

At a meeting of the Senate, held on the 7th June, the following resolutions of Convocation were decided in the negative:—

1. That Fellows of the Senate hereafter elected should hold office for a period of five years only, but should be eligible for re-election on the expiration of their term of office.
2. That the elected Fellows now in office should retire in rotation within the next five years, but should be eligible for re-election.

The third resolution of Convocation—

That the voting at contested elections of Fellows should be taken by letter—

was affirmed in principle, while it was recognised that the desired alteration in the present system could not be made without the sanction of Parliament.

Queensland Examinations.

33. The University, at the request of the Queensland Department of Public Instruction, conducted an examination of candidates for Exhibitions to Universities, granted by the Government of Queensland, and also an examination of teachers seeking admission into Class I. under that Department.

Accounts.

34. The annual statements of receipts and expenditure, and statements showing the position of the various trust funds of the University at the 31st of December, duly certified by the auditor, Mr. J. C. Dibbs, are appended to this report.

H. E. BARFF,
Registrar.

Dr.

GENERAL ACCOUNT.

RECEIPTS.

	£ s. d.	£ s. d.
Received from the Government of New South Wales :—		
,, ,, the Statutory Annual Endowment	5,000 0 0	
,, ,, the Additional Endowment	4,000 0 0	
,, ,, towards Expenses of Evening and Extension Lectures	2,000 0 0	11,000 0 0
Received Lecture Fees £7,637 18 0		
Less paid to Professors and Lecturers 2,226 2 10		
	5,411 15 2	
Received Matriculation Fees	523 17 0	
,, Degree Fees	610 0 0	
,, University Examination Fees	244 0 0	
,, Public Examination Fees	100 0 0	
,, General Purposes Fees	977 7 6	
,, Testing Fees	30 9 7	
,, Scholarship Examination Fee	1 10 0	7,898 19 3
,, for Pasturage		100 0 0
,, Fees for use of Microscopes		52 0 0
,, Fines		3 10 0
,, Anonymously		0 1 8
,, for Duplicate Certificate		1 1 0
,, from Electric Telegraph Department, for Telephone Lines purchased		102 0 0
,, from Challis Fund towards administration		500 0 0
,, from Macleay Curatorship, towards salary of the Curator of the Macleay Museum		181 9 11
,, from Hovell Lectureship, towards salary of Lecturer in Geology and Physical Geography		144 11 3
Balance due Commercial Bank, 31st December, 1897		1,131 8 0
		£21,115 1 1

JOHN C. DIBBS, Auditor.

STATEMENT of Receipts and Expenditure on account of the Junior and

RECEIPTS.	£ s. d.
Balance in Commercial Bank, 31st December, 1896	124 11 10
Received Candidates' Fees	1,640 10 0
	£1,765 1 10

JOHN C. DIBBS, Auditor.

Cr.

GENERAL ACCOUNT.

EXPENDITURE.

	£ s. d.	£ s. d.
Balance due Commercial Bank, 31st December, 1896		368 2 2
Paid Salaries	17,167 3 3	
,, Examiners	194 5 0	
,, Grant to University Extension Board	240 0 0	
		17,601 8 3
,, Printing and Stationery, including University Calendar	420 11 7	
,, Advertising	21 4 0	
,, Repairs and Alterations, Furniture and Fittings	131 6 5	
,, Fuel and Lighting	94 10 2	
,, Fire Insurance Premiums	251 11 0	
,, Rent of Chambers, &c.	243 0 0	
,, Supervision at Examinations	46 9 3	
,, Uniforms	24 19 0	
,, Rent of Telephones	61 12 6	
,, Water and Sewerage Rates	287 8 0	
,, Cleaning	27 5 5	
,, Miscellaneous Charges	62 5 10	
		1,682 3 2
,, for Periodicals and Binding Books for Library		154 2 3
,, for Improvements of Grounds		85 15 10
,, for Repairs to Organ		1 10 0
,, for University Prizes		14 16 0
,, for Microscopes		116 5 5
,, for Maintenance of Scientific Departments, including Gas		1,090 18 0
		£21,115 1 1

ROBERT A. DALLEN, Accountant.

Senior Public Examinations for the year ending 31st December, 1897.

EXPENDITURE.

	£ s. d.
Paid Examiners' Fees and all other Expenses in connection with the Examinations, and grants towards expenses of local Centres	1,637 10 3
Balance in Commercial Bank, 31st December, 1897	127 11 7
	£1,765 1 10

ROBERT A. DALLEN. Accountant.

Dr.

PRIVATE FOUNDATIONS ACCOUNT.

Revenue Account.

Receipts.

	£	s.	d.	£	s.	d.
Received from the following for annual prizes :—						
Professor Haswell, M.A., D.Sc., F.R.S.	5	5	0			
Professor Wood, M.A.	5	0	0			
Professor MacCallum, M.A.	16	10	0			
Professor Anderson, M.A.	20	0	0			
Professor David, B.A.	5	0	0			
W. C. Wilkinson, Esq., B.A., M.D.	6	6	0			
Thomas Dixson, Esq., M.B., Ch.M.	2	3	0			
				60	4	0
,, income from Investments on account of the following Foundations :—						
Levey Scholarship	37	0	0			
Barker Scholarships	122	17	2			
Deas-Thomson Scholarships	136	3	7			
Wentworth Prize Medal	22	13	2			
Cooper Scholarships	128	0	10			
Salting Exhibition	36	19	0			
Wentworth Fellowship	76	3	8			
Lithgow Scholarship	80	9	7			
Nicholson Medal	23	14	1			
Belmore Medal	20	13	8			
John Fairfax Prizes	32	10	0			
Maurice Alexander Bursary	43	12	6			
Levey and Alexander Bursary	54	0	0			
John West Prize	8	0	0			
E. M. Frazer Bursary	61	12	11			
J. E. Frazer Bursary	57	4	0			
W. C. Wentworth Bursary, No. 1	50	0	0			
Do. do. No. 2	50	0	0			
Do. do. No. 3	30	11	0			
Burdekin Bursary	40	0	6			
Hunter-Baillie Bursary, No. 1	43	14	6			
Do. do. No. 2	50	12	8			
J. B. Watt Exhibitions	130	1	8			
Renwick Scholarship	39	6	4			
Bowman-Cameron Scholarship	50	0	0			
Hovell Lectureship	144	11	3			
George Allen Scholarship	34	14	3			
Freemasons Scholarship	49	19	1			
J. G. Raphael Foundation	2	12	8			
James Aitken Scholarship	54	0	0			
Thomas Walker Bursaries	165	0	3			
G. Wigram Allen Scholarship	66	16	8			
Struth Exhibition	52	2	11			
Fisher Estate	462	5	3			
Fisher Estate, Building Account	1,143	10	8			
Norbert Quirk Prize	5	10	10			
Smith Prize	5	0	0			
Badham Bursary	36	5	0			
Slade Prizes	9	1	4			
Caird Scholarship	58	2	9			
James King of Irrawang Travelling Scholarship	254	11	2			
Macleay Curatorship	181	9	11			
John Harris Scholarship	50	0	0			
Horner Exhibition	5	17	3			
Council of Education Scholarship	20	10	10			
Carried forward	£4,228	2	11	£60	4	0

Cr.

PRIVATE FOUNDATIONS ACCOUNT.

REVENUE ACCOUNT.

EXPENDITURE.

	£	s.	d.	£	s.	d.
Balance due Commercial Bank, 31st December, 1896				174	12	11
Paid Scholarships, Bursaries, Prizes, &c., on account of the following Foundations:—						
Levey Scholarship	40	0	0			
Barker Scholarships	100	0	0			
Wentworth Prize Medal	25	0	0			
Cooper Scholarships	150	0	0			
Salting Exhibition	25	0	0			
John Fairfax Prizes	30	0	0			
Levey and Alexander Bursary	50	0	0			
John West Prize	10	0	0			
E. M. Frazer Bursary	50	0	0			
J. E. Frazer Bursary	50	0	0			
W. C. Wentworth Bursary, No. 1	50	0	0			
Do. do. No. 2	50	0	0			
Burdekin Bursary	50	0	0			
Hunter-Baillie Bursary, No. 1	50	0	0			
Do. do No. 2	50	0	0			
J. B. Watt Exhibitions	60	0	0			
Renwick Scholarship	50	0	0			
Bowman-Cameron Scholarship	50	0	0			
Hovell Lectureship (amount transferred to General Funds)	144	11	3			
George Allen Scholarship	50	0	0			
Freemasons Scholarship	50	0	0			
James Aitken Scholarship	50	0	0			
Thomas Walker Bursaries	237	10	0			
G. Wigram Allen Scholarship	50	0	0			
Struth Exhibition	50	0	0			
Norbert Quirk Prize	6	0	0			
Smith Prize	5	0	0			
Badham Bursary	40	0	0			
Slade Prizes	5	0	0			
James King of Irrawang Travelling Scholarship	152	1	4			
Macleay Curatorship (amount transferred to General Funds)	181	9	11			
John Harris Scholarship	40	0	0			
Horner Exhibition	8	0	0			
Frazer Scholarships	100	0	0			
Grahame Prize Medal	5	0	0			
Collie Prize	4	0	0			
Haswell Prizes	8	8	0			
Wood Prizes	10	0	0			
MacCallum Prizes	4	0	0			
Anderson Prizes	5	0	0			
David Prizes	5	0	0			
Wilkinson Prize	3	3	0			
Dixson Prize	2	2	0			
				2,156	5	1
Paid on account of the Fisher Library:—						
Purchase of Books	618	18	1			
Librarians' Salaries	301	0	0			
				919	18	1
Carried forward				£3,250	16	6

Dr.

PRIVATE FOUNDATIONS ACCOUNT—*Continued.*

REVENUE ACCOUNT.

RECEIPTS.

	£	s.	d.	£	s.	d.
Brought forward				60	4	0
Received income from investments on account of the following						
Foundations (*continued*)	4,228	2	11			
Frazer Scholarship	74	2	0			
Grahame Prize Medal	5	0	0			
Collie Prize	3	19	4			
P. N. Russell Endowment	1,886	16	0			
Do. do. Sinking Fund	2	2	1			
				6,200	2	4
Total				£6,260	6	4

INVESTMENT ACCOUNT.

RECEIPTS.

	£	s.	d.	£	s.	d
Received Principal sums of Bank Deposits, on account of :—						
Belmore Medal	2	13	4			
W. C. Wentworth Bursary, No. 3	9	3	4			
Hunter-Baillie Bursary No. 1	3	6	8			
Renwick Scholarship	20	0	0			
Hovell Lectureship	20	0	0			
George Allen Scholarship	29	3	4			
Freemasons Scholarship	2	10	0			
J. G. Raphael Foundation	1	3	4			
Thomas Walker Bursaries	68	6	8			
Slade Foundation	6	13	4			
Horner Exhibition	8	6	8			
Frazer Scholarships	28	6	8			
				199	13	4
Received Principal sums of Mortgages on account of :—						
Wentworth Fellowship	52	10	0			
Lithgow Scholarship	65	0	0			
Nicholson Medal	52	10	0			
Hunter-Baillie Bursary No. 2	245	0	0			
J. B. Watt Exhibitions	114	0	0			
G. Wigram Allen Scholarship	500	0	0			
Struth Exhibition	325	0	0			
Fisher Estate	1,646	0	0			
				3,000	0	0
Received from Revenue Account for investment				786	2	0
				£3,985	15	4

JOHN C. DIBBS, Auditor.

Cr.

PRIVATE FOUNDATIONS ACCOUNT—*Continued.*

REVENUE ACCOUNT.

EXPENDITURE.	£	s.	d.
Brought forward	3,250	16	6
Paid on account of P. N. Russell Endowment, salaries, scientific apparatus, &c., as per detailed account	1,819	11	1
,, Investment Account for Investment	786	2	0
Balance in Commercial Bank, 31st December, 1897	403	16	9
Total	£6,260	6	4

INVESTMENT ACCOUNT.

EXPENDITURE.

	s.	d.	£	s.	d.
Paid for Bank Deposits, on account of:—					
Barker Scholarships	50	0	0		
Deas-Thomson Scholarship	97	10	0		
Wentworth Fellowship	87	13	4		
Lithgow Scholarship	94	3	4		
Nicholson Medal	60	0	0		
Maurice Alexander Bursary	40	0	0		
Hunter-Baillie Bursary No. 2	248	16	8		
J. B. Watt Exhibitions	150	0	0		
G. Wigram Allen Scholarship	499	3	4		
Struth Exhibition	348	6	8		
Fisher Estate	891	13	4		
Caird Scholarship	49	3	4		
Fisher Estate, Building Account	949	13	4		
P. N. Russell Endowment, Sinking Fund	144	12	0		
				3,710	15	4
Paid for Additions to Properties:—					
Barker Scholarships	137	10	0		
Cooper Scholarships	137	10	0		
				275	0	0
				£3,985	15	4

ROBERT A. DALLEN, Accountant.

Dr.

CHALLIS FUND ACCOUNT.

RECEIPTS.

	£ s. d.	£ s. d.
Balance in Commercial Bank, 31st December, 1896		352 13 10
Received Interest on Investments:—		
Debentures	2,747 17 3	
Bank Deposits	986 5 0	
Mortgages	6,446 0 0	
	10,180 2 3	
„ from Challis Trustees, Interest on Guarantee Fund after payment of Australian Annuity, &c.	715 17 8	
	10,895 19 11	
Less Transfer to Special Reserve Fund	1,755 14 8	9,140 5 3
		£9,492 19 1

SPECIAL RESERVE FUND.

	£ s. d.
Balance in Commercial Bank, 31st December, 1896	641 11 6
Received Interest on Investments	519 16 11
„ from Challis Fund, interest over 4 per cent. on Investments, for providing quinquennial increases to Professors and for equalising income from investments	1,755 14 8
	£2,917 3 1

JOHN C. DIBBS, Auditor.

P. N. RUSSELL ENDOWMENT.

(Included in Private Foundations Account.)

	£ s. d.
Received Interest on Funded Stock	1,886 16 0

SINKING FUND.

Received from Endowment Fund	140 8 0
„ Interest	2 2 1
	£2,029 6 1

JOHN C. DIBBS, Auditor.

Cr.

CHALLIS FUND ACCOUNT.

EXPENDITURE.

	£	s.	d.
Paid Salaries	6,690	0	0
,, General Account, towards administration expenses	500	0	0
,, Printing and other charges	20	5	8
,, for Investment—Bank Deposit	1,000	0	0
Balance in Commercial Bank, 31st December, 1897	1,282	13	5
	£9,492	19	1

SPECIAL RESERVE FUND.

	£	s.	d.
Paid salaries—quinquennial increases	760	0	0
,, for Investment—Bank Deposits	2,150	0	0
Balance in Commercial Bank, 31st December, 1897	7	3	1
	£2,917	3	1

ROBERT A. DALLEN, Accountant.

P. N. RUSSELL ENDOWMENT.

(Included in Private Foundations Account.)

	£	s.	d.
Paid Salaries	1,152	1.	8
,, for Scientific Apparatus	554	18	0
,, for Printing and Sundry Charges	7	11	5
,, for Dies for Medal and for Gold Medal	105	0	0
,, second instalment towards Sinking Fund to defray premium on Funded Stock	140	8	0
SINKING FUND.			
Paid for Investment—Bank Deposit	144	12	0
	£2,104	11	1

ROBERT A. DALLEN, Accountant.

Private Foundations.

Levey Scholarship
Barker Scholarships
Deas-Thomson Scholarships
Wentworth Prize Medal
Cooper Scholarships
Salting Exhibition
Wentworth Fellowship
Lithgow Scholarship
Nicholson Medal
Earl Belmore Medal
John Fairfax Prizes
Alexander Bursary
Levey and Alexander Bursary
West Prize
E. M. Frazer Bursary
J. E. Frazer Bursary
W. C. Wentworth Bursary, No. 1
W. C. Wentworth Bursary, No. 2
W. C. Wentworth Bursary, No. 3
Burdekin Bursary
Hunter-Baillie Bursary, No. 1
Hunter-Baillie Bursary, No. 2
J. B. Watt Exhibitions
Renwick Scholarship
Bowman-Cameron Scholarship
Hovell Lectureship
George Allen Scholarship
Freemasons Scholarship
J. G. Raphael Foundation
James Aitken Scholarship
Thomas Walker Bursaries
G. Wigram Allen Scholarship
Struth Exhibition
Fisher Estate
Fisher Estate (Building Account)
Norbert Quirk Prize
Smith Prize
Badham Bursary
Slade Prizes
Caird Scholarship
James King of Irrawang Travelling Scholarship
Macleay Curatorship
John Harris Scholarship
Horner Exhibition
Council of Education Scholarship
Frazer Scholarships
Grahame Prize Medal
Collie Prize
P. N. Russell Endowment
P. N. Russell Endowment Sinking Fund
Challis Estate
Challis Estate—Special Reserve Fund

Ledger Account, Cr. Balance.	Investments.			
	Mortgages.	Buildings & Land.	Fixed Deposits.	Funded Stock & Debentures.
£ s. d	£ s. d.	£	£ s. d.	£ s. d.
1,023 3 2	.....	.....	700 0 0	325 0 0
2,495 18 6	100 0 0	1,257½	231 5 0	1,070 0 0
2,419 10 10	25 0 0	1,036	288 15 0	1,030 0 0
528 13 9	100 0 0	.....	18 15 0	400 0 0
2,525 10 5	.....	1,257½	131 5 0	1,320 0 0
797 9 8	.....	.....	30 0 0	755 0 0
1,980 4 1	180 0 0	.....	1,056 5 0	695 0 0
2,096 16 3	125 0 0	.....	285 0 0	1,630 0 0
586 3 6	.....	.....	168 15 0	400 0 0
562 13 11	.....	.....	125 0 0	415 7 3
548 13 1	50 0 0	.....	.....	500 0 0
1,128 11 0	25 0 0	.....	740 0 0	350 0 0
1,110 17 6	.....	.....	.....	1,100 0 0
213 11 10	15 0 0	.....	200 0 0	.....
1,544 4 1	25 0 0	.....	18 15 0	1,495 0 0
1,451 10 0	.....	.....	.....	1,430 0 0
1,000 0 0	.....	.....	.....	1,000 0 0
1,000 0 0	.....	.....	.....	1,000 0 0
941 3 2	50 0 0	.....	696 5 0	150 0 0
1,075 16 8	.....	.....	1,045 0 0	70 0 0
1,157 15 11	.....	.....	1,045 0 0	150 0 0
1,278 11 11	175 0 0	.....	512 10 0	585 0 0
3,834 14 2	85 0 0	.....	2,370 0 0	1,335 0 0
1,129 5 4	.....	.....	616 5 0	495 0 0
975 0 0	.....	.....	.....	1,000 0 0
6,025 0 0	525 0 0	4,400	805 0	275 0 0
1,086 7 7	.....	.....	951 5 0	120 0 0
1,273 12 3	25 0 0	.....	107 10 0	1,130 0 0
85 11 9	.....	.....	56 5 0	20 0 0
1,111 0 0	.....	.....	.....	1,100 0 0
5,196 10 4	.....	.....	4,890 0 0	375 0 0
1,631 2 7	.....	.....	817 10 0	795 0 0
1,230 5 4	400 0 0	.....	635 0 0	190 0 0
9,406 18 5	6,872 0 0	700	1,347 10 0	375 0 0
30,116 1 1	8,005 0 0	.....	16,944 18 9	4,880 0 0
158 5 2	.....	.....	112 10 0	40 0 0
111 14 7	100 0 0	.....	.....	.....
988 14 1	.....	.....	750 0 0	250 0 0
302 10 0	25 0 0	.....	250 0 0	.....
1,605 6 8	150 0 0	.....	960 0 0	475 0 0
4,440 4 8	50 0 0	.....	4,168 15 0	185 0 0
5,909 13 0	.....	.....	6,000 0 0	.....
1,012 0 3	1,000 0 0	.....	.....	.....
209 6 2	.....	.....	185 0 0	.....
427 19 7	335 0 0	.....	25 0 0	45 0 0
2,324 5 0	50 0 0	.....	2,160 0 0	115 0 0
97 13 10	100 0 0	.....	.....	.....
106 16 5	.....	.....	56 5 0	50 0 0
47,143 9 2	.....	.....	.....	47,170 0 0
282 18 1	.....	.....	285 0 0	.....
221,392 13 5	127,260 0 0	.....	28,250 0 0	64,600 0 0
15,257 3 1	4,400 0 0	.....	9,750 0 0	1,100 0 0
392,339 1 3	150,252 0 0	8,651	89,786 3 9	141,990 7 3

ROBERT A. DALLEN, Accountant.

UNIVERSITY CLUBS, ETC.

SYDNEY UNIVERSITY UNION.

The object of the Union is the promotion of the mental culture of its members by Debates, Readings, and such other means as may be determined upon. The meetings are held weekly on Fridays, at the University, or other place as arranged by the Executive Committee. The Professors, Lecturers, and Examiners of the Sydney University are *ex-officio* Honorary Members. All Graduates, Undergraduates, Superior officers, and all Graduates and Undergraduates of British and Colonial Universities, are eligible for ordinary membership. Except in the case of members of other Universities, the formality of an election is dispensed with. Subscription, 5s. per annum. Life Member's subscription, £1 10s.

OFFICE BEARERS FOR 1898.

PRESIDENT—F. Lloyd, B.A., LL.B.
VICE-PRESIDENT—H. S. Dettmann, B.A.
HON. SECRETARY—R. C. Teece.
HON. TREASURER—J. J. Walsh.
COMMITTEE—E. M. Mitchell, B.A., W. J. E. Davies, B.A., LL.B., W. G. Forsyth, B.A.

UNIVERSITY OF SYDNEY MEDICAL SOCIETY.

The objects of this Society, which was founded in 1885, are the intellectual and social improvement of its members, by lectures, essays and discussions, in any branch of Medical Science, and by any other means calculated to advance the objects of the Society.

The meetings are held monthly, in the Clinical Theatre, Prince Alfred Hospital, on Friday evenings, at 7.45.

All teachers in the Faculty of Medicine are honorary members *ex-officio*. All Students of Medicine, or qualified Medical Practitioners, whose qualifications are recognised by the University of Sydney, are eligible for ordinary membership.

OFFICE BEARERS FOR 1898.

PRESIDENT—E. Maynard Pain, M.B., Ch.M.
VICE-PRESIDENTS—F. J. T. Sawkins, M.B., Ch.M., J. MacPherson, M.A., B.Sc., M.B., Ch.M., H. R. Cope, M.B., Ch.M., H. J. W. Brennand, B.A., D. Æ. D. MacMaster, B.A., B.Sc.
HON. SECRETARY—H. J. P. Knight.
HON. TREASURER—F. G. Griffiths, B.A.
HON. LIBRARIAN—E. Ludowici.
HON. AUDITORS—A. G. Corbin, B.Sc., F. P. Sandes.
EDITORIAL COMMITTEE OF THE SOCIETY'S JOURNAL—J. MacPherson, M.A., B.Sc., M.B., Ch. M., D. Æ. D. MacMaster, B.A., B.Sc., H. J. W. Brennand, B.A.
REPRESENTATIVES OF THE YEARS—C. B. Blackburn, W. F. Burfitt, B.A., B.Sc., R. W. Maffey, B.A., L. W. Bond, H. A. Jones.

SYDNEY UNIVERSITY SPORTS UNION.

The Union has been formed by the amalgamation of the existing Football, Cricket, Boat, Athletic, and Tennis Clubs. Such other Clubs as may from time to time be approved by the Committee shall be admitted.

Membership is open to Graduates of this University and of other recognised Universities, and members of the University who have matriculated in accordance with the by-laws.

Annual Subscription—For active members, £2 2s.; ladies, £1 1s.; Honorary Members, £1 1s. Life Active Members £15 15s.; Life Honorary Members, £10 10s.

OFFICE BEARERS FOR 1898.

PATRON—His Excellency Viscount Hampden.

PRESIDENT—The Hon. H. N. MacLaurin, M.A., M.D., LL.D., Chancellor.

VICE-PRESIDENTS—Professor Scott, Professor Anderson, Professor Wood, H. E. Barff, M.A., J. T. Walker, H. M. Faithfull, M.A., Hon. H. E. Kater, M.L.C., John Harris, N. F. White, B.E., A. H. Uther, B.A.

COMMITTEE—The Committee consists of Delegates from the constituent clubs.

HON. TREASURERS—H. F. Maxwell, B.A., C. H. Gibson, F. W. West, H. M. Stephen.

HON. SECRETARY—J. a'B. D. Barton, B.A.

GROUNDS COMMITTEE—C. T. Russell, B.A., W. G. Gregson, B.A., H. F. Maxwell, B.A.

UNIVERSITY BOAT CLUB.

All members of the Sports Union are members of the Boat Club. The boat shed of the Club stands on the Western side of Woolloomooloo Bay, next to the Corporation baths.

OFFICE BEARERS FOR 1898.

PATRON—His Excellency Viscount Hampden.

PRESIDENT—His Honor Judge Backhouse (Vice-Chancellor).

VICE-PRESIDENTS—Professor Scott, H. E. Barff, M.A., The Hon. H. E. Kater, M.L.C., A. Consett Stephen, T. Rolin, M.A., A. MacCormick, M.D., John Harris, A. C. Millard, B.A., W. H. Palmer, V. B. MacDermott, B.A.

CAPTAIN—C. H. Helsham, B.A.

VICE-CAPTAIN—G. A. Vivers.

HON. SECRETARY—J. E. d' Apice.

HON. TREASURER—A. L. Vivers.

TRUSTEES—Professor Scott, R. Smith, M.A.

COMMITTEE—C. T. Russell, B.A., N. W. Kater, M.B., Ch.M., A. G. Purves, T. G. Wilson, W. H. Gregson, B.A., H. W. Kendall.

DELEGATES TO SPORTS UNION—A. L. Vivers (*ex-officio*), C. T. Russell, B.A.

DELEGATES TO N.S.W. R.A.—C. T. Russell, B.A., G. A. Vivers, H. W. Kendall.

HON. MEDICAL OFFICER.—N. W. Kater, M.B., Ch.M.

UNIVERSITY CRICKET CLUB.

This Club was established in the year 1865. All members of the Sports Union are members of the Cricket Club. The Senate has granted to the Club the use of that portion of the University grounds known as the "Oval." A considerable sum of money has been spent upon this ground, and a handsome pavilion has been erected upon it. Practice is carried on from October to April (inclusive) on the Oval.

Fourteen matches have been played between this University and that of Melbourne. Of these nine have been won by Sydney.

OFFICE BEARERS FOR 1898.

PRESIDENT—H. M. Faithfull, M.A.

VICE-PRESIDENTS—R. Teece, H. E. Barff, M.A., Theo. Powell, M.A., John Harris, Thomas Buckland, B.A., R. C. Allen, B.A., Professor Wood, M.A., Hon. E. Barton, M.A.

HON. SECRETARY—W. D. Cargill.

ASSISTANT HON. SECRETARIES—Second XI., H. E. Manning; Third XI., W. B. Dight; Veteran XI., A. C. Gill, B.A., LL.B.

HON. TREASURER—W. H. Gregson, B.A.

DELEGATES TO S. U. SPORTS UNION—W. H. Gregson, B.A, (*ex-officio*), G. R. C. Clarke.

COMMITTEE—N. F. White, B.E., H. D. Wood, B.A., LL.B., W. Camac Wilkinson, M.D., A. I. Blue, H. Terry, M.B., H. S. Stacy, M.B., Ch.M., L. O. S. Poidevin, T. W. Lipscomb, M.B.

DELEGATES TO NEW SOUTH WALES CRICKET ASSOCIATION—Theo. Powell, M.A., and W. D. Cargill.

SELECTION COMMITTEES—First Eleven: G. R. C. Clarke, W. D. Cargill, N. F. White, B.E. Second Eleven: H. E. Manning, A. I. Blue, W. H. Gregson, B.A. Third Eleven: H. S. Stacy, M.B., Ch.M., W. B. Dight, E. B. L. Fitzpatrick. Veteran Eleven: A. C. Gill, B.A., LL.B., H. D. Wood, B.A., LL.B., J. S. Cargill, B.A. Undergraduates' Eleven—G. R. C. Clarke, H. C. M. Delohery, W. H. Gregson, B.A.

UNIVERSITY TENNIS CLUB.

The Club was established in September, 1885. All members of the Sports Union are also members of the Tennis Club.

OFFICE BEARERS FOR 1898.

PRESIDENT—Professor Wood, M.A.

VICE-PRESIDENTS—F. Lloyd, LL.B., H. E. Barff, M.A., Professor Wilson, D. S. Edwards, B.A., P. B. Colquhoun.

HON. SECRETARY—E. P. T. Griffith.

HON. TREASURER—T. G. Wilson.

COMMITTEE—W. H. Gregson, B.A., W. D. Cargill, A. Curtis, E. L. Newman, C. B. Cameron, V. W. Savage.

DELEGATES TO SPORTS UNION—D. S. Edwards, B.A., E. P. T. Griffith.

LADIES' TENNIS CLUB.

OFFICE BEARERS FOR 1898.

PRESIDENT—Mrs. Gurney.

VICE-PRESIDENTS—Mrs. MacCallum, Mrs. Trechmann.

HON SECRETARY—Marian Harris, B.A.

HON. TREASURER—Gertrude L. Bavin, B.A.

COMMITTEE—Millicent V. Elliott, B.A. (Captain), Annie Beaumont, B.A., Nona Dumolo, B.A., Ethel N. De Lissa, B.A., Maude Scrutton, Gwendolene Wilson.

UNIVERSITY ATHLETIC CLUB.

OFFICE BEARERS FOR 1898.

PATRON—His Excellency Viscount Hampden.

PRESIDENT—Professor Anderson, M.A.

VICE-PRESIDENTS—John Harris, J. T. Walker, Dr. Wilkinson, H. E. Barff, M.A., H. D. Wood, B.A. LL.B., F. Lloyd, B.A., LL.B., H. B. Rowlands, B.E.

HON. GRADUATE SECRETARY—A. H. Uther, B.A.

HON. UNDERGRADUATE SECRETARY—C. B. Cameron.

HON. TREASURER—F. G. Griffiths, B.A.

DELEGATES TO S.U. SPORTS UNION—F. G. Griffiths, B.A., H. A. Jones.

DELEGATES TO N.S.W. A.A.A.—A. H. Uther, B.A., H. H. Lee.

GENERAL COMMITTEE—J. A'B. D. Barton, B.A., H. H. Lee, W. H. Gregson, B.A., H. A. Jones, St. A. W. L. McDowall, F. T. Perkins, F. West.

UNIVERSITY FOOTBALL CLUB.

This Club was formed in 1863. Matches are played every Saturday and Wednesday during the season, which lasts from April till September. All members of the Sports Union are members of the Football Club.

OFFICE BEARERS FOR 1898.

PRESIDENT—The Hon H. N. MacLaurin, M.D., LL.D.

VICE-PRESIDENTS—H. E. Barff, M.A., L. E. F. Neill, M.B., Ch.M., H. P. Abbott, J. F. MacManamey, B.A., P. B. Colquhoun, J. Harris, H. B. Rowlands, B.E.

GENERAL COMMITTEE—H. D. Wood, B.A., LL.B., W. A. Shortland, B.E., A. J. Corfe, E. M. Mitchell, B.A., A. I. Blue.

SELECTION COMMITTEES—First XV.: W. A. Shortland, B.E., H. Busby, A. J. Corfe. Second XV.: G. B. Thomas, B. L. Hart, S. D. Tozer, Third XV.: H. Marsh, E. Delohery, T. Heery.

HON. TREASURER—J. J. Walsh,

DELEGATE TO SPORTS UNION—H. D. Wood, B.A., LL.B.

DELEGATES TO RUGBY UNION—H. D. Wood, B.A., LL.B., W. A Shortland, B.E.

JOINT HON. SECRETARIES—H. A. Jones, S. D. Tozer.

UNIVERSITY WOMEN'S SOCIETY.

The object of this Society is to help anyone requiring and deserving help, as far as lies in the power of the Society. All women members of the University of Sydney are eligible for membership. Honorary members may be admitted by consent of a general meeting. Subscription, 1s. 6d. per term.

OFFICE BEARERS FOR 1897-8.

FOUNDRESS—The Countess of Jersey.

PATRONESS—The Vicountess Hampden.

PRESIDENT—Lady Manning.

VICE-PRESIDENTS—Lady Renwick, Mrs. MacCallum, Mrs. Wolstenholme, Miss Macdonald, M.A., Mrs. Hey Sharp, Mrs. Haswell.

HON. SECRETARY—Miss C. Lomer, B.A.

HON. TREASURER—Miss A. Pritchard, B.A.

REPRESENTATIVES—Harrington Street Night School, Miss J. F. Russell, M.A.; Lewisham Hospital, Miss G. J. Harriott, B.A.; Newington Asylum, Miss S. O. Brennan, M.A.; Prince Alfred Hospital, Miss Britton, B.A.

MEMBERS OF COMMITTEE—Miss Bowmaker, M.A., Miss B. Symonds, B.A., Miss de Lissa, B.A., Miss Liggins, Miss Larkins, Miss Cripps, B.A., Miss L. Brown, B.A., Miss Harris, B.A.

SYDNEY UNIVERSITY WOMEN'S ASSOCIATION.

This Association was founded in May, 1892, with the aim of bringing all women Graduates and Undergraduates together from time to time for social and intellectual purposes, and of taking cognizance of all matters affecting their well-being.

Office Bearers for 1897-8.

President—Miss J. F. Russell, M.A.

Hon. Secretary—Miss T. A. Britton, B.A.

Hon. Treasurers—Miss E. N. De Lissa, B.A., Miss C. M. Scrutton.

Committee—Miss C. A. Sutherland, M.A., Miss A. E. Hipsley, Miss M. I. White, Miss R. Bowmaker, M.A., Miss L. Macdonald, M.A., Miss L. E. Gullett.

SYDNEY UNIVERSITY UNDERGRADUATES' ASSOCIATION.

Office Bearers for 1898.

President—E. Ludowici.

Vice-Presidents—E. M. Mitchell. B.A., F. G. Griffiths, B.A., D. Æ. D. MacMaster, B.A., B.Sc.

Hon. Secretaries—H. M. Stephen, A. H. Macintosh.

Hon Treasurer—W. F. Burfitt, B.A.

Committee—F. T. Perkins, R. C. Teece, R. N. Robson, E. N. Merrington, A. B. S. White, F. A. Todd, D. P. Evans-Jones, B.A., H. S. Dettmann, B.A., F. W. West, H. J. P. Knight, J. A'B. D. Barton, B.A., L. W. Bond, H. A. Jones, W. R. Beaver, J. F. Morris.

UNIVERSITY CHESS CLUB.

This Club was founded in October, 1894, and has already upwards of 90 members. The subscription is 2s. 6d. per annum. Membership is open to Graduates and Undergraduates. The object of the Club is to promote an interest in Chess, Draughts, Whist, and other scientific games. The Club meets for play every Tuesday evening in the Common Room.

Office Bearers for 1898.

President—Mr. Lloyd, B.A., LL.B.

Vice-Presidents—Professor Wilson, M.B., Professor Scott, M.A., Professor Wood, M.A.

Hon. Secretary—D. T. Sawkins.

Hon. Treasurer—T. B. Clouston.

Committee—A. D. MacLaren, B.A., H. E. Whitfeld, B.A., T. H. Palmer, B.E., W. W. Monahan, B.A., C. Potts, B.A., M. M. Vernon.

Delegates to Suburban Chess Association—A. D. Maclaren, B.A., D. T. Sawkins.

SYDNEY UNIVERSITY ENGINEERING SOCIETY.

The object of the Society is to promote the welfare of the Department of Engineering by bringing into closer association the Graduates and Undergraduates in Engineering, by the reading of papers and the delivery of

lectures on professional subjects, and by such other similar means as may be approved by the Council of the Society. The subscription is 10s. 6d. per annum, payable before the beginning of May. This fee covers the cost of Proceedings.

OFFICE BEARERS FOR 1898.

PRESIDENT—P. W. Rygate, B.E., Assoc. M. Inst. C.E.

VICE-PRESIDENTS—W. M. Thompson, M.A., B.E., S. H. Barraclough M.M.E., B.E., Assoc. M. Inst. C.E., H. H. Dare, M.E., J. J. C. Bradfield, M.E.

COUNCIL—Professor Warren (Past-President), Wh.Sc., M. Inst. C.E., G. H. Knibbs, (Past-President) L.S., F.R.A.S., J. W. Roberts, B.E., N. J. C. MacTaggart, B.E., R. W. Hawken, C. P. Allen, R. F. Barker.

HON. SECRETARY AND TREASURER—R. J. Boyd.

SYDNEY UNIVERSITY CHRISTIAN UNION.

This Union was founded on May 19th, 1896. Its objects may be gathered from Article II. of the Constitution :—

"To strengthen the bonds of union among Christian students; to influence fellow-students to become followers of Christ; to deepen the spiritual life of students; to promote Christian work, especially by and for students; to lead students, as they go forth from the University to place their lives where they will be most useful in extending the kingdom of Christ."

Weekly meetings are held on Thursdays, at 4.30 or 8 p.m.; also Bible classes, missionary study classes, prayer meetings, &c., as arranged.

Membership is open to all members of the University. Subscription, 2s. 6d. per annum.

Under the Constitution the annual general meeting of the Union is held in the second week of the Third Term, at which meeting the executive officers are elected to serve for one year. They take office at once.

OFFICE BEARERS FOR 1898.

PRESIDENT—H. S. Dettmann, B.A.

VICE-PRESIDENT—R. C. Teece.

RECORDING SECRETARY—E. J. Withycombe.

CORRESPONDING SECRETARY—R. N. Robson.

TREASURER—P. L. Williamson.

WOMEN'S DEBATING UNION.

OFFICE BEARERS FOR 1898.

PRESIDENT—Miss I. Slack.

VICE-PRESIDENT—Miss E. Davies.

SECRETARY—Miss F. Rutherford.

COMMITTEE—Miss K. E. Isitt (*ex-officio*), Miss E. Read, Miss K. Fell, Miss M. Jarrett, Miss G. Bruce.

UNIVERSITY WOMEN'S BOAT CLUB.

Office Bearers for 1898.

President—Mrs. Butler.

Committee—E. Cribb, L. Ure, E. A. Lance, B.A.

Hon. Treasurer—E. E. Bourne.

Hon. Secretary—Mary H. Uther.

UNIVERSITY BOYS' CLUB.

Office Bearers for 1898.

President—Professor Wood, M.A.

Vice-President—E. M. Pain, M.B., Ch.M.

Joint Hon. Secretaries—E. C. Hall, M.B., Ch.M.; G. E. Brown, B.A.

Hon. Treasurer—E. M. Pain, M.B., Ch.M.

ARMY MEDICAL SERVICE.

The ordinary mode of admission to the Army Medical Staff is by competitive examination held twice a year. The Candidates must be 21 years of age, and not over 28 years of age at the date of commencement of the competitive examination. Each candidate must present an extract from the register of his birth, a recommendation from a person of standing in society, and a certificate of moral character. He must possess two diplomas or licences, recognised by the General Medical Council—one to practice Medicine, and the other Surgery, and must be registered under the Medical Act in force in the United Kingdom at the time of his appointment. He must also produce a certificate of having discharged the duties of a medical clinical clerk during six months, and of a surgical dresser during another six months, of which, in each case, not less than three months must have been spent in the wards of a hospital; and a certificate of having attended a course of instruction during not less than three months at an ophthalmic hospital, or the ophthalmic department of a general hospital, which course shall include instruction in the errors of refraction. Other conditions contained in the regulations must also be satisfied.

The following provision is also contained in Regulation No. 5 :—

> "It will be competent for the Secretary of State for War to fill up the remaining number (of vacancies) from such qualified candidates as may be proposed by the governing bodies of Public Schools of Medicine in the United Kingdom or in the Colonies, as he may think proper. Every candidate so proposed must be approved by the Director General of the Army Medical Department, and be certified by the Governing body proposing him to be duly qualified according to a standard laid down by the Secretary of State."

The full regulations may be seen in the Registrar's Office.

NAVAL MEDICAL SERVICE.

The Lords Commissioners of the Admiralty have been pleased to revise the regulations governing the entry to the

Medical Branch of the Royal Navy so as to provide that the Board of Admiralty may admit annually one candidate, proposed by the governing bodies of Public Schools of Medicine in the United Kingdom, or attached to such Colonial Universities as they may think proper; the candidate so proposed to be approved by the Director General of the Medical Department of the Navy, and to be certified by the Governing Body proposing him to be duly qualified according to the Regulations in force for the entry of candidates.

The Colonial candidates will have to pass a physical and test examination before a Board of Naval Medical Officers on the Station. The question papers for these examinations will be issued from the Medical Department of the Navy.

The conditions as to age, character, registration, &c., are similar to those in force for the Army Medical Staff.

The full regulations may be seen in the Registrar's Office.

EXAMINATIONS FOR THE CIVIL SERVICE OF INDIA.

Appointments in the Civil Service of India are made after open competition.

These examinations are held in England annually in the month of August, and applicants are required to send their applications on the prescribed form before the 31st of May.

Each candidate must satisfy the Civil Service Commissioners—

1. That he is a natural born subject of Her Majesty.
2. That he had attained the age of 21 and had not attained the age of 23 on the first day of the year in which the examination is held.
3. That he has no disease, constitutional affection or bodily infirmity unfitting him, or likely to unfit him, for the Civil Service of India.
4. That he is of good moral character.

The full regulations, including the subjects of examination, may be seen in the Registrar's Office.

The regulations for the entry of Engineering students in Her Majesty's Navy, for the entry of students in Naval Construction, and the regulations for the guidance of candidates for direct appointments as probationary Assistant Engineers in the Royal Navy, may be seen in the Registrar's Office.

APPENDIX.

*EXAMINATION PAPERS.

DECEMBER, 1897.

FACULTY OF ARTS.

FIRST YEAR EXAMINATION.

ENGLISH.

Not more than NINE *questions to be attempted.*

1. Explain and discuss the statement that "the standard of language is to be found in usage, recent, reputable and national."
2. What are the chief advantages and disadvantages of an uninflected language?
3. What is the meaning of Tautology? Is it ever to be justified?
4. Describe the chief instances of the improper employment of metaphor. Are mixed metaphors ever excusable?
5. Render into modern English, with full explanatory notes attached—

   (*a*) Shortly hyt was so ful of bestes,
   that thogh Argus, the noble countour,
   sete to rekene in hys countour,
   and counten with his figures ten—
   for by tho figures mowe al ken,
   yf they be crafty, rekene and noumbre,
   and telle of every thing the noumbre—
   yet sholde he fayle to rekene even
   the wondres me mette in my sweven.

*NOTE.—The time allowed for each paper is three hours, except where otherwise stated.

(*b*) He was short-sholdred, brood, a thikke knarre;
ther nas no dore that he nolde heve of harre
or breke it at a rennyng with his heed.

(*c*) Ye may abyde a while yet parde,
seyde the turtel, if it be your wille,
a wight may speke, hym were as good be stylle.

(*d*) . . . . . a subtyl kerchef of valence.

(*e*) This forseyd Affrican me hente anon,
and forth with him unto a gate broghte
ryght of a parrok walled with grene ston.

(*f*) He rood but hoomly in a medlee coat,
girt with a ceint of silk with barres smale.

6. A. Compare the metrical schemes of the Parliament of Birds and The Hunt (from the Boke of the Duchesse), and scan the following lines, adding notes on particular points:—

(*a*) Blew, bright, clere was the ayr
. . . . . .
Ne in all the welken was a clowd.

(*b*) I wolde have kaught hyt, and anon
hyt fledde, and was fro me goon.

(*c*) And he seyde: know thyself fyrst immortal.

(*d*) Ryght as the fresshe rede rose newe
agayn the somer sunne coloured is.

(*e*) For soth as yet by no manere weye.

B. Contrast the grammatical forms of Chaucerian and modern English in the case of the past tense singular of the verbs walke and grete, the plural of shal, of the third personal pronoun, and of the nouns hors, yeer, fo.

7. Describe either the debate in the Parliament of Birds, *or* the hints in the Prologue as to the character and appearance of the Wife of Bath.

8. What can be learnt from the Parliament of Birds as to its date and purpose?

9. Explain the passages quoted, and note any particular difficulties of expression—

(*a*) . . . who being more than sand-blind, high-gravel-blind, knows me not; I will try confusions with him.

(*b*) His master and he . . . . are scarce cater-cousins.

(*c*) From whom he bringeth sensible regreets,
To wit, besides commends and courteous breath,
Gifts of rich value. Yet I have not seen
So likely an ambassador of love.

(*d*) Yet more quarrelling with occasion!

(*e*) What talk you of the posy or the value?

(*f*) There is no vice so simple but assumes
Some mark of virtue on his outward parts:

. . . . . .

Thus ornament is but the guiled shore
To a most dangerous sea; the beauteous scarf
Veiling an Indian beauty;

(*g*) You stand within his danger, do you not

10. Explain the metre of—

(*a*) To offend and judge are distinct offices.

(*b*) One half of me is yours, the other half yours,

(*c*) But she may learn; happier than this

And the grammar of—

(*d*) As who should say, "I am Sir Oracle."

(*e*) . . lend it rather to thine enemy
Who if he break, thou mayst with better face
Exact the penalty.

(*f*) . . . Prove it so,
Let fortune go to hell for it, not I.

(*g*) The best-conditioned and unwearied spirit.

11. Examine the conduct of the Trial Scene in the Merchant of Venice with special reference to the treatment of Shylock.

12. Describe the casket story as it appears in the Gesta Romanorum, and discuss the changes made by Shakespeare in the matter of the inscriptions.

LATIN PROSE COMPOSITION AND UNSEEN TRANSLATION.

PASS.

1. Translate into Latin—

(*a*) Meanwhile at Rome the utmost alarm prevailed. News of Hannibal's advance had been hastily sent by Fulvius Flaccus, and the Senate had bidden him use his discretion whether he could come to the city without risking the

siege of Capua, which was not to be abandoned. But before it was known at Rome what he meant to do, a messenger arrived from Fregellae, who had travelled night and day with tidings of Hannibal being already on the Liris. Though this intensified the alarm, neither people, Senate, nor magistrates were wanting to their duties, and active preparations were made for defence. They were encouraged by the arrival of 2000 troops from Alba Fucentia, who had hurried to Rome when they heard of Hannibal's march, and by the news that Q. Fulvius was on the way from Capua, along the Appian road, with a considerable detachment.

(*b*) If you had spared those who surrendered, there would have been no need for you to beg for pardon when you were conquered.

(*c*) I am convinced that poverty is preferable to dishonour, that resistance to oppression is the duty of a man of courage.

2. Translate into English—

Eodem anno, seu motu terrae seu qua vi alia, forum medium ferme specu vasto collapsum in immensam altitudinem dicitur; neque eam voraginem coniectu terrae, quum pro se quisque gereret, expleri potuisse, priusquam deum monitu quaeri coeptum, quo plurimum populus Romanus posset; id enim illi loco dicandum vates canebant, si rem publicam Romanam perpetuam esse vellent. Tum M. Curtium, iuvenem bello egregium, castigasse ferunt dubitantes, an ullum magis Romanum bonum quam arma virtusque esset, *et* silentio facto, templa deorum immortalium, quae foro imminent, Capitoliumque intuentem et manus nunc in caelum, nunc in patentes terrae hiatus ad deos manes porrigentem, se devovisse; equoque deinde quam poterat maxime exornato insidentem, armatum se in specum immisisse, donaque ac fruges super eum a multitudine virorum ac mulierum congestas, lacumque Curtium non ab antiquo illo T. Tatii milite Curtio Mettio, sed ab hoc appellatum.

LATIN AUTHORS.

PASS.

1. Translate into English, extracts from Livy, Book XXVI.

2. Translate and explain—
   (*a*) Alii [nobiles Campani] per sociorum Latini nominis urbes in custodias dati.
   (*b*) Auctoritatem prærogativæ omnes centuriæ secutæ sunt.
3. Translate into English, extracts from Virgil, Georgics I. and II.
4. Translate and explain—
   (*a*) Satis jam pridem sanguine nostro
   Laomedonteæ luimus periuria Trojæ.
   (*b*) Ascræumque cano Romana per oppida carmen.
   (*c*) Veteres ineunt proscaenia ludi,
   Præmiaque ingeniis pagos et compita circum
   Thesidæ posuere.

PRELIMINARY EXAMINATION IN GREEK.

(FIRST YEAR PASS.)

COMPOSITION AND TRANSLATION AT SIGHT.

1. Translate into English—

Καμίλλου τὴν τῶν Φαλίσκων πόλιν πολιορκοῦντος, Φαλίσκων τις παῖδας ἐκ τῶν ἐπιφανεστάτων οἴκων συναγείρας (ἦν δὲ διδάσκαλος γραμμάτων) ἐξήγαγεν ἐκ τῆς πόλεως, ὡς περιπατήσοντάς τε πρὸ τοῦ τείχους καὶ τὸ Ῥωμαϊκὸν στρατόπεδον θεασομένους. ὑπαγόμενος δὲ κατὰ μικρὸν αὐτοὺς προσωτέρω τῆς πόλεως, ἐπὶ φυλακτήριον Ῥωμαϊκὸν ἄγει, καὶ τοῖς ἐπιδραμοῦσι παραδίδωσιν, ὑφ' ὧν ἀχθεὶς ἐπὶ τὸν Κάμιλλον ἔφη· "Βεβουλεῦμαι μὲν πάλαι τὴν πόλιν ὑπὸ Ῥωμαίων ποιῆσαι· οὐδενὸς δὲ κύριος ὤν, τοῦτον ἐξηύρηκα τὸν τρόπον, ἀναγκασθήσεσθαι οἰόμενος τοὺς πατέρας, ὑπὲρ τῆς τῶν τέκνων σωτηρίας φοβουμένους, παραδοῦναι Ῥωμαίοις τὴν πόλιν." ὁ μὲν δὴ ταῦτ' ἔλεγε, πολλὰς ἐλπίδας ἔχων θαυμαστούς τινας λήψεσθαι μισθοὺς τῆς προδοσίας. ὁ δὲ Κάμιλλος, προαγαγὼν ἐκ τοῦ στρατοπέδου τὸν διδάσκαλον ἅμα τοῖς παισὶ, καὶ οὐ μακρὰν ἀπὸ τῶν τῆς πόλεως πυλῶν στὰς, πρῶτον μὲν ἐδήλωσε τοῖς Φαλίσκοις οἷα ὁ διδάσκαλος εἰς αὐτοὺς ἐτόλμησε παρανομεῖν· ἐπεῖτα ῥάβδους τοῖς παῖσιν ἀιαδοὺς, ἀπάγειν αὐτὸν ἐκέλευσεν εἰς τὴν πόλιν δεδεμένον τῷ χεῖρε ὀπισω παίοντας. κομισάμενοι δὲ τοὺς παῖδας οἱ Φαλίσκοι, καὶ τὸν διδάσκαλον ἀξίως τῆς κακίας τιμωρησάμενοι, παρέδοσαν τῷ Καμίλλῳ τὴν πόλιν.

2. Translate into Greek—

Soon after the banishment of Cimon, the hostile feeling between Athens and Sparta, which had been growing in intensity for some time, broke out into open war. A Spartan army, which had been sent on an expedition into northern Greece, took up a position at Tanagra, near the Boeotian border. It was believed that its purpose was to assist the oligarchical party in Athens to overthrow their democratic rivals. Nor is it unlikely that some of Cimon's less discreet followers, enraged at the fall of their chief, were willing to look for foreign help. This was not Cimon's feeling. He begged to be allowed to serve, exile though he was, with the troops sent out to attack the Spartans. The request was refused. He called upon his friends to vindicate his patriotism. A hundred of them carried his armour into the thickest of the fight, and fell round it to the last man.

PRELIMINARY EXAMINATION IN GREEK.

(FIRST YEAR PASS.)

AUTHORS.

1. Translate into English, passages selected from Prose Authors.
2. Translate and explain—

(*a*) *ἐπειδὴ τοίνυν οἱ τριάκοντα κατεστάθησαν, εὐθέως κρίσιν τοῖς ἀνδράσι τούτοις ἐποίουν ἐν τῇ βουλῇ, ὁ δὲ δῆμος ἐν τῷ δικαστηρίῳ ἐν δισχιλίοις ἐψηφίσατο.*

(*b*) *τῆς γὰρ γῆς ἁπάσης τῆς ὑπὸ τῷ κόσμῳ κειμένης δίχα τετμημένης, καὶ τῆς μὲν Ἀσίας, τῆς δ' Εὐρώπης καλουμένης, τὴν ἡμίσειαν ἐκ τῶν συνθηκῶν εἴληφεν, ὥσπερ πρὸς τὸν Δία τὴν χώραν νεμόμενος ἀλλ' οὐ πρὸς ἀνθρώπους τὰς συνθήκας ποιούμενος.*

(*c*) *ἐκεῖνοι γὰρ οὐκ ἐν μὲν ταῖς παιδείαις πολλοὺς τοὺς ἐπιστατοῦντας εἶχον, ἐπειδὴ δ' εἰς ἄνδρας δοκιμασθεῖεν, ἐξὴν αὐτοῖς ποιεῖν ὅ τι βουληθεῖεν, ἀλλ' ἐν αὐταῖς ταῖς ἀκμαῖς πλέονος ἐπιμελείας ἐτύγχανον ἢ παῖδες ὄντες.*

3. What arguments are put forward by Isocrates in favour of an invasion of the Persian dominion by the united forces of the Greeks?
4. Translate into English, extracts from Homer, Iliad, Books I., II., and III.

5. Translate, with notes on the meaning or grammatical construction—

(*a*) ἀλλὰ τὰ μὲν πολίων ἐξεπράθομεν, τὰ δέδασται.

(*b*) ἦ ἐθέλεις, ὄφρ' αὐτὸς ἔχῃς γέρας, αὐτὰρ ἐμ' αὖτως ἧσθαι δευόμενον, κέλεαι δέ με τήνδ' ἀποδοῦναι;

(*c*) ἀλλ' ἄγετ', αἴ κέν πως θωρήξομεν νῖας Ἀχαιῶν.

(*d*) οὐκ ἂν δὴ μείνειας ἀρηίφιλον Μενέλαον;
γνοίης χ' οἷου φωτὸς ἔχεις θαλερὴν παράκοιτιν·
οὐκ ἄν τοι χραίσμῃ κίθαρις τά τε δῶρ' Ἀφροδίτης.

6. Mark the metre of the following lines—

(*a*) ὣς φάτο Πηλεΐδης, ποτὶ δὲ σκῆπτρον βάλε γαίῃ.

(*b*) Τρῶες μὲν κλαγγῇ τ' ἐνοπῇ τ' ἴσαν, ὄρνιθες ὣς.

(*c*) ἆσσον ἴτ'· οὔ τί μοι ὔμμες ἐπαίτιοι, ἀλλ' Ἀγαμέμνων.

7. What can be inferred from the Iliad as to the form of government and the relations between rulers and subjects among the early Greeks?

ARITHMETIC AND ALGEBRA.

TWO HOURS AND A HALF.

PASS.

1. Find the least sum of money which can be exactly divided among 13 men, 17 women, and 19 children, giving 5 men as much as 9 women, and 7 women as much as 11 children, and employing no coin of less value than one penny.

2. One clock gains at the rate of two seconds per day, and another loses at the rate of 5 seconds in three days. They are correct at noon on Monday. What time will it be by the second clock when it is 4.30 by the first clock on the following Friday afternoon?

3. Simplify

(i.) $$\left[1-\frac{1}{\frac{x}{y}+\frac{y}{x}}\right]\left[\frac{1}{y^3}+\frac{1}{x^3}-\frac{\left(\frac{1}{y^3}-\frac{1}{x^3}\right)^2}{\frac{1}{y^3}+\frac{1}{x^3}}\right],$$

(ii.) $$\frac{x-1}{6x^2-19x+15}+\frac{2x-11}{21x^2-47x+20}+\frac{x+5}{14x^2-29x+12}.$$

4. Solve the equations

(i.) $\sqrt{4x-3}-\sqrt{x-3}=\sqrt{x+2}$,

(ii.) $(x-a-b)^2+2ax=2a^2+b^2$.

5. Prove that, if an algebraical expression vanishes identically when a is substituted for x, then (i.) the expression is divisible by $x-a$, (ii.) $x=a$ is one root of the equation formed by equating the expression to zero.

Hence or otherwise, solve the equation

$$(a+b)(x^3-ax^2)=b^2(x^2-a^2).$$

6. If A varies as B when C is constant, and A varies as C when B is constant, prove that A varies as the product of B and C, when neither B nor C is constant.

The volume of a certain solid varies as the product of its height and the square of the radius of its base. When the height is 1 foot, and the radius of the base 2 feet, the volume is 25·136 cubic feet. Find the volume when the height is 15 feet and the radius of the base 9 feet.

7. Find two numbers in the ratio 5:11, such that when 4 is added to each the ratio is doubled.

8. Extract the fourth root of

$$97-56\sqrt{3}$$

and simplify

$$\frac{3(5\sqrt{7}-1)}{6-\sqrt{7}}-\frac{4(\sqrt{5}-1)}{3-\sqrt{5}}-\frac{12+5\sqrt{35}}{3\sqrt{5}+2\sqrt{7}}.$$

9. Sum the arithmetical progression whose second term is 7, its sixth term 19, and its last term 61.

GEOMETRY AND MENSURATION.

TWO HOURS AND A HALF.

PASS.

1. On the same base, and on the same side of it, there cannot be two triangles, etc. Prove a Theorem of the First Book, the enunciation of which commences thus.

2. Shew how to bisect a given triangle by a line drawn through a given point in one side of it.

3. If a straight line be divided into any two parts, the rectangle contained by the whole line and one of the parts is equal to the rectangle contained by the two parts together with the square on the aforesaid part.

4. If two straight lines cut one another within a circle, the rectangle contained by the segments of one of them shall be equal to the rectangle contained by the segments of the other. Prove this in the case in which one line passes through the centre, and they do not cut at right angles.

5. ABC is a triangle, and a circle passes through B and C, and cuts AB in F and AC in E. If another circle be described round AEF, prove that its tangent at A is parallel to BC.

6. Describe a regular hexagon in a given circle.

7. Give Euclid's definition of Equal Ratios, and shew that the following ratios do not satisfy the test

15 acres : 16 acres,
17 pints : 18 pints.

8. Three sides of a quadrilateral are a, b, c in length, and the two angles which they contain are half right angles. Prove that the area of the quadrilateral is

$$(a+c)b/2\sqrt{2}-ac/2,$$

and find the length of the fourth side.

9. The inner diameter of a hollow metal cylinder is two feet, the thickness of the metal is three-quarters of an inch, and the cylinder is two feet long. If the cylinder weighs two cwt., find the weight of a cubic inch of the metal.

TRIGONOMETRY.

TWO HOURS AND A HALF.

PASS.

1. Define the Tangent and Secant of an angle, and investigate the value of one in terms of the other.
If $\sin\theta=\frac{12}{13}$, find the difference between $\tan\theta$ and $\sec\theta$.

2. A train runs round a circular curve of length $7\frac{1}{8}$ chains, and thereby changes its direction of motion from due north to north $7\frac{1}{2}°$ east. Find the radius of the curve, taking $\pi=3\frac{1}{7}$.

3. Find $\tan 0°$, $\cos 30°$, and shew that $\sin 22\frac{1}{2}° = \left(\frac{\sqrt{2}-1}{2\sqrt{2}}\right)^{\frac{1}{2}}$.

4. Prove that $\cos(A+B) = \cos A \cos B - \sin A \sin B$,
also that $\cos(A+B+C) = \cos A \cos B \cos C - \cos A \sin B \sin C - \cos B \sin C \sin A - \cos C \sin A \sin B$.

5. Shew from a figure that
$\sin(270°+A) = -\sin(90°+A) = -\cos A$.

6. From the top of a house, on one side of a street 66 feet wide, the angle of elevation of the top of a building 150 feet high on the opposite side is 60°. What is the height of the first house?

7. Solve the equations
(i.) $\cos 3\theta = \sin 2\theta$.
(ii.) $\sin 5\theta + \sin 3\theta + \sin \theta = 0$.

8. In any triangle shew that
(i.) $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$.
(ii.) $\frac{\sin B - \sin C}{\cos C - \cos B} = \tan \frac{A}{2}$.

9. If $A = 45°$ and $B = 75°$, prove that $a + c\sqrt{2} = 2b$.

10. If $b = 91$, $c = 125$ and $\tan \frac{A}{2} = \frac{17}{6}$, prove that $a = 204$.

11. If $A = 30°$, $b = 16$ and $a = 12$, find c, and shew by a figure that c may have two values.

JUNIOR FRENCH PROSE COMPOSITION AND UNSEEN TRANSLATION.

PASS.

1. Translate—

(*a*) Neither the fortitude of Caractacus, nor the despair of Boadicea, nor the fanaticism of the Druids, could avert the slavery of their country, or resist the steady progress of the imperial generals who maintained the national glory, when the throne was disgraced by the weakest orthe most vicious of mankind. At the very time when Domitian, confined to his palace, felt the terrors which he inspired, his legions under the command of the

virtuous Agriola, defeated the collected force of the Caledonians, and his fleet, venturing to explore unknown and dangerous seas, displayed the Roman arms round every part of our island.

(*b*) Quintus Curtius tells us that in certain seasons Bactria was darkened by whirlwinds of dust which completely covered and concealed the roads. Left thus without their usual landmarks, the wanderers awaited the rising of the stars, "to light them on their dim and perilous way." May we not say the same of literature? From time to time its pathways are so obscured beneath the rubbish of the age that many a weary pilgrim seeks in vain the hidden route. In such times it may be well to imitate the Bactrians. Ceasing to look upon the confusions of the day, and turning our gaze upon the great immortals who have gone before, we may seek guidance by their light.

2. Translate—

(*a*) Le 13 mai, le premier consul faisait défiler devant lui, à Lausanne, l'avant-garde commandée par le général Lannes et montant à sept ou huit mille hommes. C'étaient de vieux régiments qui, étrangers aux désastres de 1799, avaient conservé le sentiment de leur supériorité dans la précédente guerre. Ces sept à huit mille hommes sont la force la plus solide de l'armée, et ils auront les principaux honneurs de la campagne. De Lausanne à St-Pierre, village au pied du Saint-Bernard, le chemin est praticable. A Saint-Pierre, la difficulté commence. Pour l'artillerie en particulier, elle eût dû paraitre insurmontable. Il avait été pourvu à tout. La prévoyance des généraux Gassendi et Marmont avait imaginé des moyens ingénieux pour le transport de ce qui appartient à cette arme. Des milliers de petites caisses, remplies de munitions pour les pièces et de cartouches pour les soldats, les forges, les instruments nécessiares aux divers services, furent transportés à dos de mulet.

(*b*) Sois-moi fidèle, ô pauvre habit que j'aime!
Ensemble nous devenons vieux.
Depuis dix ans je te brosse moi-même,
Et Socrate n'eût pas fait mieux.
Quand le sort à ta mince étoffe
Livrerait de nouveaux combats,
Imite-moi, résiste en philosophe:

Mon vieil ami, ne nous séparons pas.
Je me souviens, car j'ai bonne mémoire,
Du premier jour où je te mis ;
C'était ma fête, et, pour comble de gloire,
Tu fus chanté par mes amis.
Ton indigence, qui m'honore,
Ne m'a point banni de leurs bras ;
Tous ils sont prêts à nous fêter encore :
Mon vieil ami, ne nous séparons pas.
T'ai-je imprégné des flots de musc et d'ambre
Qu'un fat exhale en se mirant ?
M'a-t-on jamais vu dans une antichambre
T'exposer au mépris d'un grand ?
Pour des rubans la France entière
Fut en proie à de longs débats ;
La fleur des champs brille à ta boutonnière :
Mon vieil ami, ne nous séparons pas.

FRENCH AUTHORS—JUNIOR.

PASS.

Translate into English, extracts from Voltaire, Zaïre, Montesquieu, Sur le Grandeur et Décadence des Romains; Sedaine, Le Philosophe sans le savoir.

"Most of Voltaire's dramas are written with a polemical purpose."

Is this true of Zaïre? If so, give illustrations.

JUNIOR GERMAN PROSE COMPOSITION AND UNSEEN TRANSLATION.

PASS.

1. Translate into German—

(*a*) Guilt and Shame, says the allegory, were at first companions, and in the beginning of their journey kept inseparably together. But their union was soon found to be disagreeable and inconvenient to both. Guilt gave Shame frequent uneasiness, and Shame often betrayed the secret conspiracies of Guilt. After long disagreement, therefore, they at length consented to part for ever.

Guilt boldly walked forward alone, to overtake Fate, that went before in the shape of an executioner; but Shame, being naturally timorous, turned back to keep company with virtue, which in the beginning of their journey they had left behind. Thus, my children, after men have travelled through a few stages in vice, Shame forsakes them, or only waits upon the few virtues they have still remaining.

(*b*) Travelling from London we never so much as paused at a Whig inn; or if by chance the coachman stopped at a wrong place, one of Sir Roger's servants would ride up to his master full speed, and whisper to him that the master of the house was against So-and-so at the last election. This often handed us over to hard beds and bad cheer, for we were not so particular about the inn as the innkeeper; and provided our landlord's principles were sound, did not take any notice of the staleness of his provisions. This I found very unpleasant, for the better the host was, the worse generally was his accommodation; the fellow knowing very well that those who were his friends would put up with coarse diet and a hard lodging. For these reasons, all the time we were upon the road, I dreaded entering into a house of anyone that Sir Roger had applauded as a very honest man.

2. Translate (at sight)—

(*a*) Unter allen Städten Brabants war *Antwerpen* die wichtigste, sowohl durch ihren Reichthum, ihre Volksmenge und ihre Macht, als durch ihre Lage an dem Ausflusz der Schelde. Diese grosze und menschenreiche Stadt, die in diesem Zeitraum über achtzigtausend Einwohner zählte, war eine der thätigsten Theilnehmerinnen an dem niederländischen Staatenbunde, und hatte sich im Laufe dieses Kriegs durch einen unbändigen Freiheitssinn vor allen Städten Belgiens ausgezeichnet. Da sie alle drei christliche Kirchen in ihrem Schosze hegte, und dieser uneingeschränkten Religionsfreiheit einen groszen Theil ihres Wohlstands verdankte, so hatte sie auch bei weitem am meisten von der spanischen Herrschaft zu befürchten, welche die Religionsfreiheit aufzuheben, und durch die Schrecken des Inquisitionsgerichts alle protestantischen Kaufleute von ihren Märkten zu verscheuchen drohte. Die Brutalität spanischer Besatzungen kannte sie überdies

schon aus einer schrecklichen Erfahrung, und es war leicht vorherzusehen, dasz sie sich dieses unerträglichen Joches, wenn sie es einmal sich hatte auflegen lassen, im ganzen Laufe des Kriegs nicht mehr entledigen würde.

(*b*) Auf die Berge will ich ſteigen,
Auf die ſchroffen Felſenhöhn,
Wo die grauen Schloßruinen
In dem Morgenlichte ſtehn.
Dorten ſetz' ich ſtill mich nieder
Und gedenke alter Zeit,
Alter blühender Geſchlechter
Und verſunkner Herrlichkeit.
Gras bedeckt jetzt den Turnierplatz.
Wo gekämpft der ſtolze Mann,
Der die Beſten überwunden
Und des Kampfes Preis gewann.
Epheu rankt an dem Balkone,
Wo die ſchöne Dame ſtand,
Die den ſtolzen Überwinder
Mit den Augen überwand.
Ach! den Sieger und die Siegrin
Hat beſiegt des Todes Hand—
Jener dürre Senſenritter
Streckt uns alle in den Sand.

GERMAN AUTHORS—JUNIOR.

PASS.

Translate into English, extracts from Schiller, Jungfrau von Orleans; Lessing, Minna von Barnhelm.

(*a*) What were the chief modifications of historical fact that Schiller made in his *Jungfrau von Orleans*, and what was their object?

(*b*) Sketch shortly in German the character of Just.

CHEMISTRY—(Introductory).

1. What do you understand by the terms—Atom, atomic weight, equivalent, molecule and molecular weight?
2. You are given cylinders full of different gases, what tests would you apply to recognise the following—Nitrogen, oxygen, hydrogen, carbon monoxide, carbon dioxide, chlorine, hydrobromic acid, and hydrofluoric acid?

3. How can the composition of the atmosphere be determined by weight? What are the minor constituents and impurities in the atmosphere?

4. What chemical and physical changes take place when sulphur is heated (*a*) by itself, (*b*) in air, (*c*) with metallic iron, (*d*) with sulphuric acid, (*e*) with carbon disulphide?

5. How does Boron occur in nature, what are its principal salts, and for what purpoes are boron compounds chiefly used?

6. What do you know about the chemical composition, properties, and preparation of wood vinegar, wood spirit, glycerine, tartaric acid, citric acid, and soap?

7. What common compounds of the following are met with in nature, viz., carbon dioxide, sulphuric acid, fluorine, chlorine, and bromine?

8. How is nitric acid prepared? What are its principal properties and uses? Why is sodium nitrate used in its manufacture instead of potassium nitrate? Give equations.

PHYSICS.

FIVE *questions only to be attempted.*

1. Give some account of the phenomena of capillarity, and explain their bearing on the manufacture of shot.

2. Give a comparative account of the various species of air pumps, and explain their mode of action.

3. Taking the mass of the earth at $6{\cdot}14 \times 10^{27}$ grammes, and its velocity in its orbit as 3×10^{6} cm. per sec., find its kinetic energy.

4. Describe a lecture experiment having for its object the determination of Joule's Equivalent.

   Explain exactly (i.) how the expenditure of mechanical power is measured; (ii.) how the heat produced is measured.

5. Give an account of the phenomena of gaseous diffusion.

   What inference can be drawn from the facts of diffusion?

6. Explain the production of "beats" when two organ pipes, slightly out of tune, are sounded together.

   If the notes given out by the pipers have the vibration frequencies, 260 and 264 respectively, how many beats will be produced per second?

7. What is meant by the term "pure tone?"
   Explain how pure tones may be produced, and contrast such tones with those obtained from a piano.
8. Draw a diagram, illustrating the production of a real image by a convex lens.
   Be careful to explain the principles used in your construction.
9. What do you understand by the term "absorption spectrum?"
   Describe and illustrate the arrangement you would adopted for the study of an absorption spectrum, and draw some typical absorption spectra.

PHYSIOGRAPHY.

PASS.

1. "What is the nature and mode of origin of a "Senkungsfeld?" Quote examples, illustrating your answer with sketches.
2. Describe any important changes which have taken place in the physical geography of the earth since the first appearance of man.
3. Explain briefly the meaning of the following—Hydraulic grade, anticyclone, "mound springs" ("mud springs"), fissure vein, River Drift Man.
4. Explain and illustrate the structure and mode of origin of a typical coral atoll, and account specially for the steep submarine slope forming the seaward boundary of most atolls.
5. Explain on the theory that the basic magma in the earth's crust underlies the acidic, why volcanic eruptions in subsidence areas, or in the floors of deep seas, generally produce basalts.
6. Into what sub-kingdoms is the animal kingdom divided? Quote examples of each of these sub-kingdoms, and review briefly the development of animal life in geological time.

SECOND YEAR EXAMINATION.

LATIN PROSE COMPOSITION AND UNSEEN TRANSLATION.

PASS.

1. Translate into Latin—

Conflicting accounts are given of the death of Terence; one, that he was never heard of after sailing from Italy; another, that he was lost at sea, on his return from Greece, along with a number of plays which he had translated from Menander; another, that he died at Leucadia from grief at the loss of his baggage (including a number of new plays), which he had sent forward by sea by a different route. The account given of the extreme poverty into which the neglect of his friends allowed him to sink is contradicted by the statement that he left behind him a property, consisting of gardens to the extent of twenty acres, close to the Appian Way. It seems also inconsistent with the fact that his daughter was so well provided for that she ultimately married a Roman knight. His earliest play, the Andria, was exhibited in one hundred and sixty-six B.C., when the poet was eighteen or nineteen years of age. A story is told that, before the play was accepted by the aediles, he was desired to read it to Cæcilius; that the young author came to him at supper, and being meanly dressed, sat down on a bench at the foot of his couch, but, after reading a few lines, was invited to take his place at the table, and afterwards read the whole play, to the great admiration of the older poet.

2. Translate into English—

Reliquum est, Quirites, ut vos inista sententia, quam prae vobis fertis, perseveretis. faciam igitur, ut imperatores instructa acie solent, quamquam paratissimos milites ad proeliandum videant, ut eos tamen adhortentur, sic ego vos ardentes et erectos ad libertatem recuperandam cohortabor. non est vobis, Quirites, cum eo hoste certamen, cum quo aliqua pacis condicio esse possit: neque enim ille servitutem vestram, ut antea, sed iam iratus sanguinem concupiscit. nullus ei ludus videtur esse iucundior quam cruor, quam caedes, quam ante

oculos trucidatio civium. non est vobis res, Quirites, cum scelerato homine atque nefario, sed cum immani taetraque belua, quae quoniam in foveam incidit, obruatur; si enim illim emerserit, nullius supplicii crudelitas erit recusanda: sed tenetur, premitur, urguetur nunc eis copiis, quas iam habemus, mox eis, quas paucis diebus novi consules comparabunt. incumbite in causam, Quirites, ut facitis. numquam maior consensus vester in ulla causa fuit; numquam tam vehementer cum senatu consociati fuistis; nec mirum: agitur enim non qua condicione victuri, sed victurine simus an cum supplicio ignominiaque perituri.

LATIN AUTHORS.

PASS.

1. Translate into English, extracts from Sallust, Catiline; and Cicero pro Roscio Amerino.
2. Translate and explain—
   (*a*) Saepe ipsa plebes aut dominandi studio permota aut superbia magistratuum armata a patribus secessit.
   (*b*) Cn. Pompeio et M. Crasso consulibus tribunicia potestas restituta est.
   (*c*) Non modo ignoscendi ratio, verum etiam cognoscendi consuetudo iam de civitate sublata est.
3. Translate into English, extracts from Horace, Satires.
4. Translate and explain—
   (*a*) [illegible] Pollio regum
   facta canit pede ter percusso.
   (*b*) Me pedibus delectat claudere verba
   Lucili ritu nostrum melioris utroque.
   (*c*) Quorsum pertinuit stipare Platona Menandro,
   Eupolin, Archilochum, comites educere tantos?

ROMAN HISTORY.

ONE HOUR AND A HALF.

PASS.

Not more than FOUR *questions to be answered.*

1. Describe the constitution and powers of the Senate.

2. Describe the economic and social conditions which led to the agrarian legislation of Tib. Gracchus; give an account of that legislation and of its results.
3. Relate the career of Crassus, and discuss the probability of his connection with the Catilinarian conspiracy.
4. Give an account of the legislation of M. Livius Drusus, and describe his political aims.
5. "The extortions of the provincial governor and his suite were outdone by those of the *publicani* and *negotiatores*." Comment on this statement.

JUNIOR EXAMINATION IN GREEK.

(FIRST YEAR HONOURS AND SECOND YEAR PASS.)

TRANSLATION AT SIGHT.

1. Translate—

HECUBA SPEAKS.

ὦ θεοί· κακοὺς μὲν ἀνακαλῶ τοὺς ξυμμάχους,
ὅμως δ' ἔχει τι σχῆμα κικλήσκειν θεούς,
ὅταν τις ἡμῶν δυστυχὴ λάβῃ τύχην.
πρῶτον μὲν οὖν μοι τἀγάθ' ἐξᾷσαι φίλον,
τοῖς γὰρ κακοῖσι πλείον' οἶκτον ἐμβαλῶ.
ἦμεν τύραννοι κἀς τύρανν' ἐγημάμην,
κἀνταῦθ' ἀριστεύοντ' ἐγεινάμην τέκνα,
οὐκ ἀριθμὸν ἄλλως, ἀλλ' ὑπερτάτους Φρυγῶν,
οὓς Τρῳὰς οὐδ' Ἑλληνὶς οὐδὲ βάρβαρος
γυνὴ τεκοῦσα κομπάσειεν ἄν ποτε.
κἀκεῖνά τ' εἶδον δορὶ πεσόνθ' Ἑλληνικῷ,
τρίχας τ' ἐτμήθην τάσδε πρὸς τύμβοις νεκρῶν,
καὶ τὸν φυτουργὸν Πρίαμον οὐκ ἄλλων πάρα
κλύουσ' ἔκλαυσα, τοῖσδε δ' εἶδον ὀμμασιν
αὐτὴ κατασφαγέντ' ἐφ' ἑρκείῳ πυρᾷ,
πόλιν θ' ἁλοῦσαν. ἃς δ' ἔθρεψα παρθένους
εἰς ἀξίωμα νυμφίων ἐξαίρετον,
ἄλλοισι θρέψασ' ἐκ χερῶν ἀφῃρέθην.

2. ἡ δ' ἡμετέρα πόλις, ἡ κοινὴ καταφυγὴ τῶν Ἑλλήνων, πρὸς ἣν ἀφικνοῦντο πρότερον ἐκ τῆς Ἑλλάδος αἱ πρεσβεῖαι, κατὰ πόλεις ἕκαστοι παρ' ἡμῶν τὴν σωτηρίαν εὑρησόμενοι, νῦν οὐκέτι περὶ

τῆς τῶν Ἑλλήνων ἡγεμονίας ἀγωνίζεται, ἀλλ' ἤδη περὶ τοῦ τῆς πατρίδος ἐδάφους. καὶ ταῦθ' ἡμῖν συμβέβηκεν ἐξ ὅτου Δημοσθένης πρὸς τὴν πολιτείαν προσελήλυθεν. εὖ γὰρ περὶ τῶν τοιούτων Ἡσίοδος ὁ ποιητὴς ἀποφαίνεται. λέγει γάρ που, παιδεύων τὰ πλήθη καὶ συμβουλεύων ταῖς πόλεσι τοὺς πονηροὺς τῶν δημαγωγῶν μὴ προσδέχεσθαι. λέξω δὲ κἀγὼ τὰ ἔπη· διὰ τοῦτο γὰρ οἶμαι παῖδας ὄντας ἡμᾶς τὰς τῶν ποιητῶν γνώμας ἐκμανθάνειν, ἵν' ἄνδρες αὐταῖς χρώμεθα.

πολλάκι δὴ ξύμπασα πόλις κακοῦ ἀνδρὸς ἀπηύρα,
ὅς κεν ἀλιτραίνῃ καὶ ἀτάσθαλα μηχανάαται.
τοῖσιν δ' οὐρανόθεν μέγ' ἐπήγαγε πῆμα Κρονίων,
λιμὸν ὁμοῦ καὶ λοιμόν, ἀποφθινύθουσι δὲ λαοί·
ἢ τῶν γε στρατὸν εὐρὺν ἀπώλεσεν ἢ ὅ γε τεῖχος,
ἢ νέας ἐν πόντῳ ἀποτίνυται εὐρύοπα Ζεύς.

ἐὰν δὲ περιελόντες τοῦ ποιητοῦ τὸ μέτρον τὰς γνώμας ἐξετάζητε, οἶμαι ὑμῖν δόξειν οὐ ποιήματα Ἡσιόδου εἶναι, ἀλλὰ χρησμὸν εἰς τὴν Δημοσθένους πολιτείαν· καὶ γὰρ ναυτικὴ καὶ πεζὴ στρατιὰ καὶ πόλεις ἄρδην εἰσὶν ἀνηρπασμέναι ἐκ τῆς τούτου πολιτείας.

3. (CAESAR ADDRESSES HIS ARMY BEFORE THE BATTLE OF PHARSALUS.)

ἔστι δὲ οὐ δυσχερὲς, νεοστρατεύτων καὶ ἀπειροπολέμων ἔτι πολυπόνους ἀγωνιστὰς περιγενέσθαι, ἄλλως τε καὶ μειρακιωδῶς ἐς ἀταξίαν καὶ δυσπείθειαν τοῦ στρατηγοῦ τραπέντων· ὃν ἐγὼ πυνθάνομαι δεδιότα καὶ ἄκοντα χωρεῖν ἐπὶ τὸ ἔργον, νωθῆ καὶ βραδὺν ἐς ἅπαντα γεγενημένον, καὶ οὐδὲ στρατηγοῦντα ἔτι μᾶλλον ἢ στρατηγούμενον. καὶ τάδε μοι περὶ μόνων ἐστὶ τῶν Ἰταλῶν· ἐπεὶ τῶν γε συμμάχων μηδὲ φροντίζετε, μηδ' ἐν λόγῳ τίθεσθε, μηδὲ μάχεσθε ὅλως ἐκείνοις. ἀνδράποδα ταῦτ' ἐστὶ Σύρια καὶ Φρύγια καὶ Λύδια, φεύγειν ἀεὶ καὶ δουλεύειν ἕτοιμα· οἷς ἐγὰ σαφῶς οἶδα, καὶ ὑμεῖς δὲ αὐτίκα ὄψεσθε, οὐδὲ Πομπήϊον αὐτον τάξιν ἐγγυῶντα πολέμου. ἔχεσθε οὖν μοι τῶν Ἰταλῶν μόνων, κἂν οἱ σύμμαχοι ὥσπερ κύνες περιθέωσιν ὑμᾶς καὶ θορυβοποιῶσι. τρεψάμενοι δ' αὐτοὺς, τῶνδε μὲν ὡς συγγενῶν φειδώμεθα, τοὺς δὲ συμμάχους ἐς τὴν τῶνδε κατάπληξιν ἐξεργάσασθε. πρό δὲ πάντων, ὡς ἂν εἰδῶ ὑμᾶς ἔγωγε νίκην πάντως ἢ θάνατον αἱρουμένους, καθέλετε μοι προϊόντες ἐπὶ τὴν μάχην τὰ τείχη τὰ σφέτερα αὐτῶν, καὶ τὴν τάφρον ἐγχώσατε, ἵνα μηδὲν ἔχωμεν ἂν μὴ κρατῶμεν, ἴδωσι δ' ἡμᾶς ἀσταθμεύτους οἱ πολέμιοι, καὶ συνῶσιν ὅτι πρὸς ἀνάγκης ἐστὶν ἡμῖν ἐν τοῖς ἐκείνων σταθμεῦσαι.

JUNIOR EXAMINATION IN GREEK.

(FIRST YEAR HONOURS AND SECOND YEAR PASS.)

AUTHORS.

1. Translate into English, extracts from Thucydides, Books VI. and VII.

2. Translate and write short notes on the following—

(*a*) καὶ τὸ πρᾶγμα μειζόνως ἐλάμβανον· τοῦ τε γὰρ ἔκπλου οἰωνὸς ἐδόκει εἶναι, καὶ ἐπὶ ξυνωμοσίᾳ ἅμα νεωτέρων πραγμάτων καὶ δήμου καταλύσεως γεγενῆσθαι.

(*b*) καὶ οὐ περὶ τῆς ἐλευθερίας ἄρα οὔτε οὗτοι τῶν Ἑλλήνων οὐθ' οἱ Ἕλληνες τῆς ἑαυτῶν τῷ Μήδῳ ἀντέστησαν, περὶ δὲ οἱ μὲν σφίσιν ἀλλὰ μὴ ἐκείνῳ καταδουλώσεως, οἱ δ' ἐπὶ δεσπότου μεταβολῇ οὐκ ἀξυνετωτέρου κακόξυνετωτέρου δέ.

(*c*) πολλὴ γὰρ δὴ ἡ παρακέλευσις καὶ βοὴ ἀφ' ἑκατέρων τοῖς κελευσταῖς κατά τε τὴν τέχνην καὶ πρὸς τὴν αὐτίκα φιλονεικίαν ἐγίγνετο, τοῖς μὲν Ἀθηναίοις βιάζεσθαί τε τὸν ἔκπλουν ἐπιβοῶντες καὶ περὶ τῆς ἐς τὴν πατρίδα σωτηρίας νῦν, εἴ ποτε καὶ αὖθις, προθύμως ἀντιλαβέσθαι, τοῖς δὲ Συρακοσίοις καὶ συμμάχοις καλὸν εἶναι κωλῦσαί τε αὐτοὺς διαφυγεῖν καὶ τὴν οἰκείαν ἑκάστους πατρίδα νικήσαντας ἐπαυξῆσαι.

(*d*) καὶ μὴν ἡ ἄλλη αἰκία καὶ ἡ ἰσομοιρία τῶν κακῶν, ἔχουσά τινα ὅμως τὸ μετὰ πολλῶν κούφισιν, οὐδ' ὡς ῥᾳδία ἐν τῷ παρόντι ἐδοξάζετο, ἄλλως τε καὶ ἀπὸ οἵας λαμπρότητος καὶ αὐχήματος τοῦ πρώτου ἐς οἵαν τελευτὴν καὶ ταπεινότητα ἀφίκτο.

3. Translate into English, extracts from Sophocles, Oedipus Coloneus and Antigone.

4. Translate and write short notes on the following—

(*a*) ἀρχαῖα τὰ Λαβδακιδᾶν οἴκων ὁρῶμαι
πήματα φθιτῶν ἐπὶ πήμασι πίπτοντ',
οὐδ' ἀπαλλάσσει γενεὰν γένος, ἀλλ' ἐρείπει
θεῶν τις, οὐδ' ἔχει λύσιν.
νῦν γὰρ ἐσχάτας ὑπὲρ
ῥίζας ὃ τέτατο φάος ἐν Οἰδίπου δόμοις,
κατ' αὖ νιν φοινία θεῶν τῶν
νερτέρων ἁμᾷ κοπὶς,
λόγου τ' ἄνοια καὶ φρενῶν Ἐρινύς.

(*b*) λόγοι δ' ἐν ἀλλήλοισιν ἐρρόθουν κακοί,
φύλαξ ἐλέγχων φύλακα.

(*c*) κοὐδὲ μαντικῆς
ἄπρακτος ὑμῖν εἰμι, τῶν δ' ὑπαὶ γένους
ἐξημπόλημαι κἀμπεφόρτισμαι πάλαι.

(*d*) ὅστις τοῦ πλέονος μέρους χρῄζει τοῦ μετρίου παρεὶς
ζώειν, σκαιοσύναν φυλάσσων ἐν ἐμοὶ κατάδηλος ἔσται.
ἐπεὶ πολλὰ μὲν αἱ μακραὶ ἁμέραι κατέθεντο δὴ
λύπας ἐγγυτέρω, τὰ τέρποντα δ' οὐκ ἂν ἴδοις ὅπου,
ὅταν τις ἐς πλέον πεσῇ
τοῦ θέλοντος· ὁ δ' ἐπίκουρος ἰσοτέλεστος,
Ἄϊδος ὅτε μοῖρ' ἀνυμέναιος
ἄλυρος ἄχορος ἀναπέφηνε,
θάνατος ἐς τελευτάν.

(Mark the metre of the first two lines of this passage.)

(*e*) ἀλλ' εὐτυχὴς ἵκοιτο τῇ θ' αὑτοῦ πόλει
ἐμοί τε· τίς γὰρ ἐσθλὸς οὐχ αὑτῷ φίλος;

(*f*) ὅς μ', ὦ κάκιστε, ψιλὸν ὅμμ' ἀποσπάσας
πρὸς ὄμμασιν τοῖς πρόσθεν ἐξοίχει βίᾳ.

5. "The issue defined in the opening scene (of the Antigone)—the conflict of divine with human law,—remains the central interest throughout." Explain and discuss this.

GREEK HISTORY.

ONE HOUR AND A HALF.

Not more than FOUR *questions are to be answered.*

1. How far back into the past is knowledge of Greek History carried by means of trustworthy written records? Explain the nature, and illustrate the use, of evidence which makes it possible to penetrate into the past beyond this limit.
2. What could be said in favour of Greek tyrannies at their best?
3. Describe the political and social condition of Athens during the first twenty years after the battle of Salamis.
4. Describe the political aims of Pericles. How far was he successful in realising them?
5. Describe the view of Athenian democracy presented by Aristophanes. To what extent is his picture of it to be accepted as historically true?

ENGLISH I.

Not more than EIGHT *questions to be attempted, of which the first must be one and the last must be another.*

1. Annotate carefully the following passages—

   (*a*) And after shewede he hym the nyne speres;
   and after that the melodye herde he . . .

   (*b*) The swalwe, mortherere of the foules smale
   that maken hony of floures fresshe of hewe;
   . . . . . .
   the pokok with his aungels fethers bryghte.

   (*c*) Fle fro the pres and dwelle with sothfastnesse;
   suffise thin owene thing, thogh it be smal.
   For hord hath hate and clymbing tykelnesse,
   prees hath envye and wele blent over al.
   Savoure no more thanne the byhove shal,
   reule wel thiself that other folk canst reede:
   and trouthe the shal delyvere—it is no drede.

   (*d*) Have mercy on me, thou Herynes quene,
   . . . . . .
   that love and dred you ay lenger the more.

   (*e*) I herde gon bothe up and doun
   Men, hors, houndes, and other thing;
   and al men speken of huntyng,
   how they wolde slee the hert with strengthe,
   and how the hert had upon lengthe
   so moche enbosed—i not now what.

2. What points of resemblance are there between the Old Wives' Tales and Comus?

3. "The Comedy of Errors is taken very much from Plautus' Menaechmi, and is not an improvement on it."—*Hazlitt.*
   "This is the best of all written or possible Menaechmi.' *Schlegel.*

   Which is nearer the truth, and why?

4. Discuss the theory that the Merchant of Venice is based on an older play.

   Or,

   Examine the Casket Choice as a test of character.

5. "Its beautiful poetry does not disguise the fact that Cymbeline is defective as a drama."

   Can this be made good?

6. Explain the allegory of Comus in its different aspects.
7. Show how the Alchemist illustrates the main lines of the difference between Ben Jonson's theory of comedy and that of Shakespeare.
8. Examine any apparent imitation or apparent rivalling of Shakespeare in the Philaster.
9. Outline Professor Spalding's reasons for concluding that Shakespeare was part author of the Two Noble Kinsmen, and discuss them.
10. Explain the following passages—
    (*a*) Ah, Sir, Backare quod Mortimer to his sowe.
    (*b*) *Tib. Talk.* Ill chieue it dotying foole, but it must be cust.
    M. Mumbl. God yelde you Sir, chad not so much ichotte not whan,
    Nere since chwas bore chwine, of such a gay gentleman.
    (*c*) *Huan.* Philida, phileridos, pamphilida, florida flortos
    Dub dub-a dub, bounce quoth the guns with a sulphurous huff-snuff.
    (*d*) Well said! thou plyest these pioners well.
    (*e*) There was a fourth man in a silly habit,
    That gave the affront with them.
    (*f*) . . . . I do know
    A many fools that stand in better place
    Garnish'd like him, that for a tricksy word
    Defy the matter.
    (*g*) Hieronymo's old cloak, ruff and hat, will serve.
    (*h*) . . . . In thy rumination
    That I, poor man, might eftsoons come between
    And chop on some cold thought.
    (*i*) I hate when vice can bolt her arguments.

ENGLISH II.

Not more than EIGHT *questions to be attempted* —FOUR *from each part.*

A.

1. Describe very shortly the Book of the Duchess, Troilus and Cressida, and The Legend of Good Women, and indicate their position in the course of Chaucer's artistic development.

2. Discuss Langland's work in the revival of Alliterative Poetry that took place in the 14th Century.
3. Explain the origin of the Morality, and describe the stages through which it passed.
4. What are the leading characteristics of our Ballad Literature? Account for the superiority of the Northern productions.
5. Discuss the work of More and Tyndale as representative of the Early Renascence in England.
6. "They .... may justly be said the first reformers of our English metre and style."—*Puttenham* (in 1589).
   Estimate the poetic reforms of Surrey and Wiatt with reference to the share of each in the work done.
7. "Spenser was the poet of our waking dreams, and he has invented not only a language but a music of his own for them."—*Hazlitt.*
   Discuss the characteristics of Spenser's Poetry here referred to.

B.

1. Estimate the influence of Classical Comedy upon the English Drama, and discuss Udall's relations to his authority in Ralph Roister Doister.
2. Discuss Greene's portraiture of womanly character.
3. Estimate the position in the history of the Drama occupied by the work of Lyly and of Kyd.
4. What indications of a progress to a higher conception of life and art are discernible in Marlowe's plays?
5. .... "there is an upstart crow beautified with our feathers that .... is in his own conceit the only Shakescene in a country."
   What may be gathered as to Shakespeare's first connection with the theatre and his relations then and afterwards to his contemporaries in the profession?
6. What are the chief characteristics of the style of Beaumont and Fletcher? Wherein do they approach, and wherein do they diverge from, the example of Shakespeare?
7. Discuss the description of himself which Ben Jonson put into the mouth of a hostile fellow-dramatist, "A mere sponge: nothing but humours and observation."
8. Describe, and trace the history of, the Masque, making special reference to Milton's Comus.

LOGARITHMS AND TRIGONOMETRY.

TWO HOURS AND A HALF.

1. Find the value of the following, with the help of logarithms,
$$\sqrt[5]{3{\cdot}49} \times \sqrt[7]{7{\cdot}25} \div \{(13{\cdot}019)^2 - (7{\cdot}081)^2\}.$$

2. Prove that $\log_b a \times \log_c b = \log_c a$, and find approximate numerical values for $\log_2 10$, $\log_{14} 13$, and $\log_8(\log_4 5)$.

3. A municipality borrows £30,000 at 4 per cent. per annum, and thenceforward annually applies a certain sum of money, (i.) to pay the interest on the debt, (ii.) to accumulate (in a bank) at 3 per cent. per annum compound interest, so as to provide for repayment of the £30,000 at the end of the 15th year. What is the amount thus annually required?

4. Prove the formula giving $\sin\frac{A}{2}$ in terms of the sides of the triangle ABC.

   Also prove the formula
$$\sin\frac{A-B}{2} = \frac{a-b}{c} \cdot \cos\frac{C}{2}.$$

5. The base of a certain triangle is a, and the height is h. A strip is cut off by a straight line parallel to the base, and at a distance x from it. Prove that the area of the strip is $ax(1-x/2h)$.

6. Find the radius of the circle which touches one side of a triangle externally, and the other two sides produced.

   Also prove that the distances between the centres of the three escribed circles are proportional to the cosines of half the angles of the triangle.

7. If A, a, b are given, shew that the other elements of ABC are sometimes ambiguous.

   Also if C_1, C_2 are the two values of C, prove that
$$\cos\tfrac{1}{2}(C_1 + C_2) : \cos\tfrac{1}{2}(C_1 - C_2) = a : b.$$

8. A, B are two points, 100 yards apart, on the bank of a river, and C, D are two points directly opposite A, B (that is CAB, DBA are right angles). It is found that CD subtends an angle 17° at A, and an angle 18° 30′ at B. Find the lengths AD, BD, CD.

9. ABCD is a parallelogram, and R is the radius of a circle which passes through A and B, and touches the side CD. Prove that $R=H/2a+a^3/8H$, where $AB=a$, and H is the area of the parallelogram.

STATICS.

TWO HOURS AND A HALF.

PASS.

1. If three forces acting at a point are in equilibrium, shew that each is proportional to the sine of the angle between the other two.

2. An endless string of length $5a$ passes through a heavy ring of weight W. The string is hung over 4 smooth pegs in a vertical wall at the angles of a square of side a. Find the pressure on each peg.

3. Shew that the sum of the resolved parts in any direction of a system of coplanar forces, acting at a point is equal to the resolved part of their resultant in that direction.

   The sums of the resolved parts of a system of forces acting at one point in a plane along two straight lines inclined to one another at the angle α are P and Q respectively. Shew that the resultant R is given by the equation

$$R^2\sin^2\alpha=P^2+Q^2-2PQ\cos\alpha.$$

4. Two forces act along two opposite sides AB, DC of a quadrilateral ABCD inscribed in a circle, and are inversely proportional to those sides. Shew that their resultant passes through the intersection of the diagonals.

5. Shew that two couples acting in a plane will balance one another provided their moments are equal.

6. Find the centre of gravity of a pyramid on a triangular base.

   Find also that of a rod whose density varies as the square of the distance from one end.

7. Shew that a body, acted on by its own weight only, will stand or fall according as the vertical through its centre of gravity falls within or without its base.

A solid cone of vertical angle 2α has its base in contact with a plane, rough enough to prevent sliding, inclined to the horizon at an angle β, and is just on the point of toppling over. Shew that

$$\tan\beta = 4\tan\alpha.$$

8. Find the relation of the power to the weight in a system of heavy pulleys, each of which hangs by a separate string.

There are four movable pulleys belonging to this system and the weight of each is double that next below it. The mechanical advantage is 8, when the weight is $42\frac{1}{2}$ lbs. Shew that the weight of the lowest pulley is $\frac{1}{2}$ lb.

9. If the pressure on an inclined plane, when the power acts horizontally, is double the pressure, when the same weight is supported by a power acting along the plane, find the inclination of the plane.

10. A uniform beam rests at an inclination of 60° to the vertical with its upper end against a rough wall, and with its lower end upon a smooth plane passing through the foot of the wall, and inclined at 30° to the horizon. The beam is on the point of slipping. Find the coefficient of friction.

HYDROSTATICS.

TWO HOURS AND A HALF.

PASS.

1. Prove that at any point in a fluid at rest under gravity the pressure is the same in all directions.

2. Find the specific gravity of a mixture of given volumes of a number of fluids whose specific gravities are known.

A mixture is made of equal weights of four fluids, whose specific gravities are ρ, 2ρ, 3ρ and 4ρ, and the volume of the mixture shrinks to $\frac{9}{10}$ of the sum of the volumes of the constituent fluids; find the specific gravity of the mixture.

3. Prove that the whole pressure of a liquid at rest on a surface is equal to the weight of a column of liquid of base equal

to the area of the surface, and height equal to the depth of its centre of gravity below the fluid surface.

A right circular cylinder, closed at both ends, is filled with liquid, and held with its axis inclined at an angle θ to the vertical; find the whole pressure on the curved surface. Also shew that, if the radius of the base is equal to the height, the whole pressure on the cylinder (including the plane ends) is double that on the curved surface only.

4 Define Centre of Pressure, and find its depth, (i.) in the case of a triangle with its base in the surface of a liquid, (ii.) in the case of the lower triangle formed by joining one of the angular points in the surface to the middle of the opposite side.

5. If a solid of specific gravity ρ and weight W be placed in a fluid of specific gravity σ, find whether it will float or sink, and also the magnitude and direction of the force necessary to keep it just submerged.

6. Describe an experiment in which it is shewn that the pressure of a given quantity of gas varies inversely as its volume, the temperature remaining constant throughout.

7. Explain the action of the Siphon.

8. Over a cork floating in water an inverted tumbler is placed, and forced downwards. Will the position of the cork relative to the water surface within the tumbler be affected, and if so, how and why?

9. Describe the Force Pump.

If the plunger of the pump has a cross section of 6 sq. ins., and works 50 feet below a cistern into which the water is forced, find the least force which must be exerted along the plunger rod in order to drive water into the cistern. A cubic foot of water weighs $62\frac{1}{2}$ lbs.

SENIOR FRENCH PROSE COMPOSITION AND UNSEEN TRANSLATION.

PASS.

1. Translate—

A lie is a vice of the mind and of the heart. For God's sake be scrupulously jealous of the purity of your moral

character: keep it immaculate, blameless, unsullied; and it will be unsuspected. Defamation and calumny never attack where there is no weak place; they magnify, but they do not correct. There is a very great difference between that purity of character, which I so earnestly urge upon you, and the stoical gravity and austerity of character, which I do by no means recommend to you. Be if you will a man of pleasure, so long as it is innocent pleasure, and so long as you are also a man of business. Enjoy this happy and careless time of your life; shine in the pleasures and company of people of your own age. This is all to be done, and indeed can only be done, while you keep your principles inviolate: for those mistaken young fellows who think to shine by impiety or licentiousness, shine only like corrupted matter in the dark. Without strictness of conduct you can have no dignity of character, and without dignity of character it is impossible to rise in the world. You must be respectable if you wish to be respected.

2. Translate (at sight)—

Ils arrivèrent à Naples de jour, au milieu de cette immense population qui est si animée et si oisive tout à la fois. Ils traversèrent d'abord la rue de Tolède, et virent les Lazzaroni couchés sur les pavés, ou retirés dans un panier d'osier, qui leur sert d'habitation jour et nuit. Cet état sauvage qui se voit là, mêlé avec la civilisation, a quelque chose de très-original. Il en est, parmi ces hommes, qui ne savent pas même leur propre nom, et vont à confesse avouer des péchés anonymes, ne pouvant dire comment s'appelle celui qui les a commis. Il existe à Naples une grotte sous terre, où des milliers de Lazzaroni passent leur vie, en sortant seulement à midi pour voir le soleil, et dormant le reste du jour, pendant que leurs femmes filent. Dans les climats où le vêtement et la nourriture sont si faciles, il faudrait un gouvernement très-indépendant et très-actif, pour donner à la nation une émulation suffisante; car il est si aisé pour le peuple de subsister matériellement à Naples, qu'il peut se passer du genre d'industrie nécessaire ailleurs pour gagner sa vie. La paresse et l'ignorance, combinées avec l'air volcanique qu'on respire dans ce séjour, doivent produire la férocité, quand les passions sont excitées; mais ce peuple n'est pas plus méchant qu'un

autre. Il a de l'imagination, ce qui pourrait être le principe d'actions désintéressées; et avec cette imagination on le conduirait au bien, si ses institutions politiques et religieuses étaient bonnes.

3. (*a*) Draw a general comparison between the French literature of the 17th and that of the 18th century.

(*b*) What was the condition of lyric poetry in France in the 18th century?

(*c*) Explain the mutual influence of French and English literature upon each other during this period.

(*d*) Point out the objections that may be made against Montesquieu's Esprit des Lois.

(*e*) Give an account of Marivaux as a dramatist.

(*f*) Characterise Voltaire's influence upon the march of ideas.

SENIOR FRENCH AUTHORS.

Translate into English, extracts from Voltaire, Mérope; Rousseau, Extraits en Prose; Piron, La Métromanie; Buffon, Discours sur le style; Fasnacht, specimens of the great French writers.

Explain allusions.

SENIOR GERMAN PROSE COMPOSITION AND UNSEEN TRANSLATION.

PASS.

1. Translate—

I have often told you in my former letters (and it is most certainly true) that the strictest and most scrupulous honour and virtue can alone make you esteemed and valued by mankind; that ability and learning can alone make you admired and celebrated; but that the possession of lesser talents is absolutely necessary towards making you liked, beloved, and sought after in private life. Of these lesser talents good breeding is the principal and most necessary one, not only as it is very important in itself, but as it adds great lustre to the more solid advantages both of the heart and the mind. I have often touched upon good breeding to you before;

so that this letter shall be on the next necessary qualification to it, which is a genteel easy manner and carriage, wholly free from these odd tricks, ill habits and awkwardnesses, which even many very worthy and sensible people have in their behaviour. However trifling this may sound, it is of great consequence towards pleasing in private life, and I have known many a man, from his neglect of such matters, give people such a dislike to him at first, that all his merit could not get the better of it afterwards. A pleasant manner on the other hand prepossesses people in your favour, bends them to you, and makes them wish to like you. Awkwardness can proceed from two causes, either from not having kept good company, or from not having attended to it. As for your keeping good company, I will take care of that; do you take care to observe their ways and manners, and to form your own upon them. Careful attention is required for this, as indeed it is for everything else, and a man, who is incapable of taking trouble, is not fit to live in this world.

2. Translate (at sight)—

Dem heidnischen Volke galten die Christen in erster Reihe für Atheisten: denn mit diesem Namen hat man jederzeit Die gebrandmarkt, welche mit den herrschenden Vorstellungen über die Gottheit nicht übereinstimmten; nicht allein, wenn sie das Dasein derselben ganz läugneten, sondern ebensogut, wenn sie eine richtigere und würdigere Gottesidee zur Geltung zu bringen suchten. Die Götter, von denen das Volk allein wusste, deren Tempel es besuchte, deren Bilder es verehrte, an die es seine Opfer und Gebete richtete—diese Götter wurden ja auch wirklich von den Christen geläugnet, sie wurden bald für Geschöpfe des menschlichen Aberglaubens, bald auch für böse Geister, für Teufel erklärt. Kann man sich wundern, wenn das Volk, das diesen Göttern noch anhing, den Angriff auf dieselben als einen Angriff auf sich selbst, auf sein Heiligstes und Liebstes, empfand? wenn es über denselben um so tiefer empört war, je ernstlicher es befürchtete, durch seine Duldung die Gunst der Götter zu verlieren, an die es sein eigenes Wohlergehen nun einmal geknüpft glaubte? Der Vorwurf des Atheismus war daher der gefährlichste, der den

Christen gemacht werden konnte. In jenem "Nieder mit den Atheisten!" das der Pöbel von Smyrna Polykarp entgegenbrüllte, war das Todesurtheil ausgesprochen, an dessen Vollziehung sofort durch Aufschichtung seines Scheiterhaufens Hand angelegt wurde. Und ähnliche Folgen hatte das gleiche Vorurtheil unzählige Male. Wenn irgend ein öffentliches Unglück, irgend ein Ereigniss eintrat, das Schrecken verbreitete oder die Ungnade der Götter anzuzeigen schien, eine Seuche, ein Misswachs, eine Ueberschwemmung, eine Sonnenfinsterniss, ein Erdbeben: immer war der Aberglaube geneigt, die Götterfeinde, die Christen, dafür verantwortlich zu machen; immer hörte man wieder den Ruf: "Mit den Christen vor die Löwen!"

3. (*a*) What are the chief merits and defects of Klopstock as poet?

(*b*) What inferences did Lessing draw from the differences between the sculptured representation and Virgil's description of Laokoon's death?

(*c*) Give a short sketch of the careers of Herder and Wieland.

(*d*) Discuss the influence exerted on Schiller by Kant.

(*e*) Explain the significance of Goethe's *Götz* and *Werter* respectively.

SENIOR GERMAN AUTHORS.

Third Year Students may omit 1 (*a*), 2 (*a*) 3 (*a*) *and* 4 (*c*).

Translate into English, extracts from Lessing, Emilia Galotti; Goethe, Dichtung und Wahrheit; Buchheim, Deutsche Lyrik, Periods II.—IV. Goethe, Faust.

Add explanatory comments when necessary.

What is the significance of the title, *Dichtung und Wahrheit*, that Goethe gives to his reminiscences?

HISTORY I.

PASS.

You are recommended to answer SEVEN *questions, and to include question* 2.

1. Explain shortly the importance in English History of the reigns of Oswi, Egbert, and Edward the Elder.

2. Illustrate, by reference to the account of the reign of William I. given by the English Chronicle, some of the important consequences of the Norman Conquest.
3. Explain the nature of the quarrel between Henry II. and Becket.
4. Explain the views of Bishop Grosseteste, and show his importance in English History.
5. Explain the part taken by Edward in the conflict from 1258 to 1265; and show how the events of this time influenced his subsequent policy.
6. What territories in France were at various times between 1066 and 1377 possessed by English kings? By what claims were they held? How were they lost? If possible illustrate your answer by a map.
7. Explain and illustrate the influence of the physical geography of England on English History during the Middle Ages.
8. Show how the personal character and aims of Edward III. affected the history of the English people during the fourteenth century.
9. Explain the importance of *three* of the following:—The Assize of Clarendon; the Confirmatio Cartarum; the Statute of Labourers; the Good Parliament.

HISTORY II.

PASS.

You are recommended to answer SEVEN *questions, and to include questions* 1 *and* 2.

1. State shortly what Fortescue says as to (*a*) the difference between the English and the French monarchies, (*b*) the difference in social condition of the English and French people; (*c*) the argument that it is to a king's interest that the people should be poor; (*d*) the importance of the Council.
2. State shortly what is said in the Utopia as to (*a*) the punishment of crime, (*b*) sheep farming, (*c*) industrial arrangements, (*d*) religion.
3. Sketch the English wars in France in the fifteenth century, and account (*a*) for the early successes of the English, and (*b*) for their final failure.

4. Sketch the relations between Scotland and France from 1272 to 1603, and show how they affected the history of England.

5. "The discovery of America and the new route to India, the conquest of Constantinople by the Turks, the revival of learning, and the invention of printing and gunpowder, are the great events which mark the change of the mediæval to the modern world."

Write *short* notes of explanation on this passage.

6. Give some account of the life and work of John Colet.

7. Give a short account of the rebellions in the reign of Edward VI.

8. To what extent was Elizabeth's foreign policy determined by religious considerations?

9 Describe the views and aims of the Puritans in the reign of Elizabeth. Explain the conduct of the Queen with regard to them.

HISTORY I.

HONOURS.

You are recommended to answer not less than FIVE, *and not more than* SEVEN *questions.*

1. "In every glimpse we get of old Teutonic politics, we see what we may fairly call a monarchic, an aristocratic, and a democratic element."

Trace concisely the history of these "elements" from the migration to Britain to the Norman Conquest.

2. "Each step in our growth has been the natural consequence of some earlier step; each change in our law and constitution has been, not the bringing in of anything wholly new, but the development of something that was already old."

Examine, with a view to testing the truth of this statement, (*a*) the constitutional changes caused by the Norman Conquest, (*b*) the Magna Carta.

3. In what respects may Edward I. be said to have completed the work of Henry II.?

4. "Wycliffe and the Lollards were Socialists."
Discuss this statement.

5. "Non jugum sed libertas est politice regere populum."—(Fortescue.)
   Explain this theory, and show its importance during the Middle Ages.
6. Discuss the influence of Greek thought at the time of the Renascence.
7. "The Protestant Reformation, Hebraising child of the Renascence."
   Discuss.
8. "The Utopia is a criticism of modern society in its beginnings."
   Discuss this statement.
9. In what sense and to what extent does the Protestant Reformation make a break in the history of the Church of England?
10. Examine the constitutional limitations of the despotism of the Tudors.

LOGIC AND MENTAL PHILOSOPHY.

PASS.

Not more than FOUR *questions from each section to be attempted, of which No.* 5 *must be one.*

A.

1. From a proposition can we be said to infer its contrary? If not, what can we infer with respect to contraries?
2. State and prove the law of the relation between the truth of the antecedent and that of the consequent in a hypothetical argument.
3. Explain and illustrate the function of the middle term in the syllogism.
4. Describe the general nature of the fallacies of *Ignoratio Elenchi*, and Petitio Principii, and give your own illustrations.
5. Write a note on each of the following, stating, where you can, the exact nature of the fallacy involved—
   (*a*) "Are we children of God, or children of gorillas?" (Talmage.)

(*b*) "Science is the study of phenomena with a view to scientific knowledge."

(*c*) "It is wrong to do harm to other men, and so all war is wicked."

(*d*) "If the upper house agree with the lower, it is superfluous; if it disagree it is dangerous; therefore it ought to be abolished."

(*e*) "Vaccination is no protection whatever against smallpox, for A, B and C were vaccinated, and yet they have taken smallpox."

6. "Until a *concomitant variation* has been fully *explained*, it is merely an *empirical* law." Explain the words in italics. What is the relation between the method of concomitant variations, and the method of difference?

B.

7. State clearly the points in which Imagination differs from (*a*) Memory and Perception, (*b*) Thinking.

8. "Thinking considers relations." Explain and illustrate by reference to conception, judgment, and reasoning.

9. Is conscience an intellectual or an emotional power? Give reasons for your answer.

10. What are the main characteristics of æsthetic feeling?

11. Define motive, and account for the ambiguity of the term as ordinarily used.

LOGIC AND MENTAL PHILOSOPHY.

HONOURS I.

Not more than SIX *questions to be attempted.*

1. Discuss and illustrate the application of the term *Law* in different spheres of life and thought.

2. Show that the problem of causation is a metaphysical as well as a logical problem.

3. "Mill's canons are merely experimental generalisations, not laws, and they are all but different expressions of one canon."
Discuss this statement.

4. Is it truer to say that we test the reality of our knowledge by our perceptions, or to say that we test the reality of our perceptions by our knowledge?
   Give reasons for your answer.
5. State briefly the *dualistic* view of the self, and the ethical consequences of such a view.
6. Discuss the ground and guarantee of our belief in personal identity.
7. Give a psychological analysis of the desire of honour.
8. "The growth of knowledge from sensation to reason is the growth of reason itself."
   Explain and illustrate.

GEOLOGY.

PASS AND HONOURS.

1. What is the geological range in Australia of the following, and what is their position in the animal or vegetable kingdoms—*Bronteus*, *Pentamerus*, *Heliolites*, *Vertebraria*, *Crassatella*, *Phyllotheca*, *Fagus*, *Martinia*, *Eurydesma cordata*, *Lepidodendron Australe*, *Araucarioxylon*, *Fenestella*, *Diprotodon*, *Belemnites*?
2. Explain and illustrate the nature of the movements which have led to the elevation of great mountain ranges like the Alps and the Himalayas. Quote evidence to show that the greater part of the elevation took place in Tertiary time.
3. Review briefly the evidences of past volcanic action in Eastern Australia, describing the nature of the volcanic products, and stating whether the outbursts were synchronous with elevation or subsidence of the earth's crust.
4. What is the meaning respectively of laccolitic structure and of sill structure? Quote examples.
5. By what palæontological and stratigraphical evidence would you be guided if you were prospecting for anhydrous coal in West Australia?

6. Classify the following rocks, and describe their mineral constitution or structure :—Phonolite, gabbro, limburgite, perlitic pitchstone, trachyte, granophyre, chlorite-schist, aplite, schorlaceous granite.

7. Describe in detail the different kinds of rock developed in the neighbourhood of Sydney as far south as the Clifton coal mine, and explain what evidence they supply as to the past physical geography of that area in (1) Permo-Carboniferous, (2) Triassic and (3) Post-Triassic time.

8. Explain (1) the absence of Tertiary Rocks all along the east coast of Australia, and (2) the presence of Tertiary Rocks in South Australia and Victoria.

THIRD YEAR EXAMINATION.

MARTIAL AND UNSEEN TRANSLATION.

PASS.

1. Translate into English, extracts from Martial.
2. Translate and write explanatory notes upon—
   (*a*) Nunquam grandia nec molesta poscit
   Quae cedro decorata purpuraque
   Nigris pagina crevit umbilicis.
   (*b*) Nulla remisisti parvo pro munere dona,
   Et jam Saturni quinque fuere dies.
   (*c*) O cui Tarpeias licuit contingere quercus,
   Et meritas prima cingere fronde comas.
   (*d*) Haec [lux] meruit cum te terris, Lucane, dedisset,
   Mixtus Castaliae Baetis ut esset aquae.
3. Translate—

Interea legati ab senatu regressum iam apud aram Ubiorum Germanicum adeunt. duae ibi legiones, prima atque vicensima, veteranique nuper missi sub vexillo hiemabant. pavidos et conscientia vaecordes intrat metus, venisse patrum iussu qui inrita facerent quae per seditionem expresserant. utque mos vulgo quamvis falsis reum subdere, Munatium Plancum consulatu functum; principem legationis, auctorem senatus consulti incusant; et nocte concubia vexillum in domo Germanici situm flagitare occipiunt, concursuque ad ianuam facto moliuntur fores, extractum cubili Caesarem tradere vexillum intento mortis metu subigunt. mox vagi per vias obvios habuere legatos, audita consternatione ad Germanicum tendentes. ingerunt contumelias, caedem parant, Planco maxime, quem dignitas fuga impediverat; neque aliud periclitanti subsidium quam castra primae legionis. illic signa et aquilam amplexus religione sese tutabatur, ac ni aquilifer Calpurnius vim extremam arcuisset, rarum etiam inter hostes, legatus populi Romani Romanis in castris sanguine suo altaria deum commaculavisset. luce demum, postquam dux et miles et facta noscebantur, ingressus castra Germanicus perduci ad se Plancum imperat recepitque in tribunal. tum fatalem increpans rabiem, neque militum sed deum ira resurgere, cur venerint legati aperit.

LATIN AUTHORS—(TACITUS AND HORACE).

PASS.

1. Translate into English, extracts from Tacitus, Histories I. and II.

2. Translate and write short explanatory notes on the following—
   (*a*) Placuit ignoscentibus verso nomine, quod avaritia fuerat, videri majestatem, cujus tum odio etiam bonae leges peribant.
   (*b*) Sed Vitellius comitia consulum cum candidatis civiliter celebrans, omnem infimae plebis rumorem, in theatro ut spectator, in circo ut fautor, adfectavit.
   (*c*) Ægyptum copiasque, quibus coërceretur, jam inde a divo Augusto equites Romani obtinent loco regum.
   (*d*) Vitellius ministeria principatus, per libertos agi solita, in equites Romanos disponit.

3. Translate into English, extracts from Horace, Epistles.

4. Translate and explain—
   (*a*) Parios ego primus iambos
   ostendi Latio, numeros animosque sequutus
   Archilochi, non res et agentia verba Lycamben.
   (*b*) Ambigitur quoties uter utro sit prior, aufert
   Pacuvius docti famam senis, Accius alti,
   dicitur Afrani toga convenisse Menandro,
   Plautus ad exemplar Siculi properare Epicharmi.
   (*c*) Versibus impariter iunctis querimonia primum.
   post etiam inclusa est voti sententia compos.
   (*d*) Non ita pridem,
   tardior ut paullo graviorque veniret ad aures,
   spondeos stabiles in iura paterna recepit.

GENERAL LATIN PAPER.

1. "The restoration of the republic was followed in January, 27 B.C., by the settlement of Octavian's own position, planned unquestionably by himself."
   Describe this settlement.

2. State the different classes of provincial towns, describe the differences in their privileges, and their mode of government.

3. "The revival of religion by Augustus was not mere statecraft; it was the expression of a real want of the age, and had great and lasting results."
   Comment on this statement.
4. Give an account of Galba.
5. "Under the Empire, the people of Rome were a mixed rabble."
   Comment on this.
6. What were the principal factors in the Romanising of the provinces?
7. "By the end of the Second Century we find throughout Italy and the provinces an army of officials, in the strictest sense servants only of Cæsar."
   Explain this.
8. What are the characteristics of the style of Martial?

SENIOR EXAMINATION IN GREEK.

(SECOND YEAR HONOURS AND THIRD YEAR PASS.)

TRANSLATION AT SIGHT.

Translate—

1. CASSANDRA SPEAKS.

κἀμέ τοι νεκρὸν φάραγγες γυμνάδ' ἐκβεβλημένην
ὕδατι χειμάρρῳ ῥέουσαι νυμφίου πέλας τάφου
θηρσὶ δώσουσιν δάσασθαι, τὴν Ἀπόλλωνος λάτριν.
ὦ στέφη τοῦ φιλτάτου μοι θεῶν, ἀγάλματ' εὖια,
χαίρετ'· ἐκλέλοιφ' ἑορτάς, αἷς πάροιθ' ἠγαλλόμην.
ἴτ' ἀπ' ἐμοῦ χρωτὸς σπαραγμοῖς, ὡς ἔτ' οὖσ' ἁγνὴ χρόα
δῶ θοαῖς αὔραις φέρεσθαί σοι τάδ', ὦ μαντεῖ' ἄναξ.
ποῦ σκάφος τὸ τοῦ στρατηγοῦ; ποῖ ποτ' ἐμβαίνειν με χρή;
οὐκέτ' ἂν φθάνοις ἂν αὔραν ἱστίοις καραδοκῶν,
ὡς μίαν τριῶν Ἐρινὺν τῆσδέ μ' ἐξάξων χθονός.
χαῖρέ μοι, μῆτερ, δακρύσῃς μηδέν· ὦ φίλη πατρὶς
οἵ τε γῆς ἔνερθ' ἀδελφοὶ χὠ τεκὼν ἡμᾶς πατήρ,
οὐ μακρὰν δέξεσθέ μ'· ἥξω δ' ἐς νεκρούς νικηφόρος
καὶ δόμους πέρσας Ἀτρειδῶν, ὧν ἀπωλόμεσθ' ὕπο.

2 Καὶ ὁ Πρωταγόρας ἐμοῦ ταῦτα ἀκούσας, Σύ τε καλῶς ἐρωτᾷς, ἔφη, ὦ Σώκρατες, καὶ ἐγὼ τοῖς καλῶς ἐρωτῶσι χαίρω ἀποκρινόμενος. Ἱπποκράτης γὰρ παρ' ἐμὲ ἀφικόμενος οὐ πείσεται ἅπερ

ἂν ἔπαθεν ἄλλῳ τῳ συγγενόμενος τῶν σοφιστῶν. οἱ μὲν γὰρ ἄλλοι λωβῶνται τοὺς νέους· τὰς γὰρ τέχνας αὐτοὺς πεφευγότας ἄκοντας πάλιν αὖ ἄγοντες ἐμβάλλουσιν εἰς τέχνας, λογισμούς τε καὶ ἀστρονομίαν καὶ γεωμετρίαν καὶ μουσικὴν διδάσκοντες— καὶ ἅμα εἰς τὸν Ἱππίαν ἀπέβλεψε—· παρὰ δ' ἐμὲ ἀφικόμενος μαθήσεται οὐ περὶ ἄλλου του ἢ περὶ οὗ ἥκει. τὸ δὲ μάθημά ἐστιν εὐβουλία περί τε τῶν οἰκείων, ὅπως ἂν ἄριστα τὴν αὑτοῦ οἰκίαν διοικοῖ, καὶ περὶ τῶν τῆς πόλεως, ὅπως τὰ τῆς πόλεως δυνατώτατος ἂν εἴη καὶ πράττειν καὶ λέγειν. Ἀρ', ἔφην ἐγώ, ἔπομαί σου τῷ λόγῳ; δοκεῖς γάρ μοι λέγειν τὴν πολιτικὴν τέχνην καὶ ὑπισχνεῖσθαι ποιεῖν ἄνδρας ἀγαθοὺς πολίτας. Αὐτὸ μὲν οὖν τοῦτό ἐστιν, ἔφη, ὦ Σώκρατες, τὸ ἐπάγγελμα ὃ ἐπαγγέλλομαι.

3. ΖΕΥΣ. Χρηστὰ ἐλπίζειν σε δεῖ· πάντως γὰρ ἤδη πεπείκασιν αὐτοὺς οἱ φιλόσοφοι σὲ τῆς Ἀδικίας προτιμᾶν, καὶ μάλιστα ὁ Σωκράτης, τὸ δίκαιον ὑπερεπαινέσας. καὶ ἀγαθῶν τὸ μέγιστον ἀποφήνας.

ΔΙΚΗ. Πάνυ γοῦν αὐτὸν ὃν φῂς ἐκεῖνον ὤνησαν οἱ περὶ ἐμοῦ λόγοι, ὃς παραδοθεὶς τοῖς ἕνδεκα καὶ ἐς τὸ δεσμωτήριον ἐμπεσὼν ἔπιεν ἄθλιος τοῦ κωνείου· παρὰ τοσοῦτον ὑπερέσχον οἱ κατήγοροι τἀναντία περὶ τῆς Ἀδικίας φιλοσοφοῦντες.

Ζ. Ξένα ἔτι τοῖς πολλοῖς τὰ τῆς φιλοσοφίας ἦν τότε, καὶ ὀλίγοι ἦσαν οἱ φιλοσοφοῦντες, ὥστε εἰκότως ἐς τὸν Ἄνυτον καὶ Μέλητον ἔρρεπε τὰ δικαστήρια. τὸ δὲ νῦν εἶναι, οὐχ ὁρᾷς ὅσοι τρίβωνες καὶ βακτηρίαι καὶ πῆραι; ἁπανταχοῦ πώγων βαθὺς καὶ βιβλίον ἐν τῇ ἀριστερᾷ, καὶ πάντες ὑπὲρ σοῦ φιλοσοφοῦσι.

Δ. Καὶ μὴν οὗτοί με, ὦ Ζεῦ, δειδίττονται, πρὸς ἀλλήλους ἐρίζοντες ἐν αὐτοῖς οἷς περὶ ἐμοῦ διεξέρχονται. φασὶ δὲ καὶ τοὺς πλείστους αὐτῶν ἐν μὲν τοῖς λόγοις προσποιεῖσθαί με, ἐπὶ δὲ τῶν πραγμάτων οὐδὲ τὸ παράπαν ἐς τὴν οἰκίαν παραδέχεσθαι, ἀλλὰ δήλους εἶναι ἀποκλείσοντας, ἢν ἀφίκωμαί ποτε αὐτοῖς ἐπὶ τὰς θύρας· πάλαι γὰρ τὴν Ἀδικίαν προεπεξενῶσθαι αὐτοῖς.

Ζ. Οὐ πάντες, ὦ θύγατερ, μοχθηροί εἰσιν· ἱκανὸν δέ, κἂν ἐνίοις τισὶ χρηστοῖς ἐντυχῇς.

GREEK AUTHORS—SENIOR.

(SECOND YEAR HONOURS AND THIRD YEAR PASS.)

1. Translate into English, an extract from Plato, Republic.

2. Translate, explain, and comment on the following—

(*a*) *ἀγνοεῖς ὅτι ἡ μὲν δικαιοσύνη καὶ τὸ δίκαιον ἀλλότριον ἀγαθὸν τῷ ὄντι, τοῦ κρείττονός τε καὶ ἄρχοντος ξυμφέρον, οἰκεία δὲ τοῦ πειθομένου τε καὶ ὑπηρετοῦντος βλάβη, ἡ δὲ ἀδικία τοὐναντίον.*

(*b*) *καὶ εἶναι δὴ ταύτην γένεσιν τε καὶ οὐσίαν δικαιοσύνης, μεταξὺ οὖσαν τοῦ μὲν ἀρίστου ὄντος, ἐὰν ἀδικῶν μὴ διδῷ δίκην, τοῦ δὲ κακίστου, ἐὰν ἀδικούμενος τιμωρεῖσθαι ἀδύνατος ᾖ· τὸ δὲ δίκαιον ἐν μέσῳ ὂν τούτων ἀμφοτέρων ἀγαπᾶσθαι οὐχ ὡς ἀγαθόν, ἀλλ' ὡς ἀρρωστίᾳ τοῦ ἀδικεῖν τιμώμενον.*

(*c*) *εὐλογία ἄρα καὶ εὐαρμοστία ταῖ εὐσχημοσύνη καὶ εὐρυθμία εὐηθείᾳ ἀκολουθεῖ, οὐχ ἣν ἄνοιαν οὖσαν ὑποκοριζόμενοι καλοῦμεν ὡς εὐήθειαν, ἀλλὰ τὴν ὡς ἀληθῶς εὖ τε καὶ καλῶς τὸ ἦθος κατεσκευασμένην διάνοιαν.*

(*d*) *τί οὖν, ἔφη, ὦ Σώκρατες, ἀπολογήσει, ἐάν τίς σε φῇ μὴ πάνυ τι εὐδαίμονας ποιεῖν τούτους τοὺς ἄνδρας, καὶ ταῦτα δι' ἑαυτούς, ὧν ἔστι μὲν ἡ πόλις τῇ ἀληθείᾳ, οἱ δὲ μηδὲν ἀπολαύουσιν ἀγαθὸν τῆς πόλεως, οἷον ἄλλοι,.....χρυσόν τε καὶ ἄργυρον κεκτημένοι καὶ πάντα ὅσα νομίζεται τοῖς μέλλουσι μακαρίοις εἶναι;*

(*e*) *κηφηνώδεις ἐπιθυμίας ἐν αὐτῷ διὰ τὴν ἀπαιδευσίαν μὴ φῶμεν ἐγγίγνεσθαι, τὰς μὲν πτωχικάς, τὰς δὲ κακούργους, κατεχομένας βίᾳ ὑπὸ τῆς ἄλλης ἐπιμελείας;*

(*f*) *οἶσθ' οὖν, ἦν δ' ἐγώ, ὅτι εἰ θέλοις τρεῖς τοιούτους ἀνθρώπους ἐν μέρει ἕκαστον ἀνερωτᾶν, τίς τούτων τῶν βίων ἥδιστος, τὸν ἑαυτοῦ ἕκαστος μάλιστα ἐγκωμιάσεται; ..... ὅτε δὴ οὖν, εἶπον, ἀμφισβητοῦνται ἑκάστου τοῦ εἴδους αἱ ἡδοναὶ καὶ αὐτὸς ὁ βίος, μὴ ὅτι πρὸς τὸ κάλλιον καὶ αἴσχιον ζῆν μηδὲ τὸ χεῖρον καὶ ἄμεινον, ἀλλὰ πρὸς αὐτὸ τὸ ἥδιον καὶ ἀλυπότερον, πῶς ἂν εἰδεῖμεν, τίς αὐτῶν ἀληθέστατα λέγει;*

3. Translate, with short notes on points needing explanation, extracts from Æschylus, Agamemnon.

4. Translate into English, extracts from Euripides, Hippolytus.

5. Translate, with short notes—

(*a*) *ἡ γλῶσσ' ὀμώμοχ', ἡ δὲ φρὴν ἀνώμοτος.*

(*b*) *ἀτὰρ κακόν γε χἀτέρῳ γενήσομαι*
θανοῦσ', ἵν' εἰδῇ μὴ 'πὶ τοῖς ἐμοῖς κακοῖς
ὑψηλὸς εἶναι· τῆς νόσου δὲ τῆσδέ μοι
κοινῇ μετασχὼν σωφρονεῖν μαθήσεται.

(*c*) *ἦ μέγα μοι τὰ θεῶν μελεδήμαθ', ὅταν φρένας ἔλθῃ,*
λύπας παραιρεῖ·
ξύνεσιν δέ τιν' ἐλπίδι κεύθων
λείπομαι ἔν τε τύχαις θνατῶν καὶ ἐν ἔργμασι λεύσσων.

GENERAL QUESTIONS.

Not more than EIGHT *questions are to be answered.*

1. "No doubt, before the Epic, there existed shorter lays; but what is the relation of the lays to the Epic?" Discuss this question with reference to the Iliad.

2. "The power of *entering vividly into the feelings of both parties in a conflict* is perhaps the most characteristic gift of the Greek genius." Illustrate this statement from any two Greek authors.

3. Who or what was "Orpheus?" What is known as to the contents and character of the writings which passed under his name, and what was the nature of their influence on Greek thought?

4. "The word *tragedy* means *goat-song*." What was the original *goat-song*, and how did it develop into the tragedy of the Athenian theatre?

5. "The elder tragedians stand at a stage where it still seems possible to reconcile the main scheme of traditional theology with morality and reason. Euripides has reached a further point, where the disagreement is seen to be beyond healing." Explain this statement.

6. "Euripides excels in pathos." Compare Euripides with Æschylus in regard to their treatment of pathetic situations.

7. "When any of these clever multiform gentlemen, who can imitate anything, comes to us, and proposes to exhibit himself and his poetry . . . we must inform him that there is no place for such as he is in our State. . . . For we mean to employ for our souls' health the rougher and severer poet or story-teller, who will imitate the style of the virtuous only."

   Explain and discuss Plato's limitations of the range of poetry.

8. Describe the analogy between the State and the individual soul, as employed by Plato in the Republic. How far does the analogy hold good?

9. Describe Plato's view of democracy. How far do his criticisms apply to the special conditions of Athenian democracy in his day, and how far to democracy in general?

10. State and explain Plato's definition of Justice.

DIFFERENTIAL AND INTEGRAL CALCULUS.

PASS.

1. Find from first principles the differential coefficients of x^n and a^x.

2. Find the equation to the tangent in Cartesian coordinates.
   In the curve $x^p y^q = a^{p+q}$, prove that the tangent may be written
   $$pX/x + qY/y = p+q.$$

3. PM is a (positive) ordinate of the semi-circle $y^2 = x(a-x)$, of which AB$(=a)$ is the diameter. Find a position of P such that $2\times$ triangle APM $+ 3\times$ triangle BPM is a maximum.

4. Prove that the sub-normal is constant in the curve $y^2 = 4ax$, and that the sub-tangent is constant in $y = ae^{\frac{x}{a}}$.

5. Find an expression for the radius of curvature at the end of the major axis of an ellipse, by considering it as the ultimate value of a sub-normal.

6. Trace the curves
   (i.) $ay^2 = x(x-a)(x-2a)$.
   (ii.) $r = a\sec 4\theta$.

7. Obtain an expression for $\tan^{-1}x$, by integrating a geometrical series and its sum.

8. Find the integrals of
   $$\sin^2 2x.\cos 3x,\ e^x \sin x,\ e^{x^2}(2x^2+2x+1).$$

9. Find the whole area of the curve $r^2 = a^2\cos\theta$; and the area of $r^2 = c^2\sec\theta.\operatorname{cosec}\theta$, between $\theta = \alpha$ and $\theta = \beta$.

10. Find the volume generated by a parabolic segment, cut off by the latus rectum, which revolves round the directrix.

11. Find $\frac{ds}{dx}$ in the curve
    $$\frac{2y}{c} = e^{\frac{x}{c}} + e^{-\frac{x}{c}},$$
    and find the length of the arc of this curve in terms of the abscissa.

12. Adapt the formulæ $\bar{x}=\Sigma mx/\Sigma m$, etc., to the purpose of finding the centre of gravity of an area by means of integration.

Find the centre of gravity of the area bounded by

$$a^2y=x^3,\ y=0,\ x=c.$$

ANALYTICAL CONICS AND DYNAMICS.

PASS.

1. Find the condition that the three straight lines $ax+by+c=0$, $a'x+b'y+c'=0$ and $a''x+b''y+c''=0$ should meet at a point.

   Shew that the internal bisectors of the angles of any triangle meet in a point.

2. Define the "radical axis" of two circles, and find its equation in Cartesian co-ordinates.

   Shew that it is perpendicular to the line joining the centres.

3. Find the locus of the middle points of a system of parallel chords of a parabola.

   Obtain also the equation to the locus of the middle points of all chords of a parabola of given length c.

4. Obtain the equation to an ellipse referred to its centre as origin.

   If the eccentricity of an ellipse $=\frac{\sqrt{3}}{2}$, prove that its latus rectum is equal to one-half its minor axis.

5. Define an asymptote, and, from your definition, find the asymptotes of

$$\frac{x^2}{a^2}-\frac{y^2}{b^2}=1.$$

   Find the asymptotes of $4y^2-x^2-10x=0$, and shew that they touch

$$\frac{x^2}{9}+\frac{y^2}{4}=1.$$

6. Draw the following loci

   (i.) $6x^2+5xy-6y^2+23x+2y+20=0$,

   (ii.) $y^2+4y+3x+2=0$,

   (iii.) $36x^2+9y^2+24x-36y+4=0$.

7. Prove the equations

$$s=\frac{ft^2}{2},\ v^2=2fs.$$

A mass of one pound is placed on a smooth plane inclined at 30° to the horizon, and is connected with a mass of 9 oz. hanging freely, by means of a light string which passes over the summit of the plane. If each mass moves through 2 feet 6 inches in the first two seconds of motion, find the numerical value of g.

8. Shew that the time of descent down all chords of a vertical circle through the highest point is the same.

Find the line of quickest descent from a given circle to a given straight line, the circle and the straight line being in the same vertical plane.

9. Shew that the velocity of a projectile, at any point of its path is equal in magnitude to that which it would have acquired by falling freely from the directrix.

A cannon ball is fired at elevation α and strikes a point a feet above its starting point, its direction of motion then making an angle β with the horizon, shew that the velocity of projection was

$$\sqrt{\frac{2ag\cos^2\beta}{\sin(\alpha+\beta)\sin(\alpha-\beta)}}.$$

10. Shew that kinetic energy is lost in the direct impact of two smooth imperfectly elastic balls.

11. There are 3 equal elastic balls lying in a row on a smooth horizontal table at distances of 1 foot apart. The first is driven with velocity v against the second. Find after what time the 3rd will be set in motion, and with what velocity.

12. Describe the conical pendulum.

A particle of mass 1 lb. is swung round in a horizontal circle at the end of a string 5 feet long. If the greatest tension the string can endure without breaking is the weight of 10 lbs., shew that the greatest velocity with which the mass can revolve safely is 14 turns in 11 seconds. $[\pi=\frac{22}{7},\ g=32]$

ENGLISH I.

Not more than SIX *questions to be attempted in Section A, and not more than* THREE *in Section B.*

A.

1. Discuss all the evidences of date in regard to either (*a*) the Two Gentlemen of Verona, or (*b*) All's Well that Ends Well.

2. (*a*) What theories may be formed as to the relationship existing between "The Taming of A Shrew," and "The Taming of The Shrew."

   Or,

   (*b*) Discuss the function of the Fairies in "A Midsummer Night's Dream."

3. "Love's Labour Lost is a protest against idealising away the facts of life."

   "It is the Comedy of Affectations."

   Compare these descriptions.

4. What evidence do the Comedies afford as to Shakespeare's attitude towards the pastoral ideal?

5. What is the proper conception of the character of Malvolio?

6. Estimate the characters of Jaques and Touchstone, with special reference to their functions in the play.

7. "The Merry Wives of Windsor was a task, and its Falstaff is not the Falstaff of Henry IV., but an impostor assuming his name and style."

   Discuss.

8. Of Shylock's enforced conversion Elze says, "It goes beyond the idea of punishment: it is no longer poetic justice or tragical retribution, it is mental and moral annihilation. . . . The sentence of death would have been mild compared to this torture."

   Examine this criticism and indicate your own feeling in the matter.

9. Compare and contrast Beatrice, Portia, and Viola, or Proteus, Bertram, and Orsino.

10. What are the main characteristics of the Romances?

B.

1. "Shelley and Keats have both taken subjects from the myth of the Titans, but their attitude and treatment are entirely different."
   Discuss this statement.
2. "Has not thy life been that of most sufficient men (tüchtigen Männer) thou hast known in this generation?"
   Sketch and explain the aspect of Sartor Resartus here referred to.
3. "Short swallow-flights of song, that dip
   Their wings in tears and skim away."
   Discuss the idea that "In Memoriam" has no unity and but little arrangement.
4. Discuss the idea contained in each of the following passages—
   (*a*) "The grand unparalleled peculiarity of Teufelsdröckh is that with all this Descendentalism he combines a Transcendentalism no less superlative."
   (*b*) "Thus had the EVERLASTING No (das ewige Nein) pealed authoritatively through all the recesses of my being, of my ME; and then it was that my whole ME stood up in native God-created majesty, and with emphasis recorded its protest."
   (*c*) "It is in and through Symbols that man consciously or unconsciously, lives, works and has his being."
   (*d*) Ring out the darkness of the land,
   Ring in the Christ that is to be.
   (*e*) "'Twere best at once to sink to peace,
   Like birds the charming serpent draws,
   To drop head-foremost in the jaws
   Of vacant darkness and to cease."
   (*f*) Let Love clasp Grief lest both be drowned.

ENGLISH—PAPER II.

Not more than SIX *questions to be attempted in Section A, and not more than* THREE *in Section B.*

A.

1. In what respects are Collins, Smart, and Blake significant of the coming change in literature?

2. "Crabbe is a Pope in worsted stockings."
   Explain and discuss this saying.
3. What were the advantages and disadvantages to Burns of his obscure position and rural dialect?
4. Estimate the services of Southey to the Romantic movement.
5. What are the characteristics of Wordsworth as a poet of Nature?
6. Describe the influences that chiefly determined the bent of Scott's genius.
7. "Shelley begins as a professed atheist, but this was never the creed of his heart, and before his death even his intellect had disowned it."
   Discuss this.
8. "Byron obtained his popularity chiefly through the delineation of his melodramatic hero."
   Explain this statement; is it just?
9. "Browning in his sixty years of authorship did little more than enforce the story of the Pharisee and the Publican."
   Explain and discuss this criticism.

B.

1. "Literary Criticism, like Science, must explain but should neither praise nor blame."
   Examine this theory.
2. Give an account of the Canons of Criticism as formulated by Boileau and the Classicists.
3. Describe and compare the critical principles of Addison and of Dr. Johnson.
4. "Lessing and Sainte Beuve are in different ways the great critical geniuses of the modern world."
   In what are they great, and how is the greatness of the one distinguished from the greatness of the other?
5. "Poetry is not concerned with her subject, but depends solely on the expression."
   Examine this statement.

SENIOR FRENCH.

The same papers as those set in the Second Year, with additional questions upon Vauvenargues, Œuvres choisies; X. de Maistre, Voyage autour de ma chambre.

SENIOR GERMAN.

The same papers as those set in the Second Year, with additional questions upon Heinrich Stillings, Jugend, &c.

HISTORY I.

PASS.

You are recommended to answer SEVEN *questions, and to include question* 3.

1. Explain and discuss the foreign policy of James I.
2. "Why, forsooth, they say there are great innovations brought in by the prelates." Explain shortly the nature of this grievance, and indicate its importance in political history.
3. Explain, and illustrate by reference to the Areopagitica, Milton's relation to the Protestant Reformation.
4. Describe the political situation at the death of Strafford, and account for the subsequent growth of the royalist party.
5. "The supreme legislative authority shall be and reside in one person and the people assembled in Parliament." Explain Cromwell's political views as expressed in this statement.
6. Discuss Cromwell's foreign policy.
7. Explain the importance of the Revolution of 1688 in political and ecclesiastical history.
8. Explain the policy of the Tories during the last four years of the reign of Queen Anne.
9. Explain the significance of the wars from 1739 to 1748.
10. Describe the condition of the Church of England in the first half of the eighteenth century, and indicate the nature of the changes wished for by the early Methodists.

HISTORY II.

PASS.

You are recommended to answer SEVEN *questions, and to include questions* 1 *and* 4.

1. Explain Burke's views as to the true function of the House of Commons in the English constitution.
2. Describe the character of the economic teaching of Adam Smith.
3. Explain the importance of (*a*) the New Poor Law of 1834, and (*b*) the Factory Acts.
4. What reforms does Carlyle urge in "Past and Present?"
5. What are the most important Parliamentary Statutes that have dealt with Trade Unionism during this century?
6. Consider Dickens as a critic of modern society and a practical reformer.
7. "The whole scope of the essay is to recommend *Culture* as the great help out of our present difficulties." Explain shortly Arnold's meaning.
8. Tennyson has been called "the Mirror of his Age." Discuss.
9. Explain the importance of the Dockers' Strike of 1889.
10. Write a short account of the political career of Sir Robert Peel.
11. Describe the difficulties of the British position in India, illustrating your answer by reference to events of the present reign.
12. "There was once a Greater Spain, a Greater Portugal, a Greater France, and a Greater Holland, as well as a Greater Britain." Account for the permanence of the British Empire as compared with the Empires of other European nations.

HISTORY I.

HONOURS.

You are recommended to answer not less than FIVE *questions, and not more than* SEVEN.

1. "The real subject in dispute between statesmen such as Bacon and Wentworth on the one hand, and Coke and

Eliot on the other, was whether a strong administration of the Continental type, should or should not be permanently established in England." (*Dicey.*)

Explain the significance of the conflict regarded from this point of view.

2. "At whatever date we choose first to see all the decisive marks of the Cabinet system, it is certain that it was under Walpole that its ruling principles were first fixed in Parliamentary Government."

Discuss.

3. Men judged Burke by Party, when they ought to have judged Party by Burke."

Discuss.

4. In what respects does the character of the English constitution explain the absence of revolutions during the present century?

5. "It is insisted that the peculiar excellence of the British Constitution lies in a balanced union of three powers. It is said that the monarchical element, the aristocratic element, and the democratic element have each a share in the supreme sovereignty, and that the assent of all three is necessary to the action of that sovereignty."

Explain Bagehot's criticism of this theory.

6. How would Australian Federation affect the powers of the Parliament of New South Wales?

7. Discuss shortly the importance of John Stuart Mill in the history of English thought on political and economic matters.

8. Discuss the difficulties to be overcome in fixing a "minimum wage."

9. What important influences have affected religious thought and belief during the present century?

10. "That's what it is, that confounded égalité, French manufacture,

He is the same as the Chartist who spoke at a meeting in Ireland,

What, and is not one man, fellow-men, as good as another?"

"*Faith,*" replied Pat, "*and a deal better too!*"

Discuss this argument for the extension of the franchise.

LOGIC AND MENTAL PHILOSOPHY.

PASS.

Not more than SEVEN *questions to be attempted.*

1. Discuss the charge that the Sophists were corrupters of youth. What were the grounds of Plato's antagonism to the Sophists?
2. What is mysticism? Indicate its significance as a recurring phenomenon in philosophy and religion.
3. Account for the rise of the post-Aristotelian schools of philosophy.
4. "A man is always a member of some kind of community." What was the ideal community of the Stoics? Compare with the Christian ideal.
5. Compare the Aristotelian with the Socratic conception of virtue.
6. Discuss the influence of Scholasticism on the thought of Bacon and Descartes.
7. Examine the utility of Kant's conception of humanity, or the moral law as an "end in itself."
8. Discuss the question of *qualitative* differences in pleasure with special reference to Hedonism.
9. Summarise the general characteristics of ethical thought during the XIX. Century as contrasted with that of last century.

LOGIC AND MENTAL PHILOSOPHY.

HONOURS I.

1. Discuss (*a*) Berkeley's account of the self both from the psychological and from the metaphysical point of view;

   or,

   (*b*) the distinction drawn by Berkeley between *idea* and *notion*, and its significance in its system.
2. "The arguments of Subjective Idealism admit of no answer, and produce no conviction."

   Discuss with reference to Hume.
3. Discuss the ground and guarantee of our belief in personal identity.
4. In what respects were the political problems of the Greek world different from those of the modern world? How did the nature of the problem affect the permanent value of the solutions offered by Plato and Aristotle?

5. State and criticise Plato's Ideal Theory as a metaphysical explanation.

6. "The Stoics and Epicureans held (in different ways) that virtue and happiness are identical: this identification Kant rejects."

Discuss and account for the different standpoints of the three systems.

PALÆONTOLOGY AND GEOLOGY.

PASS AND HONOURS.

1. What is the geological range of the following, and to what families, orders, &c., do they belong:—*Tentaculites, Aturia, Dreissena, Turrilepas, Cicada Lowei, Cellepora, Microdiscus, Productus brachythærus, Estheria, Salterella, Astromma, Clypeaster, Hyalostelia, Endothyra, Michelinia?*

2. Describe in detail, illustrating your answer with sketches, the structure of one of the Blastoidea.

3. Explain and illustrate the manner and means of attachment of the following organisms to foreign objects:—*Discina, Anomia, Rhynchonella, Terebratula, Mytilus, Balanus, Aviculopecten, Ostrea, Productus, Hippurites.*

4. Explain and illustrate the microscopic structure of the shells of the following:—*Inoceramus, Serpula, Lingula, Spiriferina, Unio.* In what respects does the microscopic structure of the above differ from that of the skeletons of the Echinodermata, and of the Corals?

5. Explain in detail and illustrate the various methods of opening and closing the valves in the Brachiopods and Lamellibranchs respectively. Quote examples.

6. Enumerate any organisms, recent or fossil, provided with an operculum, giving a brief description of its nature in each case.

7. What explanations have been offered as to the nature and cause of overthrusts? In what portions of the earth's crust are they likely to be developed?

8. Quote any evidence to prove that Australia has passed through Glacial Epochs in Pre-Miocene time. Mention any possible causes for Glacial Epochs.

FACULTY OF MEDICINE.

FIRST YEAR EXAMINATION.

CHEMISTRY—(INTRODUCTORY).

The same paper as that set in the First Year in Arts.

CHEMISTRY—(METALS).

1. Mention some of the triad groups of elements, and give an account of the Periodic Law, and of any objections to it.
2. Compare the properties of the common salts of Ba, Sr, Ca, Mg, Na, K, and NH_4; state how the foregoing are classified, and give the reasons.
3. How does tin occur in nature? How is it extracted and purified?
4. Give a brief account of the chemistry of mortars, cements, pottery, porcelain and the glazing of earthenware and porcelain.
5. State which of the following are soluble (*a*) in H_2O, (*b*) in dilute HCl and (*c*) in strong HCl. $PbCl_2$, $PbSO_4$, MnO_2, NiS, As_2S_3, Fe_2O_3, Hg_2Cl_2, CaC_2O_4, FeS_2, CaF_2, $Bi(NO_3)_3$, $BaSO_4$. How would you bring the others into solution?
6. How does copper occur in nature? How can it be extracted and purified in the wet way?
7. Describe exactly how you would proceed to test for the following bases by dry methods, viz., oxides of Hg, Sb, Cd, Zn, Al and Ni. State what chemical changes take place when these oxides are heated on charcoal.
8. Give an account of the cubical system of crystals, and mention some substances belonging to it.

PRACTICAL CHEMISTRY—PASS—Three Hours.
HONOURS—Four Hours.

PHYSICS.

PASS, HONOURS AND SCHOLARSHIP.

SIX *questions only to be attempted.* *An answer to the first question is obligatory.*

1. Explain, with all practical detail, how you would perform *one* of the following experiments, giving all necessary theoretical work—

   The verification of Dalton's Law of Partial Pressures.

   The determination of the refractive index of a liquid.

   The method of making a "half wave" plate for sodium light.

2. State the gaseous laws, and describe and explain some form of practical air pump.

3. Explain exactly, with all necessary detail, the construction of a spectroscope. Make diagrams shewing the mode of action of the instrument and of the following spectra:—(i.) The spectrum of Sodium in a Bunsen gas flame. (ii.) The spectrum of a gas flame as seen through Sodium vapour. (iii.) The absorption spectrum of permanganate of Potash.

4. Give an account of the phenomena of longitudinal spherical aberration as exhibited by a convex lens.

5. Prove that it is always possible to construct a reflecting surface with respect to two points so that light emerging from one point shall form a perfect image at the other. How is the perfection of the image affected by the finite wave length of light, and why is it that the imperfections so introduced are less the larger the aperture of the reflecting surface?

6. Describe an experiment illustrating the fact that the relative deviation of light of different colours is not the same for all kinds of glass. Show from this that the construction of an achromatic lens must be possible for light of two colours.

7. What evidence is there to the effect that the ether in the glass of a charged Leyden Jar is the seat of electric energy?

8. State the laws of electrolysis and describe and explain some form of non polarising voltaic cell.
9. Two coils of wire are arranged so that they are coaxial and so that one of them may slide in or out of the other. On making or breaking the battery current circulating through one of them a momentary electromotive force is developed in the other. Explain exactly why it is that the magnitude of this electromotive force depends on the relative position of the two coils. What will be the effect of placing a bundle of iron wires coaxially within the coils, and how will the effects in the secondary circuit be modified if the interruptions in the primary circuit are caused to take place with increased rapidity?
10. Draw carefully a diagram shewing the production of an image by a double concave lens, explaining your method of construction. Draw a pencil of rays by which an eye could see the image as given by your construction.

BOTANY.

Illustrate your answers by means of drawings.

1. Describe the structure and life-history of *Fuligo* ("Flowers of Tan"), or some other Myxomycete.
2. Give a general account of the Siphoneæ.
3. Describe the structure and life-history of the Rust-Fungus (*Puccinia*).
4. Describe the reproductive organs and the sporophyte stage of a Moss.
5. Compare the oophyte stages in Pteris and Selaginella.
6. Give an account of the tissues of the fundamental system in Vascular Plants, with their arrangement in the stem, the root, and the leaves.
7. Give an account of the phenomena of absorption by the roots, and of transpiration.

PRACTICAL BOTANY—Three Hours.

ZOOLOGY.

Illustrate your answers by means of drawings.

1. Give a general account of the Radiolaria.
2. Describe the adult structure of Aurelia.
3. Describe the life-history of a Tapeworm.
4. Compare Nereis with a Leech as regards (i.) the external features, (ii.) the blood-vascular system, (iii.) the reproductive system.
5. Describe the general mode of formation of the brain and spinal cord, and of the spinal column, in the embryo of the Craniata.
6. Describe the visceral arches of the Sting Ray, and compare them with those of the Frog.
7. State in what principal features the Monotremes differ from all Mammals.

PRACTICAL ZOOLOGY—Three Hours.

SECOND YEAR EXAMINATION.

ANATOMY.

1. Describe the squamosal (squamoso-zygomatic) element of the temporal bone, including its articulations with other bones, and its junction with other elements of the same bone.
2. Make a sketch of the ventral surface of the sternum, indicating all the features visible in this aspect by means of reference lettering.
3. State briefly what you know of the mode of development of the following organs—
   (*a*) The lungs,
   (*b*) The liver,
   (*c*) The external nose,
   (*d*) The urinary bladder.
4. Describe the anatomy of the surface of the mesencephalon.
5. Describe the position and chief relations of the following—
   (*a*) The saphenous opening,
   (*b*) The superficial palmar arterial arch.

PHYSIOLOGY.

Not more than FIVE *questions to be attempted.*

1. Describe from a histological point of view the epithetia lining respectively the
   (*a*) Peritoneal cavity
   (*b*) Pulmonary air vesicles
   (*c*) Aorta, small artery, small vein, large vein, and the thoracic duct.
   (*d*) Urinary bladder
   (*e*) Mouth.
2. Describe the sequence of events occurring in the heart during the cardiac cycle.

3. Mention the principal functions of the blood. What are the essential factors in the coagulation of the blood? Why does not the blood coagulate whilst still within the healthy blood vessels?
4. Describe the mechanism of tranquil respiration.
5. Describe the appearances of the salivary cells before and after their activity. Cite the experimental evidence which proves that saliva is formed by the vital action of the salivary gland cells acting upon materials brought to them by the blood.
6. Describe the principal processes of intestinal digestion.

CHEMISTRY—(CARBON-COMPOUNDS).

1. What do you understand by isomerism, metamerism and polymerism?
2. Give a general account of the amines, phosphines and arsines.
3. What are the principal differences between the phenols and aromatic carbinols? Give a classification for these two groups.
4. What is meant by an asymmetric carbon atom? What physical effects accompany its presence? Describe the constitution of maleic and fumaric acids.
5. Give methods for the preparation of the alkyl cyanides and isocyanides or carbamines. What are the chief differences in their properties?
6. What are the chief chemical differences between the fixed and other oils? Give a brief account of the terpenes.
7. Give an account of anthracene. By what chemical changes is alizarin obtained from madder and from anthracene?
8. What do you know about the chemical constitution and properties of pyridine, conine, nicotine, piturine, quinines cinchonine, quinidine, cinchonidine, theobromine, and caffeine?

THIRD YEAR EXAMINATION.

ANATOMY.

N.B.—One of the first three questions to be omitted.

1. Give an account of the mode of formation, and of the connections and distribution of the cardiac, solar and hypogastric plexuses of the sympathetic.
2. Give an account of the position, relations and attachments of the liver, and describe the subdivision of the inferior surface of the organ.
3. Describe the origin, course and relations of the internal iliac artery and indicate its intrapelvic distribution.
4. Describe the dissection required to expose the entire plantar arterial arch, indicating the various structures met with and their mutual relations.
5. Describe the optic thalamus, including what you know of the anatomy of its interior, as well as the topographical relations of its exterior.
6. Which lymphatic glands would be likely to be first involved in, say, a cancerous affection of the following areas—
   (*a*) The skin over the inner border of the mammary gland in the female
   (*b*) The mucous membrane of the floor of the mouth
   (*c*) The glans penis
   (*d*) The testicle
   (*e*) The cervix uteri
   (*f*) The stomach
   (*g*) The skin over the calf of the leg ?

PHYSIOLOGY.

Only FIVE *questions to be attempted, and of these questions* 6 *must be one.*

1. Describe the manner in which such a bone as the tibia of man is developed from being a solid rod of cartilage into being a hollow cylinder of bone, and point out the difference between the modes in which the bone grows in thickness and in length respectively.

2. Compare the chemical composition of inspired with that of expired air, and describe the manner in which the changes in composition are produced.

3. What changes in composition does the blood undergo in passing through—
   (*a*) The liver,
   (*b*) The spleen,
   (*c*) A lymphatic gland,
   (*d*) The kidney?

4. Describe the characters and mode of production of the heart sounds. What is the cause of "reduplication" of the second sound?

5. Animal heat—
   (*a*) Describe the mechanisms or means by which the temperature of a warm-blooded animal is maintained so high and so uniform.
   (*b*) Prove experimentally the existence of a nerve mechanism regulating the secretion of sweat.

6. Describe and compare the conditions produced in an animal by deprivation of—
   (*a*) The cerebral hemispheres,
   (*b*) The cerebellum,
   (*c*) The whole brain.

MATERIA MEDICA AND THERAPEUTICS.

1. Oxygen Gas: State shortly how this is prepared commercially. Explain the principle upon which its therapeutic application is based, and illustrate your answer by describing the leading conditions under which it has been administered. What are the practical drawbacks to its free employment?

2. Compound Powder of Tragacanth: What are its ingredients, and the sources and nature of these? Why is this mixture more effective than its separate constituents? Write out a prescription in Latin, without contractions containing at least one active ingredient to illustrate its use. (Directions for administration must be explicit, and in English.)

3. Glycerin: Upon what properties is the utility of this pharmaceutically and therapeutically dependent? What effect has it if taken by mouth; applied by rectum; applied to the skin, respectively? Explain in each case the harmful results of its excessive or incorrect use.

4. Benzoic Acid: Whence is this derived? What are its (B.P.) preparations? Compare it with Salicylic Acid in its passage through the body. For what therapeutic purposes has it (or its B.P. preparations) been employed?

5. Pilocarpine: Explain the action of this upon the system. What are the leading symptoms of over-dosage, and how can you arrest these? Give in each case the doses likely to produce these results. Describe clearly why the preparations of Jaborandi are less satisfactory than Pilocarpine itself.

FOURTH YEAR EXAMINATION.

PATHOLOGY.

1. Discuss the effects of dilatation of the Heart upon the circulation, and mention any experimental evidence. Under what conditions may such dilatation occur?
2. Mention the various forms of Dropsy, and discuss the Pathology of Renal Dropsy.
3. Give an account of Cylindrical Epithelioma. Describe any conditions in animals that resemble it.
4. Describe the various macroscopic changes that may appear in the abdomen in a case of Typhoid Fever.
5. Enumerate the various forms of Ulceration of the Stomach. Give the morbid anatomy of so-called Chronic Ulcer of the Stomach, and discuss its pathology.
6. Give the characters of the Tubercle bacillus as observed outside of the body.

Special question for prize (*instead of* question 6).

Discuss the rôle of Streptococci in morbid processes, and describe the varying characters of these organisms.

SURGICAL ANATOMY AND OPERATIVE SURGERY.

1. Describe the Ischio-rectal fossa, stating its boundaries and contents.
2. Describe the structures as exposed by a transverse section through the leg midway between the knee and ankle.

   What are the branches of the posterior tibial artery and how do they anastomose?

   How could you ligature this artery in its upper third?
3. Describe fully the operation for ligature of the external carotid artery at the "seat of election."

   In the case of hæmorrhage from one of its branches, what are the advantages and disadvantages of this operation as compared with that of ligature of the common carotid?
4. Desribe fully the operation of Lumbar Nephrotomy.

FIFTH YEAR EXAMINATION.

MEDICINE.

1. What are the chief symptoms and physical signs met with in Aneurisms of the different parts of the Thoracic Aorta?
2. Describe a case of Beriberi. State the conditions under which it is usually met with, and the general outline of treatment appropriate to that disease.
3. Describe a case of Acute Laryngitis, and give an outline of the treatment you would consider necessary, with prescriptions for your remedies.

SURGERY.

1. What are the causes, symptoms and treatment of chronic suppuration of the middle ear?

   Do you consider this a serious affection? Give reasons for your opinion.
2. What are the causes, symptoms and treatment of urethro-scrotal and urethro-perineal fistulæ?
3. At what situations do foreign bodies in the æsophagus usually become impacted?

   Mention some of the foreign bodies commonly met with.

   What symptoms do they produce, and what methods of treatment have been adopted for their removal?
4. Describe the symptoms, pathology and treatment of hip-joint disease in its different "stages."

MIDWIFERY.

1. Describe fully the management of a case of breech presentation. Mention the risks to mother and child in such a case.

2. Describe the diagnosis, prognosis and treatment of a case of Gravid Retroversion.
3. Describe the causes of delay in the second stage of labour.
4. Describe the action of axis-traction forceps—
   (*a*) At the brim,
   (*b*) In the cavity,
   (*c*) At the outlet.

GYNÆCOLOGY.

FOUR *questions only to be answered.*

1. Carcinoma Uteri—
   (i.) What are the various sites?
   (ii.) Give the pathology, symptoms and diagnosis of an early case in the most frequent site.
   (iii.) What are the conditions for radical operative interference?
2. Give the pathology and aetiology, symptoms, diagnosis, and treatment of Vaginitis.
3. Give the causes, stages, symptoms, and treatment of Prolapse of Uterus.
4. Describe the proper method of examining a woman, and in a normal case what you would expect to find.
5. What are the causes, varieties, and treatment of Pelvic Haematocele?

OPHTHALMIC MEDICINE AND SURGERY.

1. What is Squint? How do you recognise its presence? What are the chief varieties? How do you distinguish between concomitant and paralytic squint? What are the methods of treatment of concomitant squint?
2. Describe the ophthalmoscopic appearances and state of vision in optic neuritis. Enumerate the chief causes of the disease.

3. Mention the diseases, and describe as precisely as you can, the injuries, calling for enucleation of the eyeball. Describe the operation.
4. Give the symptoms, prognosis and treatment of Gonorrhœal Ophthalmia.
5. State the symptoms, causes, prognosis and treatment of Interstitial Keratitis.
6. Mention the chief causes of Retinitis, and describe the Ophthalmoscopic appearances of Retinitis Albuminurica.

MEDICAL JURISPRUDENCE AND PUBLIC HEALTH.

1. Is it possible to say when death took place from the degree of putrefaction present in the body?
2. What are the symptoms of poisoning by boracic acid?
3. What would indicate that a new-born child had survived its birth for twelve hours?
4. What is meant by a "biological" filter? What are the two conditions on which its efficiency primarily depends?
5. Small roundish bodies being discovered in the muscles of a food animal, it is necessary to decide whether they are cysticerci, psorospermia or trichinae; describe the characteristics of each briefly.
6. What is meant by "disconnecting" the house-drains from the sewer into which they discharge?

PSYCHOLOGICAL MEDICINE.

1. Give the causes, symptoms, and differential diagnosis of General Paralysis of the Insane.
2. Review the various morbid mental states due to Alcohol, giving the prognosis and treatment of each.
3. On what grounds would you conclude that a patient's Testamentary Capacity was good, and how would this capacity be best ascertained?

4. Describe fully True Puerperal Insanity, and state the indications for home or asylum treatment.
5. Mention the general characteristics of Congenital Mental Enfeeblement, and state in which forms of mental enfeeblement (Congenital and otherwise) training and teaching are most likely to be of service.

CLINICAL MEDICINE AND CLINICAL SURGERY.

An examination in the wards of a recognised Hospital.

FACULTY OF SCIENCE.

FIRST YEAR EXAMINATION.

BOTANY AND ZOOLOGY, as in the First Year of Medicine, with practical Examinations of three hours each.

CHEMISTRY, as in the First Year of Medicine, with a practical Examination of four hours.

PHYSICS, as in the First Year of Medicine.

PHYSIOGRAPHY, as in the First Year of Arts.

MATHEMATICS, as in the First Year of Arts, with an additional paper on Geometrical and Analytical Conics.

GEOMETRICAL AND ANALYTICAL CONICS.

TWO HOURS AND A HALF.

1. Define focus, directrix, abscissa, ordinate, auxiliary circle asymptote, latus rectum.
2. Prove that in a parabola the focal perpendicular on the tangent is a mean proportional between half the semi-latus rectum, and the focal radius to the point of contact; or $SY^2=SA.SP$.
3. A parabola being traced on paper, find its focus and directrix.
4. Prove that in an ellipse
   (i.) $CB^2=SA.S'A$
   (ii.) $SS'^2=AA'^2-BB'^2$
   and in a hyperbola $SP\sim S'P=2a$.
5. The locus of the centre of a circle touching two given non-intersecting circles is a hyperbola.
6. Shew that the four points $-\frac{1}{2},0$; $\frac{3}{2},-1$; 3,2 and 1,3 are the angular points of a rectangle, the length of each of whose diagonals is $\frac{1}{2}\sqrt{65}$.

7. What is meant by the "Equation of a Curve?"

When the equation to a straight line is given in the form $y=mx+c$, what are the constants m and c respectively?

Find the two straight lines drawn through the point 1,1 and equally inclined at an angle $\frac{\pi}{4}$ to the line $y=2x$.

8. Find the equations of the tangents from the external point $(0,c)$ on the axis of y to the circle $x^2+y^2=r^2$; also find the lengths of these tangents.

9. Trace the curve whose equation is

$$\frac{l}{r}=1+2\cos\theta$$

l being a constant.

SECOND YEAR EXAMINATION.

BIOLOGY.

1. Give a general account of the Nemerteans.
2. Describe the structure and life history of *Limulus*, and discuss its affinities.
3. Describe in general terms the various effects of light on plants, and state how each of these effects can be demonstrated experimentally.
4. Describe the induced movements of the leaves of *Mimosa pudica* with the mechanism by which they are effected.
5. Give an account of the principal modes of vegetative reproduction observable in the vegetable kingdom.
6. Give a brief statement of Darwin's theory of Pangenesis.

ZOOLOGY—(INVERTEBRATA).

Illustrate your answers by means of drawings.

1. Trace the development and metamorphosis of *Asterina*.
2. Give a detailed account of the structure of a Feather Star (*Antedon*).
3. Give an outline of the modifications of the canal-system that occur in the various groups of Sponges.
4. Give an account of the structure and development of *Phoronis*, and discuss its affinities.
5. Give a general account of the *Cirripedia*.
6. Describe fully the structure of *Nautilus*.

GEOLOGY, as in the Second Year of Arts.

STATICS, as in the Second Year of Arts.

DIFFERENTIAL AND INTEGRAL CALCULUS, as in the Third Year of Arts.

DYNAMICS.

1. Write out and explain the three Laws of Motion.

   Several persons are standing near each other on the perfectly smooth, horizontal floor of a room, the walls being also perfectly smooth, and perfectly inelastic. Can they all get out of the open door?

2. Explain the Parallelogram of Velocities.

   A train, carrying a passenger X, moves uniformly from A to B, while a second train, carrying a passenger Y, moves uniformly from B to C. If X can see Y, but cannot see the ground or landscape, in what manner will Y appear to move? How is your answer affected if X can see the sun and clouds?

3. Find the range of a projectile on a horizontal plane which passes below the point of projection.

   If the elevation is such that the range is a maximum for the available initial velocity, prove that the direction of motion will rotate through 90° during the flight.

4. The times of descent down smooth chords of a vertical circle, drawn to the lowest point, are all equal.

   If particles are projected along these chords from the lower ends with half the velocities which would just take them to the upper ends, will the times to rest be equal?

5. A point is moving along a curve. Compare its velocity as measured by the rate of advance (i.) along the arc, (ii.) along the tangent.

   Also shew that uniform velocity in a circle implies uniform acceleration towards the centre.

   Two particles, weighing 1 lb. and 2 lbs. respectively, are connected by means of a light string 3 feet in length, and rotate about each other on a smooth table, so that the string remains tight. If a point of the string remains at rest, shew, by considering the tension of the string, that it must be the centre of gravity of the masses, and find the tension of the string for 10 revolutions per second.

6. Find the moment of inertia of a uniform circular disc about a line through its centre perpendicular to its plane, and deduce its moment of inertia about a diameter.

7. A body has a moment of inertia I about a horizontal axle through its centre of gravity. The axle runs in smooth bearings, and a weight W, attached to a string wound round the axle, sets the body in motion. Find the angular velocity of the body when the weight has unwound a length l of the string, and has itself acquired velocity v.

8. Prove that a compound pendulum oscillates like a simple pendulum of length $h+k^2/h$, where h and k have certain meanings.

A pendulum swings about a point 30 inches distant from its centre of gravity, and makes a complete double oscillation in 3 seconds. What is the approximate radius of gyration about the centre of gravity?

THIRD YEAR EXAMINATION.

ZOOLOGY—(VERTEBRATA).

1. Give a general account of the development of the heart in the embryo of a Mammal.
2. Describe the structure of the skull and visceral arches of the Elasmobranchs in general.
3. Give an outline of a classification of the *Amphibia*.
4. Describe the structure of the skull in the *Ophidia*.
5. State briefly the chief structural features of the *Pterodactyla*.
6. Describe the structure of the appendicular skeleton of the Monotremes.
7. Give a brief outline of the chief modifications of the skeleton of the fore-limb in the *Ungulata vera*.

PALÆONTOLOGY AND GEOLOGY.

The same paper as that set in the Third Year of Arts.

DEPARTMENT OF ENGINEERING.

CIVIL AND MECHANICAL ENGINEERING.

FIRST YEAR EXAMINATION.

CHEMISTRY, as in the First Year of Medicine.

CHEMISTRY, PRACTICAL, six hours.

MATHEMATICS, as in the First Year of Science.

PHYSICS, as in the First Year of Medicine.

PHYSIOGRAPHY, as in the First Year of Arts.

SECOND YEAR EXAMINATION.

PHYSICS I.

1. Give an account of an experiment having for its object the measurement of the velocity of a bullet by means of the ballistic pendulum. Explain thoroughly the theory and mode of carrying out the experiment;

or,

Give the general theory of vibration of a system of one degree of freedom to vibrate, explaining particularly the conditions for simple harmonic vibration and the effect of damping on the period.

2. Explain how you would measure the compressibility of a liquid. How would you proceed in the case of a solid?
3. Distinguish between isothermal and adiabatic incompressibility. Prove that in the case of a gas the ratio of these constants is the same as the ratio of the specific heats under the condition of the constancy of pressure and volume respectively.
4. Define "a degree" of temperature, and explain how temperature may be accurately measured and the result stated in terms of the constant volume air thermometer.
5. Give an account (not to exceed three pages) of one of the classical researches in the subject of heat.
6. Prove that a reversible heat engine is an engine of maximum efficiency, and show that the entropy of the working substance at the completion of the cycle has its original value.

PHYSICS II.

An answer to the last question is obligatory.

1. Briefly criticise Hooke's Law "Ut tensio sic vis" as applied to metallic wires.
2. Give a condensed account of the phenomena of Electrolysis, and show that Faraday's law and the law of electric

activity (W=CE) lead to the conclusion that the E.M.F. of a battery must be independent of the current, in so far as we exclude Peltier effects.

3. Explain how an absolute measurement of Electric current may be made, and how a standard of current may be established in terms of an electrolytic specification.

4. Describe and explain some experiment having for its object the determination in absolute measure of the specific resistance of mercury.

5. Find an expression for the magnetic force due to a short magnet at any point in its axis produced, and at any point in a line perpendicular to the axis passing through the centre of the magnet. What use has been made of the relation between the forces at these points?

6. Explain with all practical detail how you would perform *one* of the following experiments, giving all necessary theoretical work—

   (i.) The comparison of potential differences.

   (ii.) The determination of the relation between the magnetic force and the magnetic induction in iron, measured magnetometrically *or* (iii.) measured ballistically.

MATHEMATICS.

The same papers as those set in the Second Year of Science.

GEOLOGY.

The same paper as that set in the Second Year of Arts.

THIRD YEAR EXAMINATION.

HISTORY OF ARCHITECTURE.

Six *questions only to be attempted.*

1. Describe the effect on style of the building materials used by the Egyptians and Assyrians.
2. Where are some of the earliest examples of arches to be found? Give sketches showing their construction.
3. Sketch and describe the plan of—
   (1) A typical Egyptian temple.
   (2) A typical Greek temple.
4. Illustrate and briefly explain the differences in the three orders as used by the Greeks as against those used by the Romans.
5. Describe the Colosseum, and illustrate by sketches how an arched system of construction is incorporated with a trabeated system of ornament.
6. Sketch and describe the evolution of domical construction in the Roman, Byzantine, and Renaissance periods.
7. What are the characteristics of a Rhenish (German) Romanesque cathedral? What peculiar feature was introduced into a few churches of the period, and how did it originate?
8. Where was Gothic Architecture first developed? What important structural changes did it bring about?
9. Sketch—
   (1) The plan of a French Gothic Cathedral.
   (2) The plan of an English Gothic Cathedral.
   Explain wherein they differ.
10. Briefly describe and illustrate a typical building in any one of the following styles:—Early Italian, French, English, or German Renaissance.

BUILDING CONSTRUCTION.

SIX *questions only to be attempted.*

1. Describe the materials used and the points to be considered—
   (*a*) In laying, testing, flushing and ventilating a system of drains to a terrace house.
   (*b*) The arrangements of waste and soil pipes from baths, W.C.'s, &c., and their connections with drains. Illustrate with sketches.
2. Sketch and describe—
   (*a*) The alternate courses in "English" and "Flemish" bonds in 14″ and 18″ brick walls.
   (*b*) The different kinds of arches used, and their construction.
3. Sketch and describe a hollow or cavity wall, showing the various kinds of bonds used, the position of damp course in relation to bottom of cavity and floor plate, and state what precautions should be taken to keep cavity clear. Point out the advantages and disadvantages in hollow wall construction.
4. Sketch and specify—
   (*a*) Types of stone rubble walling.
   (*b*) Stone ashlar walling.
   (*c*) Stone ashlar with brick backing.
5. Illustrate with sketches and explain the construction of stone staircases with steps supported at one end only.
6. Sketch and describe the timbers and joints used in single and double framed floors, together with the various joints used in flooring boards, their advantages and disadvantages, and the best method of laying.
7. Describe the mode of procedure and materials used—
   (*a*) In plastering on brick walls.
   (*b*) In plastering ceilings.
   (*c*) Running and enriching cornices.
   (*d*) Cementing brick walls.
8. What are the differences between close and open string wooden staircases? Give some particulars of at least two kinds, with sketch plans, details of construction, and the sizes and thicknesses of the various parts.

9. Illustrate and explain the construction of at least two kinds of fire-resisting flooring with wooden covering. State which you consider best, and give reasons.

10. Describe the methods of laying hipped roofs with—
    (*a*) Corrugated iron.
    (*b*) Slates.
    (*c*) French pattern tiles.

MATHEMATICS.

The same papers as those set in the Third Year of Arts, or Spherical Trigonometry and Astronomy.

DEPARTMENT OF MINING ENGINEERING.

SECOND YEAR EXAMINATION

CHEMISTRY—(Inorganic).

1. Describe the process for the preparation of chlorine on the large scale, and for the recovery of MnO_2. Give equations.
2. What chemical changes take place during the manufacture of H_2SO_4? What are the uses of the Gay-Lussac and Glover towers? How can the common impurities in the acid be detected and removed?
3. Describe two commercial processes for preparing sodium carbonate, and give an account of a successful method for the recovery of sulphur.
4. How does silicon occur in nature? What are the chief uses of silicon and of its compounds?
5. Describe a quantitative method for the analysis of an alloy containing Cu. Sn. Bi and Sb.
6. What do you know about the chemical composition of ordinary paints? What are the common adulterants in them?
7. What reactions take place during the separation of Co and Ni from their ores, both by wet and dry processes?
8. What volume of air is necessary for the complete combustion of 1 lb. of coal, having the following per cent. composition C=80, H=5, O=8, N=2, Ash=5, total=100, and what volumes of CO_2 and steam would be produced?

MATHEMATICS AND GEOLOGY.

As in the Department of Civil and Mechanical Engineering.

MINERALOGY.

A practical Examination of three hours.

THIRD YEAR EXAMINATION.

MINING I.

1. Give a clear account of the occurrence, and mode of formation of *bog* and *lake-iron ores*. Mention instances of known deposits.
2. Define and explain the following terms:—(*a*) *Underlie*, (*b*) *Slickenside*, (*c*) *Comby structure*, (*d*) *Stockwork*, (*e*) *Fahlband*, (*f*) *Creep*, (*g*) *Thrust*, (*h*) *Carbona*. Illustrate by sketches.
3. Give an account of the construction and use of a *horse-whim*, and state within what limits of depth you would consider its employment advisable under ordinary circumstances.
4. Discuss fully the difficulties which may possibly be met with in connection with the attempt to mine for coal under Port Jackson.
5. What is the composition of (*a*) *Blasting Powder*, (*b*) *Dynamite*, (*c*) *Rackarock*. Describe the manufacture of the first two, and state in what respect the disruptive action of one of them differs from that of the other.

MINING II.

1. Describe the construction and *modus operandi* of some form of rock drill worked by compressed air. Illustrate your remarks by sketches.
2. Describe, and illustrate the use of (*a*) *Stulls*, (*b*) *Struts*, (*c*) *Sprags*, (*d*) *Sets of Timber*, (*e*) *Chocks*, (*f*) *Lagging*.
3. Describe the system of working coal adopted in the Metropolitan Colliery, Helensburgh; give a sketch showing the relative positions of the shafts, main roads, headings, and working places.
4. Name and give the composition and characters of the gases met with in mines. What gas constitutes the principal

source of danger in a coal mine after an explosion of fire damp has taken place, and what are the symptoms by which its effects can be recognised ?

5. Describe the construction of the *Challenge ore feeder*, and illustrate your description by sketches. Explain clearly the advantages gained in battery work by the use of automatic feeders.

METALLURGY I.

1. Define the term "roasting."

   Mention the different kinds of "roasting," giving examples and reactions.

2. Describe, with sketches, some form of gas-producer, and give the approximate composition of the gas.

3. Enumerate all the oxidising agents you can, and illustrate their use in metallurgical operations.

4. What indications are afforded by thermal measurements as to the possibility of reducing ZnO and Al_2O_3 by carbon?

   State precisely what value is to be attached to these indications.

5. Give a short account of the open-hearth processes for the manufacture of steel. What are "Harveyised" steel plates ?

6. Classify the various processes of lead smelting, and give the chief reactions which occur.

METALLURGY II.

1. At Port Adelaide, galena concentrates, containing 15 to 20 per cent. of Zn are treated by a roast reduction process, 8 per cent. S. remaining after roasting.

   What precautions are adopted to secure clean slags and practically no matte ?

2. Discuss the advantages of various fore-hearths to copper blast furnaces, and note the tendency to chilling and corrosion of mattes of different grades.

3. Outline the principles of Pyritic Smelting.

   How far are these carried out in practice, and what are the characteristics of the furnaces employed?

4. What precautions are necessary in the preparation of the Sodium Sulphide precipitant for the Russell Process?

   How are the precipitated sulphides treated?

5. Describe, with sketches, a Cyanide plant for treating tailings from a gold mill, showing method of separating slimes.

   What methods have been tried for precipitating the gold?

6. Describe a "Wet Process" for the extraction of Nickel and Cobalt from a ferruginous matte or speiss.

*EXAMINATION PAPERS,

MARCH, 1898.

FACULTY OF ARTS.

FIRST YEAR EXAMINATION.

LATIN PROSE COMPOSITION AND UNSEEN TRANSLATION.

HONOURS.

1. Translate into English—

(*a*) Quid vero? tanta rerum consentiens, conspirans, continuata cognatio quem non coget ea, quae dicuntur a me, conprobare? possetne uno tempore florere, dein vicissim horrere terra? aut tot rebus ipsis se immutantibus solis accessus discessusque solstitiis brumisque cognosci, aut aestus maritimi fretorumque angustiae ortu aut obitu lunae commoveri aut una totius caeli conversione cursus astrorum dispares conservari? haec ita fieri omnibus inter se concinentibus mundi partibus profecto non possent, nisi ea uno divino et continuato spiritu continerentur. atque haec cum uberius disputantur et fusius, ut mihi est in animo facere, facilius effugiunt Academicorum calumniam; cum autem, ut Zeno solebat, brevius angustiusque concluduntur, tum apertiora sunt ad reprehendendum: nam ut profluens amnis aut vix aut nullo modo, conclusa autem aqua facile conrumpitur, sic orationis flumine reprehensoris *con*vitia diluuntur, angustia autem conclusae orationis non facile se ipsa tutatur.

*NOTE.—The time allowed for each paper is three hours, except where otherwise stated.

(*b*) Vidit ut hostiles in rectum exire catervas
Pompeius, nullasque moras permittere bello,
Sed Superis placuisse diem: stat corde gelato
Attonitus: tantoque duci sic arma timere
Omen erat. premit inde metus, totumque per agmen
Sublimi praevectus equo: quem flagitat, inquit
Vestra diem virtus, finis civilibus armis,
Quem quaesistis, adest. totas effundite vires;
Extremum ferri superest opus, unaque gentes
Hora trahit. quisquis patriam, carosque penates,
Qui sobolem, ac thalamos, desertaque pignora quaerit,
Ense petat: medio posuit Deus omnia campo.
Causa jubet melior Superos sperare secundos.
Ipsi tela regent per viscera Caesaris, ipsi
Romanas sancire volent hoc sanguine leges.
Si socero dare regna meo, mundumque pararent,
Praecipitare meam fatis potuere senectam.
Non iratorum populis urbique Deorum est
Pompeium servare ducem.

2. Translate into Latin—

Even among his contemporaries, the effect of the speeches, when read apart from the speaker, was very powerful. There were some who thought that their full excellence could only be thus appreciated; while to the after-world, who know them only by reading, they have been and still are the objects of an admiration reaching its highest pitch in the enthusiastic sentiment of the fastidious rhetor Dionysius. The action of Demosthenes—consummate as it doubtless was, and highly as he may himself have prized an accomplishment so laboriously earned—produced its effect only in conjunction with the matter of Demosthenes; his thoughts, sentiments, words, and above all, his sagacity in appreciating and advising on the actual situation. His political wisdom, and his lofty patriotic *idéal*, are in truth quite as remarkable as his oratory. By what training he attained either the one or the other of these qualities we are unfortunately not permitted to know. But we shall hardly err in supposing that his attentive meditation of Thucydides supplied him, not merely with force and majesty of expression, but also with that conception of Athens in her foretime which he is perpetually impressing on his countrymen.

LATIN AUTHORS.

HONOURS.

1. Translate extracts from Cicero de Oratore I.

2. Translate and comment on—
   (*a*) Equidem memoria teneo C. Carbonem, quem tu adulescentulus perculisti, ignarum legum, haesitantem in majorum institutis, rudem in jure civili.
   (*b*) Cum igitur vehementius inveheretur in causam principum consul Philippus Drusique tribunatus pro senatus auctoritate susceptus infringi iam debilitarique videretur.
   (*c*) Sive quem haec Aeliana studia delectant, plurima est in pontificum libris et in XII. tabulis antiquitatis effigies.
   (*d*) Tanquam in procinctu testamentum faceret sine libra atque tabulis, se populum Romanum tutorem instituere dixit illorum orbitati.

3. Translate extracts from Virgil's Æneid VII., VIII., IX., X.

4. Translate and comment on—
   (*a*) Thybris ea fluvium, quam longa est, nocte tumentem leniit.
   (*b*) Heu, terra ignota canibus date praeda Latinis
   alitibusque iaces, nec te tua funera mater
   produxi pressive oculos aut vulnera lavi.
   (*c*) Turnus adest medioque in crimine caedis et igni
   terrorem ingeminat.
   (*d*) Primus turmas invasit agrestes
   Aeneas, omen pugnae, stravitque Latinos
   occiso Therone.

5. Scan the following lines, with any comments you think called for—
   (*a*) Semihominis Caci facies quam dira tenebat.
   (*b*) Sustinet, ac natae Turnique canit hymenacos.
   (*c*) Stipitibus duris agitur sudibusve praeustis.
   (*d*) Pellis obit totum, praefulgens unguibus aureis.

ROMAN HISTORY.

HONOURS.

1. Give a brief account of the races that inhabited Italy at the beginning of the Roman republic.
2. "The reforms of Servius Tullius in their original intention were an extension of duties and burdens rather than of privileges."

   Comment on this statement.
3. What authorities had Livy and Dionysius to employ in narrating the early history of Rome?
4. "The tribunate, which after the equalisation of the orders, seemed a useless anachronism, was transformed into a regular instrument of government."

   Explain this.
5. Describe the influence of Greek culture upon the Italians in the third century B.C.
6. Describe and account for the great increase of the Senate's powers during the Punic Wars.
7. "Hardly had the old aristocracy of birth lost its privileges when a new nobility rose in its place."

   Explain this statement.
8. Describe the settlement of Greece after the battle of Cynoscephalæ in 197 B.C., and the modifications made in that settlement in 146 B.C.

GREEK COMPOSITION.—JUNIOR.

HONOURS.

Translate into Greek—

Moreover, we will concede, likewise, that what is blamed by many people as revolutionary and a leap in the dark, what is deprecated even by some of the most intelligent of Liberal statesmen as unnecessary and dangerous,—the proposal to give a vote to the agricultural labourer,—we will concede that this, too, is a thing not to be lamented and blamed, but natural and salutary. Not that there is either any natural right in every man to the possession of

a vote, or any gift of wisdom and virtue conferred by such possession. But if experience has established any one thing in the world, it has established this: that it is well for any great class and description of men in society to be able to say for itself what it wants, and not to have other classes, the so-called educated and intelligent classes, acting for it as its proctors, and supposed to understand its wants and provide for them. They do not really understand its wants; they do not really provide for them. A class of men may often itself not either fully understand its own wants, or adequately express them; but it has a nearer interest and a more sure diligence in the matter than any of its proctors, and therefore a better chance of success. Let the agricultural labourer become articulate, let him speak for himself.

GREEK TRANSLATION AT SIGHT.

HONOURS.

Translate—

1. Τὸν δ' ἄρ' ὑπόδρα ἰδὼν προσέφη πολύμητις Ὀδυσσεύς
"ξεῖν', οὐ καλὸν ἔειπες· ἀτασθάλῳ ἀνδρὶ ἔοικας.
οὕτως οὐ πάντεσσι θεοὶ χαρίεντα διδοῦσιν
ἀνδράσιν, οὔτε φυὴν οὔτ' ἄρ φρένας οὔτ' ἀγορητύν.
ἄλλος μὲν γάρ τ' εἶδος ἀκιδνότερος πέλει ἀνὴρ,
ἀλλὰ θεὸς μορφὴν ἔπεσι στέφει, οἱ δέ τ' ἐς αὐτὸν
τερπόμενοι λεύσσουσιν· ὁ δ' ἀσφαλέως ἀγορεύει
αἰδοῖ μειλιχίῃ, μετὰ δὲ πρέπει ἀγρομένοισιν,
ἐρχόμενον δ' ἀνὰ ἄστυ θεὸν ὣς εἰσορόωσιν.
ἄλλος δ' αὖ εἶδος μὲν ἀλίγκιος ἀθανάτοισιν,
ἀλλ' οὔ οἱ χάρις ἀμφιπεριστέφεται ἐπέεσσιν,
ὡς καὶ σοὶ εἶδος μὲν ἀριπρεπὲς, οὐδέ κεν ἄλλως
οὐδὲ θεὸς τεύξειε, νόον δ' ἀποφώλιος ἐσσι."

2. μίμνουσι δ' ἔνθα πεδίον Ἀσωπὸς ῥοαῖς
ἄρδει, φίλον πίασμα Βοιωτῶν χθονί·
οὗ σφιν κακῶν ὕψιστ' ἐπαμμένει παθεῖν,
ὕβρεως ἄποινα κἀθέων φρονημάτων·
οἳ γῆν μολόντες Ἑλλάδ' οὐ θεῶν βρέτη
ᾐδοῦντο συλᾶν οὐδὲ πιμπράναι νεώς.
βωμοὶ δ' ἄιστοι, δαιμόνων θ' ἱδρύματα

πρόρριζα φύρδην ἐξανέστραπται βάθρων.
τοιγὰρ κακῶς δράσαντες οὐκ ἐλάσσονα
πάσχουσι, τὰ δὲ μέλλουσι, κοὐδέπω κακῶν
κρηπὶς ὕπεστιν, ἀλλ' ἔτ' ἐκπιδύεται.
τόσος γὰρ ἔσται πέλανος αἱματοσφαγὴς
πρὸς γῇ Πλαταιῶν Δωρίδος λόγχης ὕπο·
θῖνες νεκρῶν δὲ καὶ τριτοσπόρῳ γονῇ
ἄφωνα σημανοῦσιν ὄμμασιν βροτῶν
ὡς οὐχ ὑπέρφευ θνητὸν ὄντα χρὴ φρονεῖν.
ὕβρις γὰρ ἐξανθοῦσ' ἐκάρπωσεν στάχυν
ἄτης, ὅθεν πάγκλαυτον ἐξαμᾷ θέρος.

3. Ταῦτα μὲν Αἰγυπτίων οἱ ἱρέες ἔλεγον· ἐγὼ δὲ τῷ λόγῳ τῷ περὶ Ἑλένης λεχθέντι. καὶ αὐτὸς προστίθεμαι, τάδε ἐπιλεγόμενος, εἰ ἦν Ἑλένη ἐν Ἰλίῳ, ἀποδοθῆναι ἂν αὐτὴν τοῖσι Ἕλλησι ἤτοι ἑκόντος γε ἢ ἀέκοντος Ἀλεξάνδρου. οὐ γὰρ δὴ οὕτω γε φρενοβλαβὴς ἦν ὁ Πρίαμος οὐδὲ οἱ ἄλλοι οἱ προσήκοντες αὐτῷ, ὥστε τοῖσι σφετέροισι σώμασι καὶ τοῖσι τέκνοισι καὶ τῇ πόλι κινδυνεύειν ἐβούλοντο, ὅκως Ἀλέξανδρος Ἑλένῃ συνοικέῃ. εἰ δέ τοι καὶ ἐν τοῖσι πρώτοισι χρόνοισι ταῦτα ἐγίνωσκον, ἐπεὶ πολλοὶ μὲν τῶν ἄλλων Τρώων, ὁκότε συμμίσγοιεν τοῖσι Ἕλλησι, ἀπώλλυντο, αὐτοῦ δὲ Πριάμου οὐκ ἔστι ὅτε οὐ δύο ἢ τρεῖς ἢ καὶ ἔτι πλέους τῶν παίδων μάχης γινομένης ἀπέθνησκον, εἰ χρή τι τοῖσι ἐποποιοῖσι χρεώμενον λέγειν, τούτων δὲ τοιούτων συμβαινόντων ἐγὼ μὲν ἔλπομαι, εἰ καὶ αὐτὸς Πρίαμος συνοίκεε Ἑλένῃ, ἀποδοῦναι ἂν αὐτὴν τοῖσι Ἀχαιοῖσι, μέλλοντά γε δὴ τῶν παρεόντων κακῶν ἀπαλλαγήσεσθαι. ἀλλ' οὐ γὰρ εἶχον Ἑλένην ἀποδοῦναι.

4. πῶς γὰρ οὐκ αἰσχρόν, ὦ ἄνδρες Ἀθηναῖοι, δημοσίᾳ μὲν ἅπαντας ὑμᾶς καὶ ὅλον τὸν δῆμον πᾶσι τοῖς πεπραγμένοις ἐκ τῆς εἰρήνης ἐπιτιμᾶν, καὶ μήτε τῶν ἐν Ἀμφικτύοσι κοινωνεῖν ἐθέλειν δυσκόλως τ' ἔχειν καὶ ὑπόπτως πρὸς τὸν Φίλιππον, ὡς ἀσεβῶν καὶ δεινῶν ὄντων τῶν πεπραγμένων καὶ οὔτε δικαίων οὔθ' ὑμῖν συμφερόντων, εἰς δὲ τὸ δικαστήριον εἰσελθόντας τὰς ὑπὲρ τούτων εὐθύνας δικάσοντας, ὅρκον ὑπὲρ τῆς πόλεως ὀμωμοκότας, τὸν ἁπάντων τῶν κακῶν αἴτιον, καὶ ὃν εἰλήφατ' ἐπ' αὐτοφώρῳ τοιαῦτα πεποιηκότα, τοῦτον ἀφεῖναι; καὶ τίς οὐ δικαίως ὑμῖν ἐγκαλέσει τῶν ἄλλων πολιτῶν, μᾶλλον δ' ἁπάντων τῶν Ἑλλήνων, ὁρῶν Φιλίππῳ μὲν ὑμᾶς ὀργιζομένους, ὃς ἐκ πολέμου ποιούμενος εἰρήνην παρὰ τῶν πωλούντων τὰς πράξεις ἐωνεῖτο, πρᾶγμα πολλὴν συγγνώμην ἔχον διαπραττόμενος, τουτονὶ δ' ἀφιέντας, ὃς τὰ ὑμέτερα οὕτως αἰσχρῶς ἀπέδοτο, τῶν νόμων τὰ ἔσχατα τατ-τόντων ἐπιτίμια, ἐάν τις ταῦτα ποιῇ;

FRENCH PROSE COMPOSITION AND UNSEEN TRANSLATION.

JUNIOR.

HONOURS.

1. Translate into French—

We resumed our steamboat last Wednesday morning, and came on slowly up the Rhine, the banks of which are more uniformly ugly and flat as far as Cologne than any other country I ever saw of so great an extent. Really, until yesterday, we had seen nothing in the way of scenery that deserved going a mile to see. Cologne is the paradise of painted glass; the splendour of the windows in the churches would have greatly delighted you. The cathedral is unfinished, and if completed on the original plan would be the most stupendous and magnificent in the world. From Cologne we proceeded to Bonn, where the Rhine begins to be beautiful; and yesterday we took a luxurious climb to the Drachenfels, looked around at the mild vine-spread hillocks and "river-sundered champaign clothed with corn," ate cherries under the old castle-wall at the top of the crag, then descended to a village below, and were carried over in a boat to the place from which I am writing. And what is that? Ten years ago it was a convent; now it is a large and comfortable hotel, still retaining the form of the convent, the cloisters, and the cell-like rooms. The prospect from the windows and gardens is most beautiful, the mountains rising above the bank of the river, and the smaller hills glooming in the distance.

2. Translate into English—

Quand Gilliatt s'éveilla, il eut faim. La mer s'apaisait. Mais il restait assez d'agitation au large pour que le départ immédiat fût impossible. La journée d'ailleurs était trop avancée. Il profita de ce que la mer baissait pour rôder dans les rochers à la recherche des langoustes. Il y avait assez de découverte pour espérer une bonne chasse. Ce jour-là pourtant les poing-clos et les langoustes se dérobaient. La tempête avait refoulé ces solitaires dans leurs cachettes, et ils n'étaient pas encore rassurés. Gilliatt tenait à la main son couteau ouvert, et arrachait de temps en temps un coquillage sous le varech. Il

mangeait tout en marchant. Comme Gilliatt prenait le parti de se résigner aux oursins et aux châtaignes de mer, un clapotement se fit à ses pieds. Un gros crabe, effrayé de son approche, venait de sauter à l'eau. Le crabe ne s'enfonça point assez pour que Gilliatt le perdît de vue. Gilliatt se mit à courir après le crabe sur le soubassement de l'écueil. Le crabe fuyait. Subitement il n'y eut plus rien. Le crabe venait de se fourrer dans quelque crevasse sous le rocher. Gilliatt se cramponna du poing à des reliefs de roche et avança la tête pour voir sous les surplombs. Il y avait là, en effet, une anfractuosité. Le crabe avait dû s'y réfugier. C'était mieux qu'une crevasse. C'était une espèce de porche.

3. (i.) Mention the different dialects of the Langue d'oïl, and explain how the *français* came to supersede the other dialects.

(ii.) What phonetic changes took place in Vulgar Latin before the French period?

(iii.) Illustrate the importance of accentuation in the development of words from Latin to French.

(iv.) Trace the origin of the following sounds in French—*au*, *eu*, *ie* (in tonic syllables); *e-muet*, *ui* (in atonic syllables); *j*, z, *n-mouillée*. Illustrate by examples.

(v.) Give the history, in their different parts, of the *regular* verbs which terminate in *ir* in the Infinitive.

(vi.) Give an account of the adjective declension in Old French; and explain the formation of *grand'mère*; *rudemment*.

FRENCH AUTHORS—JUNIOR.

HONOURS.

1. and 2. Translate extracts from Fasnacht's Select Specimens of the Great French writers; Beaumarchais, Le Barbier de Seville.

3. (*a*) How does Beaumarchais defend the *Barber of Seville* against the attacks made on it?

(*b*) Give a short description of Montesquieu's *Esprit des Lois*.

GERMAN PROSE COMPOSITION AND UNSEEN TRANSLATION.

JUNIOR.

HONOURS.

1. Translate into German—

Time was when the mystery and wonder of handicrafts were freely acknowledged by the world, when imagination and fancy mingled with all things made by man; and in those days all artisans were artists, as we should now call them. But the thought of man became more intricate, more difficult to express; art grew a heavier thing to deal with, and its labour was more divided among great men, lesser men, and little men; till that art, which was once scarce more than a rest of body and soul, as the hand cast the shuttle or swung the hammer, became to some men so serious a labour, that their working lives have been one long tragedy of hope and fear, joy and trouble. This was the growth of art: like all growth, it was good and fruitful for a while; like all fruitful growth, it grew into decay; like all decay of what was once fruitful, it will grow into something new.

2. Translate into English—

Die Entwickelung unserer Kriegsflotte entspricht nicht den Aufgaben, welche Deutschland an seine Wehrkraft zur See zu stellen gezwungen ist. Sie genügt nicht, bei kriegerischen Verwickelungen die heimischen Häfen und Küsten gegen eine Blockade und weitergehende Unternehmungen des Feindes sicherzustellen. Sie hat auch nicht Schritt gehalten mit dem lebhaften Wachstum unserer überseeischen Interessen. Während der deutsche Handel an dem Güteraustausche der Welt in steigendem Maasse teilnimmt, reicht die Zahl unserer Kriegsschiffe nicht hin, unseren im Auslande thätigen Landsleuten das der Stellung Deutschlands entsprechende Maass von Schutz und hiermit den Rückhalt zu bieten, den nur die Entfaltung von Macht zu gewähren vermag. Wenngleich es nicht unsere Aufgabe sein kann, den Seemächten ersten Ranges gleichzukommen, so muss Deutschland sich doch in den Stand gesetzt sehen, auch durch seine Rüstung zur See sein Ansehen unter den Völkern der Erde zu behaupten. Hierzu ist eine Verstärkung der heimischen Schlachtflotte und eine Vermehrung der für den Auslandsdienst im Frieden bestimmten Schiffe erforderlich.

3. (*a*) Explain what is meant by Upper, Middle, and Low German. Mention some of the chief characteristics of each.

(*b*) In what sense may Luther be called the Creator of the Modern High German *Schriftsprache?*

(*c*) Explain the origin of (i.) double consonants as a sign of shortness of the preceding vowel; (ii.) as a sign of length.

(*d*) Compare the conjugation in M.H.G. and N.H.G. of the verbs *scheiden*, *schwören* and *frieren*, and show how the changes in each took place.

(*e*) Write notes on the italicised words in the following sentences—

(i.) Und Gott schuf den Menschen *ihm* zum Bilde.

(ii.) In ein Land, darinnen Milch und Honig *fleusst.*

(iii.) So dir geschenkt ein Röslein *was.*

(iv.) Es ist das Heil uns *kommen* her.

(v.) Kinds *Kind* werden deine Werke preisen.

(vi.) Es schenkte der Böhme *des perlenden Weins.*

GERMAN AUTHORS—JUNIOR.

1. and 2. Translate extracts from Goethe, Dichtung und Wahrheit; Buchheim, Deutsche Lyrik, Periods II-IV.

ALGEBRA.

HONOURS.

1. Solve algebraically the equation $x^5-1=0$, and verify your result in the case of one of the imaginary roots.
2. Solve the equations

(i.) $\sqrt{x^2+2x+5}+\sqrt{x^2-3x+7}=5x-2$

(ii.) $x(x^2+y^2)-y=y(y^2-x^2)-x=0.$

3. If $x+y+z=0$, shew that $4(x^7+y^7+z^7)=7xyz(x^2+y^2+z^2)^2$.
4. Given that the Binomial Theorem is true for a positive integral exponent, prove that (with certain limitations) it is true for any other exponent.

Shew that the sum of the infinite series

$$1+\frac{4}{12}+\frac{4.7}{12.18}+\frac{4.7.10}{12.18.24}+\ldots \text{ is } 6(\sqrt[3]{2}-1).$$

5. State and prove the exponential theorem.

Shew (by equating coefficients) that

$$\frac{1}{n!n!}=\frac{2}{(n-1)!(n+1)!}-\frac{2}{(n-2)!(n+2)!}+\ldots$$

6. Prove that the arithmetic mean of a series of positive quantities is greater than their geometric mean.

7. Sum the series

(i.) $1+3x+6x^2+10x^3+\text{to }\infty$

(ii.) $\frac{1}{1.2.5}+\frac{1}{2.3.6}+\frac{1}{3.4.7}+\text{to } n \text{ terms.}$

8. What is meant by a recurring series?

Investigate the generating fraction of the series

$$3+11x+31x^2+95x^3+\ldots,$$

and find the coefficient of x^n in the expansion.

9. In a continued fraction shew that every convergent is a nearer approximation to the value of the fraction than any of the preceding convergents.

If $u=\cfrac{v}{v^2+}\ \cfrac{v}{v^2+}\ \ldots$

then $v=\cfrac{u}{1}\ \cfrac{u}{1}\ \ldots$
$\quad\ \ \overline{u-}\ \ \overline{u-}$

10. From a box containing five sovereigns and five shillings, five coins are taken out, and without being examined are placed in a bag. From this bag a coin is drawn at random, and found to be a sovereign. Being replaced, a fresh draw also gives a sovereign. Shew that the chance there is only one sovereign in the bag is 1 in 70.

11. Shew that the value of a determinant is unaltered by adding to the constituents of the first column equimultiples of the corresponding constituents of another column.

Simplify $\begin{vmatrix} (b+c)^2 & a^2 & a^2 \\ b^2 & (c+a)^2 & b^2 \\ c^2 & c^2 & (a+b)^2 \end{vmatrix}$

GEOMETRY AND TRIGONOMETRY.

HONOURS.

1. If a solid angle is contained by three plane angles, then any two of these are together greater than the third.
2. Express the length of a median of a triangle in terms of the sides. The medians of ABC are equal to the sides of DEF, and the medians of DEF to the sides of GHK. Prove that GHK is similar to ABC.
3. Prove the fundamental property of the nine-points-circle of a triangle. Shew that this circle and the circumcircle have the orthocentre as the centre of direct similitude, and find the centre of reversed similitude.
4. Prove that a straight line inverts into a circle passing through the centre of inversion.

   Three circles have one point of intersection common, and their other points of intersection are collinear. Prove that their centres lie on a circle which passes through the common point.
5. ABCD are four points on a circle which are joined by six straight lines. If the three lines at A and the tangent form a harmonic pencil, prove that two sides of the quadrilateral ABCD are proportional to the other two sides, and that the corresponding pencils at B, C and D are also harmonic.
6. If the interior common tangents to two circles intersect at an angle I, and the exterior common tangents intersect at an angle E, prove that
   $$\tan\tfrac{1}{4}(\mathrm{I}+\mathrm{E}):\tan\tfrac{1}{4}(\mathrm{I}-\mathrm{E})=r:r',$$
   where r,r' are the radii.
7. Express the area of a triangle in terms of the sides, and find the area when the sides are $x+y$, $\sqrt{x^2+z^2}$, $\sqrt{y^2+z^2}$.
8. The medians of ABC from A and B intersect at an angle θ. Prove that $\cot\theta=(a^2+b^2-5c^2)/12\Delta$, where Δ is the area of the triangle.
9. ABCD is a horizontal rectangle. The angular elevation of a point P above the plane of the rectangle is α at A, β at B, and γ at C. Find the elevation at D.
10. Eliminate x between
    $$\left.\begin{aligned}\sin 2x\cot x+\cos 2x\tan x&=a,\\ \cos 2x\cot x-\sin 2x\tan x&=b\end{aligned}\right\}$$

DIFFERENTIAL CALCULUS.

HONOURS.

See the paper set for Second Year Honours.

CONIC SECTIONS.

HONOURS.

1. Prove that in a parabola $QV^2=4SP.PV$.

   OP is a fixed tangent to a parabola; OQ is any other tangent; K is the middle point of OQ. Shew that the locus of K is a parabola.

2. The circumscribed circle of the triangle formed by any three tangents to a parabola passes through the focus.

3. The tangent at any point of a central conic makes equal angles with the focal distances at the point.

   If SY, S'Y' be perpendiculars on the tangent at any point of a central conic, shew that XY, X'Y' will intersect on the conjugate axis.

4. If the tangent at Q to a central conic meets the diameter P'CP' at T and QV be the ordinate from Q to P'CP, then $CV.CT=CP^2$.

   If the tangents at P and Q meet CQ, CP in q and p respectively, prove that the triangles CQp and CqP are equal.

5. Define an asymptote, and find the position of the asymptotes of a hyperbola.

   A straight line is drawn from a focus of a hyperbola, parallel to an asymptote, to meet the corresponding directrix. Shew that it is bisected by the hyperbola.

6. Find the area of the triangle formed by the straight lines

   $$x=a,\ y=b \text{ and } \frac{x}{b}+\frac{y}{a}=1.$$

7. Find the equation to either of the straight lines, which pass through the intersection of two given straight lines, and bisect the angle between them.

   Obtain the equation to a straight line which makes equal angles with the straight lines $4x+3y=1$ and $5x-12y=17$, and which passes through the point $(3,-2)$.

8. Obtain the equation to the tangent at any point of the circle $x^2+y^2+2gx+2fy+c=0$.

Find the equation to a circle touching $x=a$, $3x-4y=0$, and which passes through the point $\left(-\frac{a}{2}, \frac{3a}{2}\right)$

9. Determine the equation to a parabola referred to its axis and the tangent at its vertex as axes.

A chord of a parabola subtends a right angle at the vertex. Prove that the product of the ordinates at its extremities is equal to the square of the latus rectum.

10. Investigate the locus of the middle points of a system of parallel chords of an ellipse, and shew that, if the coordinates of an extremity of a diameter are $x'y'$, those of its conjugate are $\pm\frac{bx'}{a}, \mp\frac{ay'}{b}$.

Prove that the locus of the middle point of a chord joining the extremities of conjugate diameters is the ellipse given by $\frac{x^2}{a^2}+\frac{y^2}{b^2}=\frac{1}{2}$.

SECOND YEAR EXAMINATION.

LATIN PROSE COMPOSITION.

HONOURS.

The same paper as that set in the Third Year Examination.

LATIN AUTHORS.

HONOURS.

1. Translate, with brief notes, extracts from Cicero's Letters, Watson's Selection, Parts I. and II.

2. Translate and comment on—

   (*a*) Quid ergo? exercitum retinentis, cum legis dies transierit rationem haberi placet? mihi vero ne absentis quidem; sed, cum id datum est, illud una datum est.

   (*b*) Quod a me ita praecautum atque ita provisum est, non ut ego de optima illa mea ratione decederem, sed ut ille esset melior, et aliquid de populari levitate deponeret.

   (*c*) Quin etiam Marcellino et Philippo consulibus nonis Aprilibus mihi est senatus adsensus, ut de agro Campano frequenti senatu Idibus Maiis referretur.

   (*d*) Quoniam videtur in suffragiis multum posse Gallia, cum Romae a judiciis forum refrixerit, excurremus mense Septembri legati ad Pisonem.

3. and 4. Translate, with brief notes, extracts from Plautus, Captivi and Trinummus.

5. Scan the following lines, with such comments as you think called for:—

   (*a*) Eugepae: edictiones aedilicias hic quidem habet.

   (*b*) Tanta incepta res est: haud somniculose hoc
   Agundumst. TY. Ero ut me voles esse. PH. Spero.

   (*c*) Decet innocentem servom atque innoxium
   Confidentem esse suom apud erum potissumum.

(*d*) Dedistine hoc facto ei gladium qui se occideret?

(*e*) In occulto jacebis, quom te maxume clarum voles.

(*f*) Non satis id est mali, ni ampliust etiam,
Quod bibit, quod comest, quod facit sumpti.

LATIN TRANSLATION AT SIGHT.

HONOURS.

The same paper as that set in the Third Year Examination.

ROMAN HISTORY.

HONOURS.

ONE HOUR AND A HALF.

1. Discuss Mommsen's view that C. Gracchus wished to abolish the republic and introduce in its stead a *Tyrannis*.
2. "The enfranchisement of the Italians was itself a revolution which affected the very foundation of the republic."—*Pelham*.

   Comment on this statement.
3. Discuss the legality of the execution of the Catilinarian conspirators.
4. "It was the fortune of Cn. Pompeius, a favourite officer of Sulla, first of all to violate in his own person the fundamental principles of the constitution re-established by his old chief, and then to overturn it."—*Pelham*.

   Comment on this.
5. Describe the condition of the province of Cilicia when Cicero arrived there as Governor, and his measures for its amelioration.

GREEK COMPOSITION.—SENIOR.

HONOURS.

Translate into Greek—

Surely I ought to be talking platitudes when I say that it is not English to tell a man a lie, or to suggest a lie by your silence or your actions, because you are afraid that

he is not prepared for the truth, because you don't quite know what he will do when he knows it, because perhaps after all this lie is a better thing for him than the truth would be, this same man being all the time an honest fellow-citizen whom you have every reason to trust. Surely I have heard that this craven crookedness is the object of our national detestation. And yet it is constantly whispered that it would be dangerous to divulge certain truths to the masses. "I know the whole thing is untrue: but then it is so useful for the people; you don't know what harm you might do by shaking their faith in it." Crooked ways are none the less crooked because they are meant to deceive great masses of people instead of individuals. If a thing is true, let us all believe it, rich and poor, men, women, and children. If a thing is untrue, let us all disbelieve it, rich and poor, men, women and children. Truth is a thing to be shouted from the housetops, not to be whispered after dinner when the ladies are gone away. Life must first of all be made straight and true; it may get easier through the help this brings to the commonwealth. I cannot believe that any falsehood whatever is necessary to morality. It cannot be true of my race and yours that to keep ourselves from becoming scoundrels we must needs believe a lie. The sense of right grew up among healthy men, and was fixed by the practice of comradeship. It has never had help from phantoms and falsehoods, and it never can want any.

GREEK TRANSLATION AT SIGHT—SENIOR.

HONOURS.

Translate—

1. Μοῦσα, τίς πρῶτος λόγων ἆρχεν δικαίων ;
Πλεισθενίδας Μενέλαος γάρυϊ θελξιεπεῖ
φθέγξατ' εὐπέπλοισι κοινώσας χάρισσιν·
ὦ Τρῶες ἀρηΐφιλοι,
Ζεὺς ὑψιμέδων, ὃς ἅπαντα δέρκεται,
οὐκ αἴτιος θνατοῖς μεγάλων ἀχέων·
ἀλλ' ἐν μέσῳ κεῖται κιχεῖν
πᾶσιν ἀνθρώποις Δίκαν ἰθεῖαν, ἀγνᾶς
Εὐνομίας ἀκόλουθον καὶ πιντᾶς Θέμιτος.
ὀλβίων παῖδές νιν αἱρεῦνται σύνοικον.

ἁ δ' αἰόλοις ψεύδεσσι καὶ ἀφροσύναις
ἐξαισίοις θάλλουσ' ἀθαμβὴς
ὕβρις, ἁ πλοῦτον δύναμίν τε θοῶς
ἀλλότριον ὤπασεν, αὖτις
δ' ἐς βαθὺν πέμπει φθόρον.

Explain the character of the metre of this passage, and mark the metre of the last three lines.

2. οὐκ ἔστ' ἀκριβὲς οὐδὲν εἰς εὐανδρίαν·
ἔχουσι γὰρ ταραγμὸν αἱ φύσεις βροτῶν.
ἤδη γὰρ εἶδον ἄνδρα γενναίου πατρὸς
τὸ μηδὲν ὄντα, χρηστὰ δ' ἐκ κακῶν τέκνα,
λιμόν τ' ἐν ἀνδρὸς πλουσίου φρονήματι,
γνώμην δὲ μεγάλην ἐν πένητι σώματι.
πῶς οὖν τις αὐτὰ διαλαβὼν ὀρθῶς κρινεῖ;
πλούτῳ; πονηρῷ γ' ἆρα χρήσεται κριτῇ.
ἢ τοῖς ἔχουσι μηδέν; ἀλλ' ἔχει νόσον
πενία, διδάσκει δ' ἄνδρα τῇ χρείᾳ κακόν.
ἀλλ' εἰς ὅπλ' ἐλθών; τίς δὲ πρὸς λόγχην βλέπων
μάρτυς γένοιτ' ἂν ὅστις ἐστὶν ἀγαθός;
κράτιστον εἰκῇ ταῦτ' ἐᾶν ἀφειμένα.
οὗτος γὰρ ἀνὴρ οὐτ' ἐν Ἀργείοις μέγας
οὔτ' αὖ δοκήσει δωμάτων ὠγκωμένος,
ἐν τοῖς δὲ πολλοῖς ὢν, ἄριστος εὑρέθη.
οὐ μὴ ἀφρονήσεθ' οἱ κενῶν δοξασμάτων
πλήρεις πλανᾶσθε, τῇ δ' ὁμιλίᾳ βροτοὺς
κρινεῖτε καὶ τοῖς ἤθεσιν τοὺς εὐγενεῖς;
οἱ γὰρ τοιοίδε τὰς πόλεις οἰκοῦσιν εὖ
καὶ δώμαθ', αἱ δὲ σάρκες αἱ κεναὶ φρενῶν
ἀγάλματ' ἀγορᾶς εἰσιν.

3. ΣΩ. Οὐκοῦν ὁ τέχνην οἰόμενος ἐν γράμμασι καταλιπεῖν καὶ αὖ ὁ παραδεχόμενος, ὡς τι σαφὲς καὶ βέβαιον ἐκ γραμμάτων ἐσόμενον, πολλῆς ἂν εὐηθείας γέμοι καὶ τῷ ὄντι τὴν Ἄμμωνος μαντείαν ἀγνοοίη, πλέον τι οἰόμενος εἶναι λόγους γεγραμμένους τοῦ τὸν εἰδότα ὑπομνῆσαι περὶ ὧν ἂν ᾖ τὰ γεγραμμένα.

ΦΑΙ. Ὀρθότατα.

ΣΩ. Δεινὸν γάρ που, ὦ Φαῖδρε, τοῦτ' ἔχει γραφή, καὶ ὡς ἀληθῶς ὅμοιον ζωγραφίᾳ. καὶ γὰρ τὰ ἐκείνης ἔκγονα ἕστηκε μὲν ὡς ζῶντα, ἐὰν δ' ἀνέρῃ τι, σεμνῶς πάνυ σιγᾷ. ταὐτὸν δὲ καὶ οἱ λόγοι· δόξαις μὲν ἂν ὡς τι φρονοῦντας αὐτοὺς λέγειν, ἐὰν δέ τι ἔρῃ τῶν λεγομένων βουλόμενος μαθεῖν, ἕν τι σημαίνει μόνον ταὐτὸν ἀεί. ὅταν δὲ ἅπαξ γραφῇ, κυλινδεῖται μὲν πανταχοῦ πᾶς

λόγος ὁμοίως παρὰ τοῖς ἐπαίουσιν, ὡς δ' αὖτὼς παρ' οἷς οὐδὲν προσήκει, καὶ οὐκ ἐπίσταται λέγειν οἷς δεῖ τε καὶ μή. πλημμελούμενος δὲ καὶ οὐκ ἐν δίκῃ λοιδορηθεὶς τοῦ πατρὸς ἀεὶ δεῖται βοηθοῦ· αὐτὸς γὰρ οὔτ' ἀμύνασθαι οὔτε βοηθῆσαι δυνατὸς αὑτῷ.

ΦΑΙ. Καὶ ταῦτά σοι ὀρθότατα εἴρηται.

ΣΩ. Τί δ'; ἄλλον ὁρῶμεν λόγον τούτου ἀδελφὸν γνήσιον, τῷ τρόπῳ τε γίγνεται, καὶ ὅσῳ ἀμείνων καὶ δυνατώτερος τούτου φύεται;

ΦΑΙ. Τίνα τοῦτον, καὶ πῶς λέγεις γιγνόμενον;

ΣΩ. Ὃς μετ' ἐπιστήμης γράφεται ἐν τῇ τοῦ μανθάνοντος ψυχῇ, δυνατὸς μὲν ἀμῦναι ἑαυτῷ, ἐπιστήμων δὲ λέγειν τε καὶ σιγᾶν πρὸς οὓς δεῖ.

ΦΑΙ. Τὸν τοῦ εἰδότος λόγον λέγεις ζῶντα καὶ ἔμψυχον, οὗ ὁ γεγραμμένος εἴδωλον ἄν τι λέγοιτο δικαίως.

4. Write in Greek as usually printed, and translate into English, the following copy of an inscription found on the Acropolis at Athens.

διειτρεφησειπεεπειδηανη
ρεστιαγαθοσοινιαδησοπαλ
αισκιαθιοσπεριτηνπολιντ
ηναθηναιωνκαιπροθυμοσπο
ιενοτιδυναταιαγαθονκαιε
υποιειτοναφικνομενοναθη
ναιωνεσκιαθονεπαινεσαιτ
εαυτωικαιαναγραψαιαυτον
προξενονκαιευεργετηναθη
ναιωνκαιτοσεκγονοσαυτοκ
αιοπωσανμηαδικηταιεπιμε
λεσθαιτηντεβοληντηναειβ
ουλευουσανκαιτουσστρατηγ
οσκαιτοναρχοντατονενσκι
αθωιοσανηιεκαστοτετοδεψ
ηφισματοδεαναγραψαιτογγ
ραμματεατησβολησενστηλη
ιλιθινηικαικαταθεναιεμπ
ολεικαλεσαιδεαυτονκαιεπ
ιξενιαεστοπρυτανειονεσα
υριον.

ENGLISH I.

HONOURS.

1. Translate with notes on underlined words and some brief comment on the subject matter, extracts from Cook's First Book in Old English.

2. (*a*) Decline "hāt wæter," "se lengra dæg" and the demonstrative that.

   (*b*) Explain and illustrate the statement that "Old English strong verbs have four tense stems."

   (*c*) Examine the grammar of—

   (i.) Hwæt is ðes geonga mann?

   (ii.) Gif ðū mē lufodest, ðu hit besorgodest.

   (iii.) Đā cōmon hīe sōna and slogon ealle and cwealdon ðæt hīe gemētton.

   (iv.) Fram hēanesse ðære winterlican sunnan ūpgange.

3. Translate (at sight)—

   Hit gelamp gīo ðætte ān hearpere wæs on ðāere ðēode ðe Đrācia hātte; se hearpere wæs swīðe ungefræglice gōd, ðæs nama wæs Orfeus; hē hæfde ān swīðe āenlīc wīf sēo wæs hāten Eurudice. And hē meahte hearpian þæt se wudu wagode, and þā stānas hīe styredon for ðȳ swēge, and wildu dēor ðāer woldon tō iernan and standan swilce hīe tamu wāeron, swa stille, ðēah him menn oððe hundas wið ēoden, ðæt hīe hīe nā ne onscunedon. Đā sāedon hīe ðæt ðæs hearperes wīf sceolde ācwelan, and hire sāwle man sceolde lāedan tō helle. Đā ðāem hearpere ðā ðūhte ðæt hine nānes ðinges ne lyste on ðisse worulde, ðā ðōhte hē ðæt hē wolde gesēcean helle godu, and onginnan him ōleccan mid his hearpan, and biddan ðæt hīe him āgēafen eft his wīf.

4. Render into Old English—

   The Romans held dominion over Britain for four hundred and seventy years—says Bede—and then they ceased to rule in the island, and at last went away declaring they would never come or send thither again. When the Picts and Scots learnt this they became emboldened and seized upon all the North right up to the wall, on which the cowardly Britons remained in terror day and night, until they were driven from it and utterly routed.

ENGLISH II.

HONOURS.

1. Annotate carefully, indicating the context, passages from The Miracle Plays.

2. Note peculiarities of dialect and grammar in—

A. (*a*) I schall multiplye yowres botheres sede
As thyke as sterres be in the skye.

(*b*) Þei þat haven serued me
With me he shulen in hevene be.

(*c*) Bothe the nighte and the day, does dewly yhour deyver,
To all I sall wirke be yhe wysshing.

(*d*) To staunche thi thryste lete thi syde blede.

(*e*) *Luc. in inf.* Yhe ly, yhe ly!
Secund. diab. Thou lyes, and that sall thu by.

B. Render into modern English (at sight)—

Me may lere a sely fode,
Þat is euer toward gode,
Wiþ a lutel lore;
Yef me nul him forþer teche,
Þenne is herte wol areche
Forto lerne more.
"Sely chyld is sone ylered;"
Quoþ Hending.

3. Outline, and estimate the historical importance of, "The Harrowing of Hell," "The Castle of Perseverance," and the play of "S. Mary Magdalene."

4. Compare the Chester play treating of the Sacrifice of Abraham with the corresponding piece in the Brome M.S.

5. Explain, making very brief reference to context, passages from Chaucer.

6. Briefly discuss the Anelida and Arcite as "experimental work."

7. "This world is not so strong, it is no nay,"
"As it hath been in olde tymes yore."
Has the change of taste affected Chaucer's "Clerk's Tale?" Discuss his treatment of the story of Griseldis.

FRENCH PROSE COMPOSITION AND UNSEEN TRANSLATION.

SENIOR.

HONOURS.

1. Translate into French prose—

(*a*) A throng of bearded men, in sad-coloured garments and gray steeple-crowned hats, intermixed with women, some wearing hoods and others bare-headed, was assembled in front of a wooden edifice, the door of which was heavily timbered with oak, and studded with iron spikes. It was the jail, and this wooden prison-house was already marked with weather stains and other indications of age, which gave a yet darker aspect to its beetle-browed and gloomy front. Like all that pertains to crime, it seemed never to have known a youthful era. Between this ugly building and the wheel-worn street was a grass plot much overgrown with unsightly vegetation, which evidently found something congenial in the soil that had so early borne the black flower of civilised society, a prison. But, on one side of the portal, and rooted almost at the threshold, was a wild rose-bush, covered in this month of June with its delicate gems, which might be imagined to offer their fragrance and fragile beauty to the prisoner as he went in, and to the condemned criminal as he came forth to his doom, in token that the deep heart of Nature, could pity and be kind to him.

(*b*) He, above the rest
In shape and gesture proudly eminent
Stood like a tower; his form had yet not lost
All its original brightness; nor appeared
Less than archangel ruin'd and the excess
Of glory obscured; as when the sun, new risen,
Looks through the horizontal misty air,
Shorn of his beams; or from behind the moon,
In dim eclipse, disastrous twilight sheds
On half the nations, and with fear of change
Perplexes monarchs.

2. Translate (at sight)—

Une troupe de quinze à vingt nègres, hommes, femmes et enfants, se serrait devant l'escalier. Ce cercle de têtes crépues environnait un homme de soixante ans peut-être,

très grand, très rouge, mais robuste encore et svelte dans son costume de chasseur, avec ses guêtres montantes de cuir et son veston de velours brun à grosses côtes. Le colonel, car c'était bien lui, ne s'aperçut pas plus de mon approche que ces noirs qui le regardaient, avec une attention haletante, vaquer à une bien étrange besogne. Il était penché sur une grande boîte de bois blanc, fermée de lattes disjointes. Elle devait contenir un animal singulier et singulièrement irrité, à juger par le bruit qui s'en échappait: celui d'une râpe frottée furieusement contre une siubstance très dure. Le colonel tenait à la main droite un bâton à l'extrémité duquel il avait fixé un énorme tampon de ouate, et il promenait ce tampon à travers les interstices de la boîte, en l'imbibant de temps à autre avec le contenu d'une grande bouteille, remplie d'un liquide de la couleur de l'eau. Je reconnus presque aussitôt l'arome fade et sucré du chloroforme. Quelle était la bête que le colonel essayait d'endormir ainsi? .... Le colonel fourragea avec le bâton pour bien s'assurer de ce sommeil. Puis, empoignant une tenaille, il arracha une des planches du couvercle et renversa le tout. Je vis sortir une tête d'abord, immobile, une monstrueuse tête de serpent, large comme ma main, trian gulaire et plate, avec des glandes renflées. Elle pendait inerte, comme flottante, à l'extrémité d'un cou dont la peau de dessous tremblait, molle et blanche. Le corps de la bête se déroula, s'écoula tout entier, long de huit pieds peut-être, et plus gros qu'un bras. Une petite queue le terminait, composée d'une douzaine d'anneaux comme taillés en rond dans de la corne grise. L'aspect de ce serpent à sonnettes était si hi leux, si vraiment digne de ce surnom d'atrocc donné par le naturaliste à cette variété qu'il y eut parmi les nègres comme le remous d'un recul devant cette bêtel pourtant inoffensive à cette minute.

3. (i.) State and criticise the theories with regard to the origina, form of the old French epic poems. What conclusions are to be drawn from the Fragment of the Hague?

(ii.) Give an account of *Raoul de Cambrai*.

(iii.) (*a*) Explain the success of the British Romances in the 13th century. (*b*) Give an account of the works of Chrestien of Troyes, pointing out his merits and defects.

(iv.) Contrast the Celtic with the Chivalric idea of love.

(v.) Is anything known of the origin of the *Roman de Renard?* What is the main idea underlying this animal epic?

(vi.) Say what you know of the life and works of Rutebeuf.

FRENCH AUTHORS.

HONOURS.

Translate and explain passages (from Toynbee, Specimens of Old French) writing special notes on the underlined words.

GERMAN PROSE COMPOSITION AND UNSEEN TRANSLATION.

SENIOR.

HONOURS.

1. Translate into German prose—

(*a*) I have said that the imitators of Shakespeare, fixing their attention on his wonderful gift of expression, have directed their imitation to this, neglecting his other excellrncies. These, the fundamental excelleucies of poetical art, Shakespeare no doubt possessed, possessed many of them in a splendid degree: but it may, perhaps, be doubted whether even he himself did not sometimes give scope to his faculty of expression to the prejudice of a higher poetical duty. For we must never forget that Shakespeare is the great poet he is from his skill in discerning and firmly conceiving an excellent action, from his power of intensely feeling a situation, of intimately associating himself with a character; not from his gift of expression, which rather leads him astray, degenerating sometimes into a fondness for curiosity of diction, into an irritability of fancy, which seems to make it impossible for him to say a thing plainly, even when the press of the action demands the very directest language, or its level character the very simplest. He has a far wider range than the ancients, and a far richer fertility of thought: but in the accurate limitation of the subject, the conscientious rejection of superfluities, the simple and rigorous development of it, he falls below them.

(*b*) High on a throne of royal state, which far
Outshone the wealth of Ormus or of Ind,
Or where the gorgeous East, with richest hand,
Showers on her kings barbaric pearl and gold,
Satan exalted sat, by merit raised
To that bad eminence : and from despair
Thus high uplifted beyond hope, aspires
Beyond thus high ; insatiate to pursue
Vain war with Heaven.

2. Translate into English—

(*a*) Ohne irgend eine hervorstechende Leidenschaft war Hamlet's Liebe zu Ophelien ein stilles Vorgefühl süßer Bedürfnisse ; sein Eifer zu ritterlichen Uebungen war nicht ganz original ; vielmehr mußte diese Lust durch das Lob, das man dem Dritten beilegte, geschärft und erhöht werden; rein fühlend kannte er die Redlichen, und wußte die Ruhe zu schätzen, die ein aufrichtiges Gemüth an dem offenen Busen eines Freundes genießt. Bis auf einen gewissen Grad hatte er in Künsten und Wissenschaften das Gute und Schöne erkennen und würdigen gelernt; das Abgeschmackte war ihm zuwider, und wenn in seiner zarten Seele der Haß aufkeimen konnte, so war es nur ebenso viel, als nöthig ist, um bewegliche und falsche Höflinge zu verachten und spöttisch mit ihnen zu spielen. Er war gelassen in seinem Wesen, in seinem Betragen einfach, weder im Müßiggange behaglich, noch allzubegierig nach Beschäftigung. Ein akademisches Hinschlendern schien er auch bei Hofe fortzusetzen.

(*b*) Es zieht mit seiner Schaar von hohen
Kameelen, achtzig an der Zahl,
Derweil des Mittags Flammen lohen,
Abdalla durch das öde Thal.

Und wo ein Kranz von Dattelpalmen
Umziehet eines Quelles Rand,
Streckt er sein Heer auf weichen Halmen
Und sich auf's schwellende Gewand.

Dem Sultan gleich, der in der festen
Umzinglung seiner Treuen ruht ;
Frucht, Schatten nimmt er von den Aesten
Und kühlen Schöpftrunk aus der Fluth.

Da tritt, die ernsten Mannesschritte
Gelenkt von einem Zederstab,
Ein Derwisch in des Kreises Mitte
Und grüßt zum Ruhenden herab :

Was zählest du mit müß'gen Blicken
Dein unbelastet lagernd Heer?
Mich sendet, um dich zu beglücken,
Dein günstiges Geschick hierher.

Steh' auf und zeuch mit deinen Schaaren
Auf meiner Spur vertrauensvoll!
Den Schatz will ich dir offenbaren,
Der achtzig Rücken lasten soll.

3. (*a*) Tell what you know of the Hildebrand's Lied, the Heliand, and Muspilli.

(*b*) Discuss the relationship of the Northern and the German versions of the Nibelungen story.

(*c*) Are there any indications of a mythical nucleus for the stories of Siegfried and of Gudrun?

(*d*) What is meant by *Law of Triplicity* in the Minnesong, and what were its results?

(*e*) Sketch the development of the mock-heroic poem of *Reinhart Fuchs*.

GERMAN AUTHORS—SENIOR.

HONOURS.

Translate and explain passages from Bachmann, Mittelhochdeutsches Lesebuch, discussing any peculiarity in construction, composition, derivation or meaning in the underlined words.

DIFFERENTIAL CALCULUS.

HONOURS.

First Year Candidates will be allowed ONE AND A HALF *hours only, and need only take the questions marked* *.

*1. Prove the formulæ

$$\text{(i.)}\quad \frac{du}{dx}=\frac{du}{dy}\frac{dy}{dx}.$$

$$\text{(ii.)}\quad \frac{du}{dt}=\frac{du}{dx}\frac{dx}{dt}+\frac{du}{dy}\frac{dy}{dt}.$$

where in (i.) u is a function of y, and y is a function of x; and in (ii.) u is a function of x and y, which are both functions of the independent variable t.

Differentiate $\sin^{-1}x\cos^{-1}x$ with respect to x, and also with respect to $\tan^{-1}\dfrac{1-x^2}{2x}$.

*2. State and prove Leibnitz Theorem for finding the n^{th} differential coefficient of a product of two functions.

Explain why it is justifiable to separate the symbol of operation $\dfrac{d}{dx}(\equiv D)$ from the symbol of quantity u on which it operates, and treat the former as a symbol of quantity, so that Leibnitz Theorem may be written $D^n(uv)=(D_1+D_2)^n uv$ where D_1 operates on u only and D_2 on v only.

*3. If $x+y=y(1+x)^t$, shew that

$$x(1+x)^2\frac{d^2y}{dx^2}+2t(x+y)(1+x)\frac{dy}{dx}+t(t-1)(x+y)y=0;$$

also shew that the value of $\dfrac{d^3y}{dx^3}$ when $x=0$ is equal to $\dfrac{1-t^2}{4t}$.

*4. Prove that $f(x+h)=f(x)+hf'(x)+\dfrac{h^2}{2!}f''(x)+\dfrac{h^3}{3!}f'''(x+\theta h)$ where $\theta<1$.

Prove that

$$\tan^{-1}(x+h)=\tan^{-1}x+h\sin\theta\sin\theta-\frac{h^2}{2}\sin 2\theta\sin^2\theta+\frac{h^3}{3}\sin 3\theta\sin^3\theta\ \ldots$$

where $\sin^2\theta=\dfrac{1}{1+x^2}$.

*5. Find the limit of $\dfrac{\log(\tan 2\theta)\cdot(1+\theta)^{\frac{1}{\theta}}}{\log(\tan\theta)}$ when θ is indefinitely diminished.

6. Shew that if $x=r\cos\theta$ and $y=r\sin\theta$, then

$$\frac{\delta^2V}{\delta x^2}+\frac{\delta^2V}{\delta y^2}=\frac{\delta^2V}{\delta r^2}+\frac{1}{r}\frac{\delta}{\delta r}+\frac{1}{r^2}\frac{\delta^2V}{\delta\theta^2}.$$

7. Prove the formula

$$\rho=\frac{\left\{1+\left(\frac{dy}{dx}\right)^2\right\}^{3/2}}{\frac{d^2y}{dx^2}}$$

Shew that in the curve $ax^3+by^2=c$, the radius of curvature varies as the cube of the normal.

*8. Trace the curves.

(i.) $(y-a)^2(x^2+y^2)=a^2y^2$.

(ii.) $y(x-y)^3=y(x+y)+2$.

(iii.) $r(1+\sin 2\theta)=c$.

9. Prove that if $\frac{d^2y}{dx^2}=0$ at any point of a curve $y=f(x)$, then the point is either a point of undulation or a point of contrary flexure; and that if $\frac{d^2y}{dx^2}$ changes sign in passing through the value 0, then the point is a point of contrary flexure.

Examine the following curves for singular points

(i.) $a^2y^2=x^2(a^2-x^2)$; (ii.) $x^3=(y-b)^2(y-c)$.

10. Eliminate the arbitrary functions ϕ and ψ from the equation

$$z=x\phi(z)+y\psi(z).$$

11. Find the envelope of the curve $\left(\frac{x}{a}\right)^{2m}+\left(\frac{y}{b}\right)^{2m}=1$ where the sum of the parameters a and b is constant.

INTEGRAL CALCULUS.

HONOURS.

ONE AND A HALF HOURS.

1. Integrate $\cos^3x$, $\frac{3x^2-12x+11}{(x-1)(x-2)(x-3)}$.

2. Prove the formula for integration by parts, and integrate $(a+bx+cx^2)\log ex$, axe^{bx}.

3. If $I_n=\int_0^{\frac{\pi}{2}}\sin^n x\,dx$, prove that $I_n=\frac{n-1}{n}\times I_{n-2}$.

Hence find the value of I_n, when n is a positive integer.

4. Shew that the curves $y=(x-1)(x-2)$, $y=(x-1)^2(x-2)^2$ cut each other in four points making three loops, and find the area of the middle loop.

5. Shew that $\frac{1}{2}r^2d\theta$ is the element of polar area, and find the area between the following curves in the first quadrant,
$r=a(1+\cos\theta)$, $r=a\cos\theta$.

6. The ellipse $\frac{x^2}{a^2}+\frac{y^2}{b^2}=1$ revolves about the axis of x. Find by integration the whole volume of the spheroid which it generates.

ANALYTICAL GEOMETRY.

HONOURS.

1. Find the equation to a line which lies midway between two given parallel straight lines.

   The angles of a parallelogram are of constant magnitude, and the sides pass through four fixed points. Prove that the intersection of the diagonals always lies on a fixed circle.

2. Prove that the sub-normal in a parabola is constant, and deduce the value of the radius of curvature at the vertex.

3. PQ, PR are chords of a parabola, equally inclined to the axis, and PV bisects the chord QR in V. Prove that PV is bisected by the axis of the parabola.

4. Find relations between the coordinates of ends of conjugate diameters of an ellipse.

   CP', CQ' are two conjugate radii which move continuously round an ellipse from the fixed initial positions CP, CQ. Tangents at P and Q meet in T. Prove that the straight lines PP', QQ' intersect on an ellipse which circumscribes the quadrilateral CPTQ, and is similar to the original ellipse, and similarly situated.

5. A variable hyperbola has the centre and one asymptote fixed, and the magnitude of the real axis constant. Prove that its foci describe straight lines.

6. Find the equation to the tangent for the curve given by the general equation of the second degree, and deduce that of the polar of a given point. Hence find the coordinates of the centre, considered as the pole of the line at infinity.

7. If each of two conics has a pair of conjugate diameters parallel to the oblique coordinate axes, shew that any conic through their intersection has a pair of conjugate diameters parallel to them.

Explain in what sense it may be said that any conic through the intersection of two circles is another circle.

8. Shew that a circle may be reciprocated into a conic of any eccentricity, and conversely.

Two parabolas have a common focus. From any point in their common tangent another tangent is drawn to each. Prove that the angle between these last two tangents is constant.

If two parallel straight lines move so that the perpendiculars drawn to them from the origin have a constant product, and if one of the lines envelopes a conic section, with a focus at the origin, shew that the other envelopes a similar conic section, having one focus common with the first conic.

9. Three functions $a_1x+b_1y+c_1$, etc., are transformed by rotating the rectangular axes. Prove that the following are invariant

$$a_1^2+b_1^2, \quad \begin{vmatrix} a_1 & b_1 \\ a_2 & b_2 \end{vmatrix}, \quad \begin{vmatrix} a_1 & b_1 & c_1 \\ a_2 & b_2 & c_2 \\ a_3 & b_3 & c_3 \end{vmatrix}.$$

10. Prove that, if corresponding sides of two triangles meet on a straight line, then non-corresponding sides meet on a conic.

Also if the sides of the triangles be curves all of degree n, and, if corresponding sides meet on a curve of degree n, then non-corresponding sides meet on a curve of degree $2n$.

STATICS AND DYNAMICS.

HONOURS.

1. Shew that necessary and sufficient conditions of equilibrium of a system of forces acting in one plane are that the sums of their moments about three points, not in the same straight line, should severally vanish.

Three forces act along the bisectors of the exterior angles of a triangle taken in order, and are in the ratio

$\sin A \sin\frac{B-C}{2} : \sin B \sin\frac{C-A}{2} : \sin C \sin\frac{A-B}{2}$. Prove that their resultant passes through the incentre and the circumcentre.

2. A smooth uniform beam of length a rests with one extremity against a vertical wall, and is supported by a peg at distance c from the wall. Shew that in the position of equilibrium the beam makes an angle with the wall whose sine $= \sqrt[3]{\frac{2c}{a}}$.

3. Find the conditions of equilibrium of a particle resting upon a rough inclined plane.

   A smooth uniform rod has one extremity attached to a point in a rough inclined plane of inclination α. The other extremity is supported by a rough particle of weight equal to that of the rod, which rests upon the plane. Shew that θ, the greatest inclination of the rod to the line of greatest slope, is given by the equation $5 \sin^2\alpha \sin^2\theta + 4(1+\mu^2)\sin^2\alpha = 4\mu^2$, where μ is the coefficient of friction.

4. OA, OB are two uniform rods hinged together at O. If OA is fixed, shew that, as OB is turned about the hinge, the centre of gravity of the two rods describes the surface of a sphere.

5. Two uniform smooth rods of length $2a$ and weight w, are freely jointed at one extremity and placed in a vertical plane, joint downwards. Their other extremities are connected by a string of length $4a \sin\alpha$. A circular disc of radius r and weight w rests between them. Find the tension of the string, and the action at the joint.

6. What is meant by the "dimensions" of Dynamical Units? What dimensions would you assign to the units of force, momentum, and kinetic energy, and why?

   If the unit of force be the weight of 1 lb., the unit of momentum the momentum of 1 cwt. moving with a velocity of 10 miles per hour, and the unit of kinetic energy that of 1 cwt. which has fallen from a height of 100 feet under gravity, find the units of length, time and mass.

7. Find the range of a projectile along an inclined plane passing through the point of projection.

Prove that the range when the body is projected at right angles to the plane is equal to the difference between the maximum range directly down the plane and the maximum range directly up the plane, the velocity of projection being given.

8. Enunciate the experimental laws assumed in discussing the collision of elastic particles, and prove by their means that, in the case of the direct collision of two elastic particles, the impulse between them is $1+e$ times as great as if they were inelastic.

Two equal small spheres are at rest, nearly in contact. A third equal sphere, moving in a direction perpendicular to the line joining the centres of the first two, strikes them simultaneously with velocity v, and remains at rest after the collision. Find the coefficient of restitution, and the velocity of the other spheres after collision.

9. Describe Atwood's Machine, and find the acceleration, when it is loaded with given weights.

A string is attached at its extremities to masses m_1, m_2. It also passes over two small fixed pulleys, and between them carries a movable pulley of mass M. The parts of the string between the pulleys being parallel, find the accelerations of the masses, and the tension of the string.

10. Define simple harmonic motion, and find the time of a simple harmonic oscillation in terms of the strength of the centre of force.

Assuming that a body within the earth is attracted to its centre by a force varying as the distance from the centre, find how long it would take a particle to fall down a tunnel direct through the centre of the earth from one side to the other.

LOGIC AND MENTAL PHILOSOPHY.

HONOURS II.

Not more than SEVEN *questions to be attempted.*

1. What main defects does Mill find in "inductions improperly so called," and how far is the method of agreement free from those defects?

2. According to Mill the basis of induction is itself an induction.

   Discuss this statemenet.

3. Explain the following terms:—Experimentum crucis; classification by type and series; the law of continuity; method of curves.

4. Summarise Bosanquet's account of the relation between Induction and Deduction, and compare it with that given by Mill.

5. Discuss the relation of logic to general theory of knowledge.

6. Analyse the state of mind called desire, and discuss its relation to feeling.

7. Give a psychological analysis of remorse in relation to the development of the moral life.

8. Give a psychological analysis of the elements involved in self-control.

9. Discuss the conception of freedom as self-expression, in relation to the general problem of volition.

HISTORY II.

HONOURS.

Candidates are recommended to answer not less than FIVE *questions and not more than* SEVEN.

1. "The coronation of Charles the Great is one of those very few events of which it may be said, that if they had not happened, the history of the world would have been different."

   Briefly discuss.

2. Show the importance of the papacy of Nicholas I.

3. Compare the characters and aims of Otto I. and Otto III.

4. Explain the significance of the controversies between Popes and Emperors concerning Investitures, and sketch the course of the struggle.

5. Discuss and illustrate the various motives that led to the Crusading movement.

6. Explain the nature of the conflict between Frederick I. and the Lombard Towns, and sketch its course.

7. What theories of the religious life are represented by the Cistercian Monks, the Knights Templars, and the Franciscan Friars respectively?
8. Explain the nature of the conflict between Frederick II. and the Papacy.
9. What do you understand by "the period of the Middle Ages?" On what principles would you determine the dates of its beginning and end?

THIRD YEAR EXAMINATION.

LATIN PROSE COMPOSITION.

HONOURS.

Translate into Latin—

And now, having done my duty to the bill, let me say a word to the author. I should leave him to his own noble sentiments if the unworthy and illiberal language with which he has been treated, beyond all example of parliamentary liberty, did not make a few words necessary—not so much in justice to him as to my own feelings. I must say, then, that it will be a distinction honourable to the age that the rescue of the greatest number of the human race that ever were so grievously oppressed from the greatest tyranny that was ever exercised has fallen to the lot of abilities and dispositions equal to the task; that it has fallen to one who has the enlargement to comprehend, the spirit to undertake, and the eloquence to support, so great a measure of hazardous benevolence. His spirit is not owing to his ignorance of the state of men and things; he well knows what snares are spread about his path, from personal animosity, from court intrigues, and possibly from popular delusion. But he has put to hazard his ease, his security, his interest, his power, even his darling popularity, for the benefit of a people whom he has never seen. This is the road that all heroes have trod before him. He is traduced and abused for his supposed motives. He will remember that obloquy is a necessary ingredient in the composition of all true glory; he will remember that it was not only in the Roman customs, but it is in the nature and constitution of things, that calumny and abuse are essential parts of triumph. These thoughts will support a mind which only exists for honour under the burthen of temporary reproach. He is doing, indeed, a great good, such as rarely falls to the lot and almost as rarely coincides with the desires of any man. Let him use his time; let him give the whole length of the reins to his benevolence.

LATIN AUTHORS.

HONOURS.

1. Translate, with short notes, extracts from Tacitus, Histories III., IV., V.
2. Translate and comment on—
   (*a*) Tum invectus est Musonius Rufus in Publium Celerem, a quo Baream Soranum falso testimonio circumventum arguebat.
   (*b*) Reipublicae haud dubie intererat Vitellium vinci, sed imputare perfidiam non possunt, qui Vitellium Vespasiano prodidere, cum a Galba descivissent.
   (*c*) "Ne Romanis quidem ingratum id bellum, cujus ambiguam fortunam Vespasiano imputaturos: victoriae rationem non reddi."
   (*d*) (Vitellius) adsistenti consuli exsolutum a latere pugionem, velut jus necis vitaeque civium, reddebat.
   (*e*) Pessimus quisque, spretis religionibus patriis, tributa et stipes illuc gerebant; unde auctae Iudaeorum res.
3. Translate, with short notes, extracts from Lucretius.
4. "Long passages (in the *de Rerum Natura*) seem rather to revert to the roughness of Ennius than to approach the smooth and varied cadences of Virgil."
   Comment on this.

LATIN TRANSLATION AT SIGHT.

HONOURS.

Translate—

(*a*) Age, ut a caelestibus rebus ad terrestris veniamus, quid est in his, in quo non naturae ratio intellegentis adpareat? principio eorum, quae gignuntur e terra, stirpes et stabilitatem dant iis, quae sustinent, et e terra sucum trahunt, quo alantur ea, quae radicibus continentur, obducunturque libro aut cortice trunci, quo sint a frigoribus et caloribus tutiores. iam vero vites sic claviculis adminicula tamquam manibns adprehendunt at que ita se erignnt ut animantes. quin etiam a caulibus si propter sati sint. ut a pestiferis et nocentibus refugere dicuntur nec eos ulla ex parte contingere. animantium vero quanta varietas est, quanta ad eam rem vis, ut in suo quaeque genere permaneat! quarum aliae coriis tectae sunt, aliae villis vestitae, aliae spinis

hirsutae; pluma alias, alias squama videmus obductas, alias esse cornibus armatas, alias habere effugia pinnarum. pastum autem animantibus large et copiose natura eum, qui cuique aptus erat, conparavit. enumerare possum, ad eum pastum capessendum conficiendumque quae sit in figuris animantium et quam sollers subtilisque discriptio partium quamque admirabilis fabrica membrorum.

(*b*) Interea magna vis accusatorum in eos irrupit qui pecunias faenore auctitabant adversum legem dictatoris Caesaris qua de modo credendi possidendique intra Italiam cavetur, omissam olim, quia privato usui bonum publicum postponitur. Sane vetus urbi faenebre malum et seditionum discordiarumque creberrima causa, eoque cohibebatur antiquis quoque et minus corruptis moribus. Nam primo duodecim tabulis sanctum ne quis unciario faenore amplius exerceret, cum antea ex libidine locupletium agitaretur; dein rogatione tribunicia ad semuncias redactum, postremo vetita versura. Multisque plebis scitis obviam itum fraudibus, quae totiens repressae miras per artes rursum oriebantur. Sed tum Gracchus praetor, cui ea quaestio evenerat, multitudine periclitantium subactus rettulit ad senatum, trepidique patres (neque enim quisquam tali culpa vacuus) veniam a principe petivere; et concedente annus in posterum sexque menses dati, quis secundum iussa legis rationes familiares quisque componerent.

(*c*) Inde petit tumulos, exesasque undique rupes,
Antaei quae regna vocat non vana vetustas.
Nominis antiqui cupientem noscere causas,
Cognita per multos docuit rudis incola patres.
Nondum post genitos Tellus effoeta gigantes,
Terribilem Libycis partum concepit in antris.
Nec tam justa fuit terrarum gloria Typhon,
Aut Tityos, Briareusque ferox: coeloque pepercit,
Quod non Phlegraeis Antaeum sustulit arvis.
Hoc quoque tam vastas cumulavit munere vires
Terra sui foetus, quod, cum tetigere parentem,
Jam defecta vigent renovato robore membra.
Haec illi spelunca domus: latuisse sub alta
Rupe ferunt, epulas raptos habuisse leoncs.
Ad somnos non terga ferae praebere cubile
Assuerunt, non silva torum: viresque resumit

In nuda tellure jacens. periere coloni
Arvorum Libyes: pereunt, quos appulit aequor,
Auxilioque diu virtus non usa cadendi,
Terrae spernit opes: invictus robore cunctis,
Quamvis staret, erat. tandem vulgata cruenti
Fama mali, terras monstris aequorque levantem,
Magnanimum Alciden Libycas excivit in oras.

(*d*) "Vivite contenti casulis et collibus istis,
o pueri!" Marsus dicebat et Hernicus olim
Vestinusque senex "panem quaeramus aratro,
qui satis est mensis. laudant hoc numina ruris,
quorum ope et auxilio gratae post munus aristae
contingunt homini veteris fastidia quercus.
nil vetitum fecisse volet, quem non pudet alto
per glaciem perone tegi, qui summovet euros
pellibus inversis; peregrina ignotaque nobis
ad scelus atque nefas, quaecumque est, purpura ducit."
haec illi veteres praecepta minoribus. at nunc
post finem autumni media de nocte supinum
clamosus iuvenem pater excitat: "accipe ceras,
scribe, puer, vigila, causas age, perlege rubras
maiorum leges aut vitem posce libello.
sed caput intactum buxo naresque pilosas
adnotet et grandes miretur Laelius alas.
dirue Maurorum attegias, castella Brigantum,
ut locupletem aquilam tibi sexagesimus annus
adferat."

LATIN GENERAL PAPER.

HONOURS.

1. Give a brief account of Spain under the earlier empire.
2. "A Graeco-Roman civilisation using the Greek language was the type which Rome aimed at establishing in the East." *Ramsay.*

   Comment on this statement.
3. Give an account of the dealings of the Roman Government with the Jews from the principate of Claudius to that of Hadrian.
4. "With the accession of Vespasian the history of the empire entered upon a new phase. Although the name and

traditions of Augustus were still appealed to, yet in almost every department of government there was a departure from the Augustan policy."—*Pelham.*

Comment on this.

5. "The notion, so commonly adopted, that the Stoics played a great part in constructing the fabric of Roman jurisprudence is much mistaken or exaggerated."—*Merivale.*

Discuss this.

6. "The legal basis of the position of the Christians—a basis which had remained exactly the same from the time of Nero to that of Antoninus Pius—may be expressed in the words: Christianity *per se*, i.e., the *nomen ipsum* is contrary to law."—*Bryant.*

Discuss this.

7. Describe the development of the style of Tacitus.

8. "It is in his grasp of speculative ideas and in his application of them to interpret the living world that the greatness of Lucretius as an imaginative thinker is most apparent." *Sellar.*

Comment on this.

GREEK COMPOSITION AND TRANSLATION AT SIGHT.

HONOURS.

The same papers as those set in the Second Year Examination.

GREEK AUTHORS—SENIOR.

HONOURS.

A. Translate, with short comments and explanations, extracts from Plato, Republic.

B. 1. Translate, with short notes on points needing explanation, extracts from Æschylus, Choephori and Eumenides.

2. Explain Æschylus' conception of the Erinyes as *beneficent* powers.

GREEK GENERAL QUESTIONS—SENIOR.

HONOURS.

(*Not more than* EIGHT *questions are to be answered.*)

1. "The Epic dialect, as it stands, is no language, but a mixture of linguistically incongruous forms, late, early, and primæval."

   Explain this statement, and show its bearing on the "Homeric Question."

2. Describe the ideal of human life presented in Pindar's poems.

3. Discuss Aeschylus' attitude towards the belief in a hereditary curse.

4. οὔτε τοὺς ἐπιεικεῖς ἄνδρας δεῖ μεταβάλλοντας φαίνεσθαι ἐξ εὐτυχίας εἰς δυστυχίαν, οὐ γὰρ φοβερὸν οὐδὲ ἐλεεινὸν τοῦτο ἀλλὰ μιαρόν ἐστιν.—(Aristotle, Poetics.)

   Is this a sound rule for tragic art? How far is it observed by the Attic Tragedians?

5. "What is not explicable in Thucydides is that he should have fallen into the absolute hodgepodge of ungrammatical and unnatural language which occurs on every third page."

   What truth is there in this description? So far as it is true, how is the fact to be explained?

6. "Leave realism to life: art should gladden."

   Discuss this.

7. Interpret the Allegory of the Cave in Plato's Republic.

8. μηδεὶς ἀγεωμέτρητος εἰσίτω.

   Explain Plato's view of the use of the mathematical sciences as a training for philosophy.

9. Compare the spirit and aim of Plato's communism with those of modern socialistic schemes.

10. "It is just the inconclusiveness of Plato's thought that has made it immortal. We get in him not a system but a spirit, and a spirit that no discoveries can supersede."

    Comment on this.

ENGLISH I.

HONOURS.

1. Translate extracts from Beowulf; and from Maclean's Old and Middle English Reader.
2. Explain the following expressions—
   (*a*) (Ic sceal) âna gehegan
   þing wið þyrse.
   (*b*) Nu ic eówer sceal
   frum-cyn witan aer ge fyr heonan
   leáse sceáweras on land Dena
   furður fêran.
   (*c*) Hwîlum cyninges þegn
   guma gilp-hläden gidda gemyndig
   se þe eal-fela eald-gesegena
   worn gemunde, word ôder fand
   sôðe gebunden: secg eft ongan
   sîð Beówulfes snyttrum styrian
   and on spêd wrecan spel gerâde,
   wordum wrixlan.
3. Discuss what is known of the following personages referred to in Beowulf: Finn, Sigemund, Þryðo.
4. Describe shortly how the poem of Beowulf grew up.
5. Translate into Anglo-Saxon—
   After the wars with the Danes learning had almost vanished in England. "When I began to reign," says Alfred, "I cannot remember one south of the Thames who could explain his service-book in English." To remedy this ignorance, Alfred desired that at least every free-born youth, who possessed the means, should "abide at his book till he can well understand English writing." "Formerly," he writes bitterly, "men came hither from foreign lands to seek for instruction, and now when we desire it we can only obtain it from abroad."
6. Translate (at sight)—
   Hit gelamp æt sumum sāele þæt þā dēofolgyldan þe þā gyt ungelēaffulle wáeron gecwāedon þæt hī woldon þone apostol tō heora hāeðenscipe genēadian. Þa cwæð se apostol tō ðām hāeðengyldum: 'Gāð ealle endemes tō Godes cyrcan, and clypiað ealle tō ēowerum godum, þæt

sēo cyrce āfealle ðurh heora mihte; ðonne būge ic tō ēowerum hāeðenscipe. Gif ðonne ēower godes miht þā hālgan cyrcan tōwurpan ne mæg, ic tōwurpe ēower tempel þurh ðæs Ælmihtigan Godes mihte, and ic tōcwȳse ēower dēofolgyld; and bið þonne rihtlic geðuht þæt gē geswȳcon ēoweres gedwyldes, and gelȳfon on ðone sōðan God, sē ðe āna is Ælmihtig.' Þā hāeðengyldan ðisum cwyde geðwāerlāehton, and Iōhannes mid geswāesum wordum þæt folc tihte þæt hí ufor ēodon fram þām dēofles temple; and mid beorhtre stemne ætforan him eallum clypode: 'On Godes naman āhrēose þis templ mid eallum þām dēofolgyldum þe him on eardiað, þæt þēos menigu tōcnāwe þæt ðis hāeðengyld dēofles biggeng is.' Hwæt ðā fāerlice āhrēas þæt tempel grundlunga mid eallum his ānlicnyssum tō dūste āwende.

ENGLISH II.

HONOURS.

1. Translate the following passage, and point out its dialect peculiarities—

For th*e*re neidfaerae naenig ni uurthit
thoncsnottura, than him tharf sie
to ymbhycggannae aer his hiniongae,
huaet his gastae godaes a*e*htha yflaes
aefter deothdaege doemid uueorthae.

2. Translate—

éaþe ic mæg fréora feorh geneгgan,
gif ic máegburge mót míne geláedan
on dégolne weg þurh dúne þyrel
swáese ond gesibbe: ic mé siþþan ne þearf
wælhwelpes wíg wiht onsittan.
gif se níðsceaþa nearwe stíge
mé on swaþe séceþ, ne tósáeleþ him
on þám gegnpaþe gúþgemótes,
siþþan ic þurh hylles hróf geráece
ond þurh hést hríno hildepílum
láðgewinnum, þám þe ic longe fléah.

To what do these lines refer? Tell what you know of the branch of literature to which they belong.

3—8. Translate, with comments, passages from the Old and Middle English Reader.

FRENCH AND GERMAN.

The same papers as those set in the Second Year Examination.

SOLID GEOMETRY.

HONOURS.

1. Find the direction cosines to a plane, drawn through a given straight line to make a maximum angle with another given straight line.

2. A plane drawn through x, y, z, perpendicular to r cuts the rectangular coordinate planes in a triangle. Prove that the area of the triangle is $r^5/2xyz$.

3. Prove that an ellipsoid has two systems of circular sections, and that two sections of opposite systems lie on a sphere.

   If the two planes of section intersect along the line $x=x_1$, $z=z_1$, and if the centre of the sphere is α, 0, γ, prove that
   $$\alpha/x_1=1-b^2/a^2,\ \gamma/z_1=1-b^2/c^2.$$

4. Find the equation to the tangent plane at a point on a quadric, and prove that, in the case of the hyperboloid of one sheet, the plane meets the quadric in two straight lines.

   If P=0, Q=0, etc., are the faces of a tetrahedron, find the generators of the quadric P.Q=R.S, and its tangent planes at the angles of the tetrahedron.

5. Find the section of a given central quadric which has a given point as its centre, and prove that the centres of parallel sections are collinear, and the middle points of parallel chords are co-planar.

6. Prove that two concentric quadrics have a common set of conjugate diameters.

7. If a point and plane are pole and polar with reference to $ax^2+by^2=z$, and if the plane touches $ax^2+by^2=-z$, prove that the point lies on the latter surface, and compare its coordinates with those of the point of contact of the plane.

8. If $a+b+c=0$ in the general equation to the quadric cone, prove that the cone has two generators perpendicular to each other and to any selected generator.

Prove also that a certain plane may be drawn through the vertex of such a cone, having the property that the three co-ordinates of any point on the cone are inversely proportional to the three coordinates of a point on the plane; the coordinates being drawn parallel to three perpendicular generators of the cone.

9. If a surface touches the xy plane at the origin, prove that curvature of normal sections depends on the terms $z=ax^2+2hxy+by^2$ only, and deduce a theorem concerning the curvatures of two perpendicular normal sections.

The plane curve $y=a\sin\frac{x}{a}$ rotates about the axis of x; prove that the end of a maximum ordinate describes a circle of umbilici on the surface.

10. With the usual notation for the general conic, prove that $a+b$, $ab-h^2$, f^2+g^2, c, are all invariant, when the rectangular axes are rotated in their own plane. Hence deduce by general reasoning two of the three invariants for the general central quadric, when its axes are rotated in threedimensions.

For the plane $ax+by+cz+d=0$, prove that d and $a^2+b^2+c^2$ are invariant. Only two arbitrary relations are thus possible between the old and new coefficients, though the rotating axes have three degrees of freedom.

Explain this.

11. What is a developable surface? Can the edge of regression be a plane curve on the surface?

If the edge of regression is a right circular helix, prove that it will become a circle on development.

NEWTON.

HONOURS.

ONE AND A HALF HOURS.

1. Enunciate and prove Lemma I.

A triangle is inscribed in an oval curve; shew that if the area is a maximum the tangent to the curve at each of the

angular points is parallel to the opposite side, but if the perimeter is a maximum the tangent makes equal angles with the sides meeting at that point.

2. Prove by Newton's method that the semi-chords of curvature at any point P of an ellipse drawn through the centre of the ellipse, through the centre of curvature, through a focus, are CD^2 divided by CP, CY, CA respectively.

T is the pole of the chord PQ of an ellipse; shew that the chord of curvature at P drawn in the direction PQ is to the chord of curvature at Q in direction QP as $TP^2 : TQ^2$.

3. The velocity at any point of an ellipse described under a force to the focus is compounded of two uniform velocities, one perpendicular to the radius vector, and the other perpendicular to the major axis.

4. Prove the formulæ for motion about a fixed centre of force

$$F = \frac{2h^2}{SY^2 . PV}$$

$$V^2 = 2F . \frac{PV}{4}.$$

Prove that if an ellipse is described under a force to the vertex A, the force varies as $\frac{AP}{AN^3}$, N being the foot of the perpendicular from P on the axis.

5. A body is revolving in an ellipse, find the law of force tending to a focus of the ellipse.

If at any point the velocity is suddenly increased to n times its former amount, shew that the latus rectum of the new path is $n^2 \times$ the old latus rectum.

6. Enunciate and prove the proposition which proves that, if a body sweeps out a circle uniformly, the acceleration is towards the centre and is measured by $\frac{v^2}{r}$.

SPHERICAL TRIGONOMETRY AND ASTRONOMY.

HONOURS.

1. Given the lengths of the edges of a parallelepiped and their mutual inclinations, find the angle between two adjacent faces, and the distance between two parallel faces.

2. If the base of a spherical triangle is fixed, and if the sum of the base angles exceeds the vertical angle by a constant amount, find the locus of the vertex.

3. If three concurrent arcs are drawn from the angular points of a triangle to meet the opposite sides, find the relation which holds between the six segments of the angles.

   Also if a great circle cuts the sides of a spherical triangle ABC, all produced, in P, Q and R respectively, shew that the isotomic conjugates of P, Q and R are also concyclic.

4. D is a fixed point in the fixed base AB of a triangle ABC, and $\sin AD \cos BC + \sin BD \cos AC$ is constant; prove that the locus of C is a small circle.

5. Find the radius of the circumcircle of a spherical triangle, and shew that it is the complement of the radius of the incircle of the polar triangle.

6. Enunciate Legendre's Theorem.

   If a, b, c, R be the sides and circumradius of the plane triangle, and ρ the radius of the sphere, prove that the circumradius of the spherical triangle is an arc which exceeds R by

$$R(a^2+b^2+c^2-8R^2)/24\rho^2.$$

7. Shew that the series of changes in the sun's declination and the gradual increase in the sun's right ascension are a consequence of the earth's motion round the sun, and the obliquity of the ecliptic.

8. Discuss the separate effects of the causes giving rise to the Equation of Time. Shew that the maximum value of the equation of time, due to the obliquity alone, is when cosine of the sun's declination $= \sqrt{\cos\omega}$.

9. Find the azimuth of the sun from an observation of his altitude in terms of the latitude of the place and the sun's declination.

   If the sun's bearings relative to some fixed object be observed at equal altitudes, then the bearing of the meridian will differ from the mean of the two bearings by

$$\frac{D}{2\sin h \sin(\text{lat})}$$

   where D is the change in the sun's declination, and $2h$ is the difference in time of the two observations.

10. Explain what is meant by Aberration, and shew that it causes a star to describe an ellipse about its mean place, its semi-axis minor being proportional to the sine of the star's latitude.

Find the aberration of a given star in declination.

If the aberration in declination of two given stars vanishes, shew that the tangent of the sun's right ascension is

$$\frac{(\tan\delta\sin\alpha-\tan\delta'\sin\alpha')\cos^2\omega}{\tan\delta\cos\alpha'-\tan\delta'\cos\alpha},$$

α, α' being the stars' right ascensions and δ, δ' their declinations.

11. Shew that in a year there cannot be more than seven eclipses, five of the sun and two of the moon, nor fewer than two eclipses, both of the sun.

Prove that, at or near the moon's opposition, a lunar eclipse will take place, if the distance between the centres of the moon and the earth's shadow referred to the earth's centre is less than

$$r-\mathrm{R}+\mathrm{P}+p$$

where R, r are the radii and P, p the parallaxes of the sun and moon.

INTEGRAL CALCULUS AND DIFFERENTIAL EQUATIONS.

HONOURS.

1. Evaluate the integrals

(i.) $\displaystyle\int\frac{(7x+9)dx}{\sqrt{3x^2+5x-4}}$

(ii.) $\displaystyle\int\frac{(5x-8)dx}{(x^2+5)(x-2)^2}$

(iii.) $\displaystyle\int\frac{(x^2-1)dx}{(x^2+1)\sqrt{x^2-1}}$

(iv.) $\displaystyle\int_0^{\frac{\pi}{2}}x\sin^4x\,dx$

2. Find the area included between the hyperbola $xy=2a^2-y^2$ and its asymptotes.

3. Shew that the integral $\int x^{m-1}(a+bx^n)^{\frac{p}{q}}dx$ can be obtained by rationalisation when $\frac{m}{n}$ or $\frac{m}{n}+\frac{p}{q}$ is an integer.

Hence find for what values of r the curve $y=x^r$ is rectifiable, and determine s in terms of x when $r=\frac{5}{4}$.

4. Shew that $\int\int \phi(xy)dxdy=\int\int \mathrm{F}(\xi,\eta)\frac{\delta(x,y)}{\delta(\xi,\eta)}d\xi d\eta$

where $\mathrm{F}(\xi,\eta)$ is what $\phi(xy)$ becomes in the substitution of the new variables, and the limits are properly chosen.

Shew that $\int\int \log(x^2+y^2)dxdy=\frac{\pi a^2}{4}(\log a^2-1)$, where the integration extends over the quadrant of a circle of radius a cut off by the positive portions of the axes of x and y.

5. A point P is taken at random on the axis of the segment of the parabola $y^2=4ax$ cut off by the latus rectum. Shew that the mean value of the ordinate at P is $\frac{4a}{3}$, and that the probability of the ordinate at P falling below this mean value is $\frac{4}{9}$.

6. Shew how to solve a homogeneous differential equation of the first degree.

Illustrate by solving the equation
$$(ax+by-b)dx+(bx+ay-a)dy=0.$$

7. Write down the differential equation of the family of curves, having the portion of the tangent cut off between the axes of constant length c. Solve the equation, and shew that the complete primitive is a family of straight lines while the singular solution is the four-cusped hypocycloid $x^{\frac{2}{3}}+y^{\frac{2}{3}}=c^{\frac{2}{3}}$.

8. Prove the theorem $\mathrm{F}\left(x\frac{d}{dx}\right)x^m\mathrm{V}=x^m\mathrm{F}\left(x\frac{d}{dx}+m\right)\mathrm{V}$, where V is a function of x.

Solve the equations

$$x^2\frac{d^2y}{dx^2}-3x\frac{dy}{dx}-5y=(\text{i.})0\ (\text{ii.})x\ (\text{iii.})\ x\log x.$$

9. Solve the equations

(i.) $py=p^2(p+1)x+1$

(ii.) $(D^2+1)(D-1)^2y=0$

(iii.) $(D^3-7D^2+16D-12)y=x^2+x^3\sin 2x.$

ANALYTICAL STATICS AND DYNAMICS.

HONOURS.

1. Shew that the necessary and sufficient conditions of equilibrium of a system of forces acting on a rigid body are that the sum of the moments of all the forces about each edge of any one finite tetrahedron shall severally be equal to zero.

2. Find the centre of gravity (i.) of a wire in the form of the part of the catenary $y=\frac{c}{2}(e^{\frac{x}{c}}+e^{-\frac{x}{c}})$ cut off by a line parallel to the axis of x; (ii.) of a segment of a parabola cut off by any straight line.

3. Prove that a rigid lamina may be moved from any one given position to any other given position in its plane by rotating it about some point in its plane as centre.

A flat circular disc lies on a rough horizontal table, and all its elements are equally supported by the table. The disc can turn about a smooth pin in its circumference. Find the least force, which, applied at the point of the circumference diametrically opposite the pin, will move the disc.

4. A perfectly rough heavy sphere rests in equilibrium on a fixed sphere. Shew that whether the equilibrium is stable or unstable depends upon whether $\frac{1}{z\sec\alpha}-\frac{1}{\rho}-\frac{1}{\rho'}$ is positive or negative, where ρ, ρ' are the radii of the spheres, and z is the distance of the centre of gravity of the movable sphere from the point of contact, and α is the angle which the common normal at the point of contact makes with the vertical.

A homogeneous sphere is placed on a perfectly rough plane inclined at 45° to the horizon, and has a particle attached to it at the point on its surface, in the vertical plane through the line of greatest slope which passes through the point of contact, such that the arc between the point of contact and the particle subtends 45° at the centre of the sphere. If the sphere is in equilibrium, shew that the weight of the particle $=(\sqrt{2}+1)\times$ weight of the sphere, and shew that the equilibrium is unstable.

5. Find the equations of equilibrium of a flexible inextensible string under the action of any forces in one plane.

A flexible inextensible string is fixed at its extremities, and is acted on by no force except its weight. The string is such that its normal section at any point is proportional to its tension. Shew that it will hang in the curve whose equation is $\frac{y}{a}=-\log\cos\frac{x}{a}+b$, where the axis of y is vertical and passes through the lowest point of the curve.

6. Find expressions for the tangential and normal accelerations of a particle describing a plane curve in any manner.

A particle with a tangential acceleration in the opposite direction to that in which s increases varying inversely as the cube of the distance from the pole, and velocity varying inversely as the distance from the pole is describing the equiangular spiral $r=ae^{\theta\cot\alpha}$. Find its radial and transverse accelerations.

7. A particle is projected from a given point in a given direction with a given velocity, and moves under the action of an attractive force to a fixed point varying inversely as the square of the distance from the point, find the orbit described.

A particle is describing an ellipse under a centre of force in the focus. When the particle is at an extremity of the latus rectum passing through the centre of force, its velocity in the direction of the radius vector is suddenly destroyed. Shew that it will proceed to describe the circle on the latus rectum as diameter.

8. A particle is placed outside of a smooth circle of radius a, and is acted on by a force to a fixed point situated on the diameter through the particle, produced through its opposite extremity, at a distance from the centre $=2a$, and

varying as the distance from that point. If the particle is slightly disturbed, find its velocity, and the pressure on the circle at any point, and the point where the particle will leave the circle.

9. If A, B, C, A′, B′, C′ are the moments and products of inertia of a body with reference to the axes of coordinates, shew that the moment of inertia with reference to the line through the origin whose direction cosines are $l\,m\,n$ is

$$Al^2+Bm^2+Cn^2-2A'mn-2B'nl-2C'lm.$$

Find the moment of inertia of a right circular cone about a generating line, the density of any circular section varying as the square of its distance from the vertex.

10. Find the equations of motion of a rigid body moving about a fixed axis.

A uniform rod of length $2a$ is capable of rotating in a vertical plane about a hinge at one extremity; the other extremity is attached to a string, which passes over a small pulley vertically under the hinge at depth $2a$ below it, and is attached to a particle of weight equal to that of the rod. The rod is allowed to start from rest in a horizontal position. Shew that the angular velocity of the rod in a position making θ with the vertical is given by

$$\frac{2a}{3}\left(1+3\cos^2\frac{\theta}{2}\right)\dot{\theta}^2=g\left(2\sqrt{2}-4\sin\frac{\theta}{2}+\cos\theta\right).$$

LOGIC AND MENTAL PHILOSOPHY.

HONOURS II.

Not more than SEVEN *questions to be attempted.*

1. Is the sense that something *ought* to be, or be done, the highest form of the moral consciousness? Discuss with reference to Kant and Green.
2. Discuss the comparative value of the theories of duty offered by Kant and Spencer.
3. "The moral theory which has been of most public service in modern Europe is Utilitarianism." (*Green.*) Discuss this statement taken in connection with Green's own criticism of Utilitarianism as ethical theory.

4. "Badness is mere negation." Examine pantheism in its bearing on morality.
5. State and examine Spencer's view of the relation between justice and beneficence.
6. Discuss Spencer's account of the feeling of moral obligation.
7. The moral end as realised in the community. Compare Green's views with those of Kant.
8. Democracy is said to prefer equality to liberty. Accepting this description, in what sense do you understand *liberty* and *equality*?
9. "We cannot permanently help men except by enabling them to help themselves." Discuss this remark, with special reference to socialism and the conception of "equality of opportunities."
10. What is the function of a second chamber in the modern democracy? Answer with special reference to the proposed introduction of the Referendum.

HISTORY II.

HONOURS.

Candidates are recommended to answer not less than FIVE *and not more than* SEVEN *questions.*

1. "The Revolution rested on a philosophy, and Burke confronted it with an antagonistic philosophy." Discuss.
2. Describe the political ideas of Robespierre, and account for his rise to power and for his fall.
3. Describe the home government of Napoleon I.
4. Sketch the career of Stein, and explain the importance of his work.
5. Compare shortly the condition of Europe in 1815 with the condition of Europe in 1789, with a view to determining the permanent results of the French Revolution.
6. Explain the political views of Mazzini, and compare them with Carlyle's.
7. Sketch the relations between Russia and Turkey during the present century.
8. Compare the condition of the Austrian Empire at the present time with its condition in 1848.

9. Show the influence of Socialistic ideas in French politics since 1815.
10. "France had made war in order to undo the work of partial union effected by Prussia in 1866; it achieved the opposite result, and Germany emerged from the war with the empire established." Explain.
11. Describe the constitution of the German Empire.

FACULTY OF LAW.

INTERMEDIATE EXAMINATION.

ROMAN LAW.

Candidates are not to attempt more than NINE *questions, but the questions attempted must include Nos.* I., VIII. *and* X.

I. Translate, and comment briefly, on each of the following passages—

(1) *Nostra autem providentia et hoc in melius per constitutionem reformavit, ut fictione pristina explosa recta via apud competentes judices vel magistratus parentes intrent et filios suos vel filias . . . sua manu dimitterent* (I. 12, 6).

(2) *Ceterum sicut is qui in alieno solo aedificaverit, si ab eo dominus petat aedificium, defendi potest per exceptionem doli mali: ita ejusdem exceptionis auxilio tutus esse potest is qui alienum fundum sua impensa bona fide consevit* (II. 1, 32).

(3) *Postumorum autem loco sunt et hi, qui in sui heredes locum succedendo quasi adgnascendo fiunt parentibus sui heredes* (II. 13, 2).

(4) *Plane si quis debere se scripserit, quod numeratum ei non est, de pecunia minime numerata post multum temporis exceptionem opponere non potest* (III. 21, *pr.*).

(5) *Hi, qui in parentium potestate sunt, si rem eis subripiant, furtum quidem illis faciunt et res in furtivam causam cadit . . . . sed furti actio non nascitur* (IV. 1, 12).

II. From what sources would an advocate have obtained a knowledge of Roman Law (1) in the time of Hadrian (say 130 A.D.); and (2) in that of Justinian (say 535 A.D.)?

III. By what methods, and under what conditions, could a civil marriage be dissolved, under the earlier Roman Law? What restrictions on divorce had been imposed in the time of Justinian?

IV. How far did Roman Law allow (1) ownership, and (2) possession, to be acquired through the agency of another?

V. A Roman testator makes the following disposition o his property:—"*Lucius Titius heres esto: et rogo te Luci Titi, ut, cum primum possis hereditatem meam adire, eam Gaio Seio reddas restituas.*" Examine the effect of such a disposition (1) after the passing of the S. C. Pegasianum; and (2) under the law as finally settled by Justinian.

VI. Describe, briefly, the different theories that have been put forward as to the origin of *either* (1) "*Bonorum Possessio*," *or* (2) the "*Stipulatio*."

VII. Describe, briefly, the more important rights and liabilities of a lessee of land, under the Roman Law.

VIII. Discuss the rules applicable to each of the following cases, stating, in technical language, the rights and remedies of the parties:—

(1) A employs B to make a gold ring, and supplies him with the gold. B sells the gold to C.

(2) A is a guest at B's inn. Whilst there, his luggage is stolen by C, a slave belonging to D, a fellow guest.

(3) A, whilst staying at B's house, accidentally drops a jar from the window, which falls on and severely injures C, a passer-by.

(4) A scares a horse on which B, a slave belonging to C, is riding. The slave is thrown into the river and drowned.

IX. "Almost every gesture and almost every set of formal words in the Legis Actio Sacramenti symbolize something which, ... in some Aryan society or another, has developed into an important institution."—*Maine*. Explain and illustrate this statement.

X. Explain and illustrate, briefly, the difference between *Publica Judicia*, *Extraordinaria Crimina*, and *Private Delicta*.

XI. Write a *short* explanatory note on each of the following:—(1) *acta intervenientia;* (2) *cognati;* (3) *universitas personarum;* (4) *servitutes praediorum;* (5) *heres extraneus;* (6) *cretiones;* (7) *depositum miserabile;* (8) *actio redhibitoria.*

CONSTITUTIONAL LAW.

Candidates are not to attempt more than NINE *questions.*

I. "The actual exercise of authority by any sovereign whatever, and notably by Parliament, is bounded by two limitations.

X. By what considerations does Bentham suggest that the legislator should be guided in drawing up a table of prohibited alliances? Illustrate your answer by examples.

XI. Explain Bentham's views with respect to (1) the value of commeasurability as a quality in punishment; (2) the award of remedies for offences against honour; (3) the recognition of lapse of time as a bar to punishment; and (4) the award of subsidiary satisfaction at the public expense.

INTERNATIONAL LAW.

Candidates are not to attempt more than NINE *questions; but the questions attempted should include Nos.* I., III., VI. *and* IX.

I. "The expression, International Law, is sometimes applied to principles and rules which obtain, or are said to obtain, as between nation and nation, and sometimes to parts of the law of one nation in which other nations are interested. In each of these senses it is likely to mislead." Explain and comment on this statement.

II. What is the present status, or position in relation to international affairs, of (1) the Empire of Japan; (2) the Pashalik of Egypt; (3) the Regency of Tunis; and (4) the kingdom of Hungary; and (5) the kingdom of Samoa.

III. Give a *brief* sketch of the boundary dispute between Great Britain and Venezuela, stating the questions at issue, and the main incidents of the dispute down to the present time.

IV. On what principles will Great Britain extradite criminals? A fugitive criminal from New Caledonia takes refuge in Sydney. Describe, briefly, the steps that must be taken to secure his arrest and ultimate surrender.

V. What rules were adopted at the Berlin Conference, 1885, with respect to future acquisitions of territory, by the parties to that Conference, along the coasts of Africa? What arrangements have also been made for the purpose of avoiding collisions between colonizing Powers in the interior parts of the Continent?

V. A Roman testator makes the following disposition o his property:—"*Lucius Titius heres esto: et rogo te Luci Titi, ut, cum primum possis hereditatem meam adire, eam Gaio Seio reddas restituas.*" Examine the effect of such a disposition (1) after the passing of the S. C. Pegasianum; and (2) under the law as finally settled by Justinian.

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IX. "Almost every gesture and almost every set of formal words in the Legis Actio Sacramenti symbolize something which, ... in some Aryan society or another, has developed into an important institution."—*Maine*. Explain and illustrate this statement.

X. Explain and illustrate, briefly, the difference between *Publica Judicia*, *Extraordinaria Crimina*, and *Private Delicta*.

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CONSTITUTIONAL LAW.

Candidates are not to attempt more than NINE *questions.*

I. "The actual exercise of authority by any sovereign whatever, and notably by Parliament, is bounded by two limitations.

Of these one is an external and the other an internal limitation."—*Dicey*. Explain and illustrate this statement.

II. Discuss briefly—(1) the liability of subordinate officers for illegal acts done in obedience to the orders of a superior; and (2) the principles which, under English law, govern the right of self-defence; citing authority for your conclusions.

III. What provision was made by the Act of Settlement with respect to (1) the title to the Crown; (2) the functions of the Privy Council; and (3) the capacity of persons holding office under the Crown to sit in the House of Commons. In what respects were any of these provisions subsequently modified?

IV. Give a brief historical account of the circumstances attending the introduction and passing of the Constitution Act; explaining, incidentally, how it came to assume its present form.

V. Sketch, very briefly, with dates, the steps by which the territory of New South Wales came to assume its present dimensions. What statutory provisions exist with respect to future readjustment?

VI. Explain the terms "Executive Council,"—"Ministry,"—"Cabinet." What are the more important provisions of the Executive Councillors' Act, 1880? What difficulties would you suggest with regard to its interpretation?

VII. Explain, carefully, the steps attending the introduction and passing of a Loan Bill, down to the stage of the Royal assent.

VIII. Examine the powers possessed by each House (1) over its own members; and (2) over strangers. How far (if at all) can the Courts take cognizance of words spoken, or acts committed, in the course of a sitting of either House?

IX. Discuss, briefly, the constitutional position of the Legislative Council with respect to (1) the rejection, and (2) the amendment, of money bills.

X. Under what circumstances may a person resident in New South Wales—(1) be arrested, either by a constable or private person, without the issue of a warrant; and (2) be subjected to imprisonment in the course of civil process.

JURISPRUDENCE AND THEORY OF LEGISLATION.

Candidates are not to attempt more than NINE *questions; but the questions attempted should include Nos.* VIII. *to* XI. *inclusive*

I. How do you account for the divergence, in different systems, between Law and Equity? What points of resemblance do you notice between Roman and English Equity?

II. "I know of nothing more wonderful than the variety of sciences to which Roman Law,—Roman Contract Law more particularly,—has contributed modes of thought, a course of reasoning, and a technical language."—*Maine.* Explain and illustrate this statement.

III. Trace, *briefly*, the rise and development in Western Europe of the conception of Territorial Sovereignty.

IV. Distinguish, *briefly*, between—(1) Nation and State; (2) Federal and Confederate Union; (3) Positive Law and Positive Morality; (4) Written and Unwritten Law; (5) Dominium and Servitus; and (6) Motive and Intention.

V. Explain and justify the distinction between Normal and Abnormal Law. What classes of rights would you include under Abnormal Law? Where would you place the law relating to landlords, apprentices, aliens? How far does the same distinction manifest itself in Public Law, Adjective Law, and International Law?

VI. Within what limits (if at all), and upon what principle, would you regard—(1) Necessity; (2) Drunkenness; (3) Ignorance of fact; and (4) Accident;—as grounds of non-liability upon a charge of crime?

VII. Distinguish between Pleading, Evidence and Practice. State and illustrate the three main topics comprised under the law of Evidence.

VIII. Upon what grounds, and within what limits (if any), does Bentham justify—(1) The institution of private property; (2) the enforcement of contracts; and (3) the recognition of a right of testation?

IX. "The goodness of the laws depends upon their conformity to general expectation." State and illustrate some of the more important conditions laid down by Bentham, with a view to the attainment of this end.

X. By what considerations does Bentham suggest that the legislator should be guided in drawing up a table of prohibited alliances? Illustrate your answer by examples.

XI. Explain Bentham's views with respect to (1) the value of commeasurability as a quality in punishment; (2) the award of remedies for offences against honour; (3) the recognition of lapse of time as a bar to punishment; and (4) the award of subsidiary satisfaction at the public expense.

INTERNATIONAL LAW.

Candidates are not to attempt more than NINE *questions; but the questions attempted should include Nos.* I., III., VI. *and* IX.

I. "The expression, International Law, is sometimes applied to principles and rules which obtain, or are said to obtain, as between nation and nation, and sometimes to parts of the law of one nation in which other nations are interested. In each of these senses it is likely to mislead." Explain and comment on this statement.

II. What is the present status, or position in relation to international affairs, of (1) the Empire of Japan; (2) the Pashalik of Egypt; (3) the Regency of Tunis; and (4) the kingdom of Hungary; and (5) the kingdom of Samoa.

III. Give a *brief* sketch of the boundary dispute between Great Britain and Venezuela, stating the questions at issue, and the main incidents of the dispute down to the present time.

IV. On what principles will Great Britain extradite criminals? A fugitive criminal from New Caledonia takes refuge in Sydney. Describe, briefly, the steps that must be taken to secure his arrest and ultimate surrender.

V. What rules were adopted at the Berlin Conference, 1885, with respect to future acquisitions of territory, by the parties to that Conference, along the coasts of Africa? What arrangements have also been made for the purpose of avoiding collisions between colonizing Powers in the interior parts of the Continent?

VI. Discuss, very briefly, *two* of the following questions—

(1) The position of a parent State, after the suppression of an organised rebellion, in respect of property belonging to—or contracts entered into by—the rebel government in the United Kingdom.

(2) The right of a belligerent to bombard unfortified coast towns.

(3) The circumstances under which a treaty becomes voidable.

VII. State, generally, the effect of war on commercial relations, either existing at the time, or subsequently entered into, between the subjects of the respective belligerents. Cite authority for your answer.

VIII. Upon what principles will the title to prize depend, according to the law in force in the English Prize Courts,—(1) As between the original owner and a recaptor; and (2) as between the original owner and a neutral purchaser? Cite authority for your answer.

IX. During a war between two European Powers, Great Britain being neutral, a public vessel belonging to one belligerent puts into Sydney Harbour. Subsequently a public vessel belonging to the other belligerent does the same. Write a short memorandum advising the Executive as to the treatment of such vessels, both separately and in relation to each other. For the purposes of your advice, you are to assume that this occurs in 1898, but that the same "Orders" have been made as were issued in 1870.

X. What usages have prevailed at different times with respect to the treatment of belligerent goods in neutral vessels?

FINAL EXAMINATION.

THE LAW OF CONTRACT.

Candidates are not to attempt more than TEN *questions, but these must include Nos.* VI., VIII., IX. *and* XI.

I. "The cases have resulted in the establishment of two rules—(1) Motive is not the same thing as consideration; and (2) Consideration must move from the promisee." Explain and illustrate each of these rules.

II. Contrast the attitude of the Courts of Law and Equity respectively, towards misrepresentation (not amounting to fraud) as a vitiating element in contract.

III. Define "Undue Influence." How would you classify the various circumstances which have been held to constitute undue influence?

IV. "The law concerning restraint of trade has changed from time to time with the changing conditions of trade, but, with trifling exceptions, these changes have been a continuous development of a general rule." Illustrate this statement, and give a brief summary of the present rules on this subject.

V. How far is the position of a person claiming under a written instrument affected (1) by its loss; and (2) by its alteration?

VI. Mention the principal parts of an ordinary policy of marine insurance. Explain, especially, the meaning of the "valuation clause" and the "suing and labouring clause."

VII. Distinguish between executory, executed, and past consideration. Examine, also, the nature and limits of the exceptions to the rule that past consideration will not support a subsequent promise.

VIII. Discuss the following cases, stating the rights of the parties and the principles involved:—

(2) Injury to reversion.

(3) *Res ipsa loquitur.*

(4) *Dominus pro tempore.*

II. "Unless and until a superior title or justification is shewn, existing legal possession is not only presumptive but conclusive evidence of the right to possess." Explain fully the above proposition, and cite authority in support of it.

III. Discuss the following cases—

(1) A and B are owners of vacant allotments adjoining each other. A builds a house on his allotment near the dividing boundary. B afterwards excavates his land close to this boundary, and in consequence of such excavation A's house falls to the ground.

(2) A wrongfully gets and carries away coal from a mine under B's land. A dies, and two years after his death B sues A's executor to recover the value of the coal wrongfully taken, and damages for the injury to the mine and the surface of the ground consequent upon A's workings.

(3) A assaults B, and B in lifting up his stick to defend himself injures C a bystander.

(4) The directors of a new company issue a prospectus containing false statements concerning the position and prospects of the company. Upon the faith of these statements A purchases shares from B, a shareholder, and suffers pecuniary loss.

IV. Examine briefly the principles which govern the assessment of damages in actions of Tort.

V. Give an account of the various matters which must be proved to support an action for malicious prosecution. Discuss the following case—

A maliciously, and for the sole purpose of injuring B, institutes an action of deceit against him. The declaration alleges facts which amount to a charge of gross commercial immorality against B. A verdict is returned for B, and thereupon B sues A for maliciously instituting the former action.

VI. Discuss fully the doctrine of ratification in reference to Torts.

CRIMES.

I. Give an account of the statutory provisions in force in New South Wales relating to the offence of obtaining property by false pretences.

II. Explain the meaning of the following terms in relation to Criminal Law:—Mens rea, asportation, embracery, avowterer, arraignment.

III. Discuss the following cases, stating the principles involved—

(1) A, a married woman intending to desert her husband, procures the assistance of B her sister, and with her breaks open her husband's desk and takes money from it. A and B are indicted for larceny.

(2) A is the owner of an oil painting by B, an unknown painter. A removes B's name from the corner of the picture and substitutes that of C, a celebrated artist. D seeing C's name on the painting purchases it from A. A is indicted for forgery.

(3) A owes £10 for wages to B his clerk. B collects £30 due to A from various customers, and retains thereout £10 to cover his unpaid wages, paying over the balance to A.

V. Give an account of the provisions of the Criminal Law Amendment Act relating to each of the following—

(1) The distinction between felony and misdemeanor.

(2) The authority of private persons and constables to arrest without warrant.

(3) The investigation, after conviction, of a prisoner's guilt.

(4) Depositions by persons dangerously ill.

V. Enumerate the different kinds of challenges of jurors allowed by the Criminal Law, explaining clearly the nature of each. Discuss the provisions of the Criminal Law Amendment Act relating to challenges.

VI. It has been said that Conspiracy is the most elastic crime known to English Law. Explain fully this statement, and illustrate your explanation by examples.

LAW OF PROPERTY.

Candidates are not to attempt more than TEN *questions, but the questions attempted should include Nos.* I., IV., VI., VIII. *and* XII.

I. What protection is afforded by statute (1) to creditors, and (2) to purchasers, against alienations of property by a debtor or vendor, whereby their claims are liable to be defeated?

II. What covenants or powers are implied (1) in a lease, and (2) in a mortgage, of land, under the Real Property Act?

III. Is it possible, directly or indirectly, and if so by what means, and to what extent, to attach an effectual condition, in restraint of either voluntary or involuntary alienation, to a grant of land in fee simple?

IV. State shortly the provisions of the Trust Property Act, 1862, with respect to (1) the mode of executing powers; (2) the doctrine of *scintilla juris;* and (3) the powers incident to mortgages.

V. State precisely the provisions of the Wills Act with respect to (1) the effect on a legacy of *personalty* of the death of the legatee before the testator; (2) what will be deemed to be included in a residuary devise; and (3) the nature and extent of the estate taken by trustees under a will?

VI. A lodges an application to bring land under the Real Property Act; B lodges a caveat. Advise B as to what courses are open to him, and as to what steps he must adopt in each case, having regard both to the Principal Act, and the Amending Act of 1878.

VII. Explain the nature and use of an abstract of title. In what cases would a purchaser of an interest in personal estate be entitled to an abstract?

VIII. State,—and illustrate briefly the operation of,—the rules as to the time within which future interests in land, must take effect,—with special reference to (1) contingent remainders, (2) executory interests, and (3) accumulations of income. Discuss the effect of the following limitation:—Gift of land to A (a bachelor) for life, with remainder to A's eldest son for life, with remainder to the eldest male descendant of B, who may be living at the death of A's son.

IX. What methods are generally adopted in settlements of personal estate for vesting the interests of children? Is there any and, if so, what difference in effect between these methods?

X. "The general rule of the common law is that if a man dispose of a chattel, whether for value or not, he can confer no better title than he himself has." What exception do you find to this statement?

XI. Write a short explanatory note on each of the following:—
(1) Tenancy by entirety; (2) *Donatio mortis causâ;* (3) Dependent relative revocation (will); (4) Merger; (5) Lease and Release; and (6) Chose in action.

XII. Discuss the effect of the following dispositions, stating the nature of the interests taken, and the principles involved:—

(1) Appointment (under special power) by will to A (who is an object of the power) with remainder in tail to his children (who are not objects of the power).

(2) Conveyance of land to A and his heirs, to the use of B for life, and after B's death to the use of A and his heirs in trust for C and his heirs.

(3) Conveyance of land to trustees and their heirs to the use of such trustees and their heirs during the life of A (a married woman) upon trust for her separate use, and after her death to the use of her husband for life, with remainder to the heirs of A.

(4) Bequest by A of all his personal property to B for life, and after his decease to C. The property includes money in the funds, furniture, and a quantity of valuable wine.

EQUITY AND EQUITY PROCEDURE.

I. Write a short explanatory note on each of the following—
(1) Ward of Court.
(2) Interpleader.
(3) Fraud on marital rights.
(4) Vendor's lien.

II. Give a brief historical account of the origin and growth of the jurisdiction of the Court of Chancery in England.

III. Explain the principles on which the Court of Equity will act in determining whether a condition in a settlement of property tending to restraint of marriage is valid or invalid.

IV. Explain under what circumstances the Court of Equity will decree annual rests against a mortgagee. What is the effect of such a decree?

V. Discuss the following cases—

(1) A sum of £1000 is given to A, B and C in such shares as D their father shall by deed appoint. D by his last will appoints the fund as follows—£1 to A; £400 to B; £599 to C.

(2) In consideration of the sum of £100 paid by A to the B Co, Ltd., the Company issues to A scrip certificates for 200 £1 shares expressed on their face to be fully paid up. A transfers the shares to C, a *bonâ fide* purchaser, for value, who accepts them on the faith of the statement appearing on the scrip that the shares are fully paid up. Two years afterwards the shares are again purchased by A from C, who transfers them to him for value. The Company is subsequently wound up and the official liquidator seeks to make A liable for the difference between the amount paid to the Company for the shares and their face value.

VI. Discuss the rights of C in each of the following cases—

(1) A is trustee for B. A fraudulently sells and conveys freehold property forming part of the trust estate to C, a *bonâ fide* purchaser, for value without notice of the fraud.

(2) A is trustee for B. A fraudulently obtains from C an advance of money upon a deposit of the title deeds of the trust property. C has no notice of the trust.

VII. State under what circumstances and to what extent (1) a past member, (2) a present member, of a Company limited by shares is liable to contribute to the assets of the Company in the event of its being wound up by the Court.

VIII. Explain the Doctrine of Marshalling, and give an example of each of the following—

(1) Marshalling of assets.

(2) Marshalling of securities.

IX. What are the consequences of default on the part of a plaintiff or defendant in an equity suit to comply with an order to answer interrogatories?

X. Under what circumstances will a plaintiff in an equity suit be ordered to give security for costs, and what is the effect of such an order upon the proceedings?

XI. Explain the nature of each of the following and how they are obtained:—

(1) Order of revivor.

(2) Stop order.

XII. The following paragraph occurs in a statement of claim in a suit instituted by A against B for infringement of trade mark:—

"The defendant has been for a considerable time past and still is in the habit of selling and of manufacturing knives of a similar kind, made and got up in close resemblance to and imitation of the articles of that description manufactured and sold by the plaintiff, and the defendant, in order to injure and defraud the plaintiff, and with a view of passing off and selling such spurious articles as being the manufacture of the plaintiff, stamps and impresses on the blades of the knives so sold or manufactured by him certain marks or stamps devised and contrived in close and fraudulent imitation of the plaintiff's said trade mark."

Draw a paragraph of the statement of defence, putting in issue every allegation of fact contained in the above paragraph.

PROCEDURE, EVIDENCE AND PLEADING.

I. In what ways may the credibility of a witness be tested in cross-examination?

II. What is the rule as to the disclosure by (1) solicitors, (2) medical men, and (3) clergymen of confidential communications made to them in their professional capacity?

III. What is an admission and what is the general rule as to the reception of admissions in evidence? Discuss the following cases:—

(1) A sues B for the price of goods sold, and to prove the debt tenders an entry in his shop-books debiting B with the goods.

(2) A sues B for the price of goods sold. B tenders evidence that A has in his books debited C and not B with the goods.

IV. By the Criminal Law and Evidence Amendment Act of 1891, every person charged with an indictable offence is competent, but not compellable, to give evidence on the hearing of such charge. Discuss the policy of this enactment.

V. Explain the meaning of the following terms:—Particulars; joinder of issue; nonsuit; common counts.

VI. What is a plea in confession and avoidance? Give instances.

VII. In what actions is it open to the defendant to pay money into Court? What courses may a plaintiff adopt after a plea of payment into Court?

VIII. Draw a declaration in an action against the proprietors of a newspaper registered as a limited company for publishing words with respect to the plaintiff which he charges impute a felony (supplying names and other particulars.)

IX. Discuss the following case:—A sues B upon the common counts for wages and work and labour, &c., B pleads never indebted and issue is joined. Shortly before the date for trial B makes an application to a Judge in Chambers for leave to add a plea of the Statute of Limitations.

X. State the principal provisions of the Claims against the Government Act.

XI. A party sued in the District Court is advised that the Court has no jurisdiction. How may he take advantage of the point?

XII. In what cases does an appeal lie from the Supreme Court to the Privy Council? State what you know of the practice regulating such appeals.

BANKRUPTCY, PROBATE AND DIVORCE.

I. What is a bankruptcy notice and by whom may it be issued? Under what circumstances may it be set aside?

II. What is a composition or scheme of arrangement, and under what circumstances is it binding on creditors?

III. How and when may a certificate of discharge be applied for, and what is its effect when granted?

IV. What effect has a sequestration order upon—

(1) A landlord's power to distrain for rent due by the bankrupt?

(2) An execution?

V. What assistance can the Court afford to an official assignee who has reason to believe that the bankrupt is concealing assets?

VI. What are the powers and duties of an executor to whom probate has been granted with reference to real estate?

VII. What are the papers and affidavits necessary to support an application for (1) probate and (2) letters of administration?

VIII. When is a creditor entitled to administration of the estate of his debtor, and what steps must he take to obtain it?

IX. What conditions are essential to the valid execution of a will?

X. A husband files a petition for a dissolution of his marriage on the grounds of his wife's adultery. What defences are open to the respondent?

XI. What is the effect of a decree of judicial separation on the status of the wife?

XII. Define and illustrate the meaning of "cruelty" as a matrimonial offence.

FACULTY OF SCIENCE.

DEPARTMENT OF ENGINEERING.

FIRST YEAR EXAMINATION.

APPLIED MECHANICS I.

Not more than SIX *questions to be attempted.*

1. A beam 20 feet long is supported at each end and loaded—
   (*a*) With a uniformly distributed load of 2000 lbs.;
   (*b*) With a load of 1000 lbs. at each quarter span;
   (*c*) With loads (*a*) and (*b*) combined.
   Compute bending moments and shears throughout, and draw to a suitable scale moment and shear diagrams.
2. A beam 1 inch square and 1 foot span breaks with a central load of 2000 lbs. What load will be needed to break a beam of the same material 4 inches deep, 2 inches wide, and 10 feet span—
   (*a*) Loaded uniformly;
   (*b*) Loaded with equal loads at the quarter spans;
   (*c*) Loaded at a point 4 feet from one end.
3. An ordinary steel rolled girder is 10 inches deep, 5 inches wide, and $\frac{1}{2}$ inch thick throughout, and its span is 12 feet. What central load will be required to break it, the resistance of the material being 60,000 lbs. per square inch.
4. Prepare a tabulated statement giving the Tensile, Compressive and Shearing strengths of the following materials—Cast Iron, Wrought Iron, Mild Steel, Ironbark Timber and Oregon Pine Timber, Brick, Sandstone, Portland Cement.

5. Describe the methods you would adopt in testing a piece of mild steel in tension, and also how you would determine accurately the following—
   (*a*) Limit of Elasticity,
   (*b*) Coefficient of Elasticity,
   (*c*) Tensile Strength,
   (*d*) Percentage of general Extension,
   (*e*) Local Extension,
   (*f*) Contraction of Area,
   (*g*) Coefficient of Quality.
6. Make sketches showing how you would design a timber beam bridge, suitable for a country road, having given the span 30 feet, width of roadway 20 feet.
7. Make sketches and calculations showing how you would design an ordinary plate web girder 40 feet span and 5 feet deep, having given the live load $1\frac{1}{2}$ tons, and the dead load $\frac{1}{4}$ of a ton per foot run.
8. Make sketches showing how you would design an ordinary roof tress for a span of 40 feet, and show how to draw the reciprocal figures for the stresses in the various members—
   (*a*) For a dead load acting vertically at the joints.
   (*b*) For a wind pressure acting horizontally.
   Assume all necessary data.
9. Investigate the equations for determining the torsional strength of a shaft, and calculate the load which would break a shaft 3 inches in diameter of mild steel if applied with a leverage of 2 feet.
10. What do you understand by the term Horizontal Shear in beams? Show how to calculate the intensity of the horizontal shearing stress in a beam at any section.

APPLIED MECHANICS II.

Not more than SEVEN *questions to be attempted.*

1. Explain carefully the conception of instantaneous motion, and define the terms *centrode* and *axode*.

"If any three bodies have relative motion in a plane, their three virtual centres are three points upon one straight line." Prove this proposition, and state (without proof) the corresponding proposition for spheric motion.

2. Indicate clearly the relationship between the four following mechanisms—
   (*a*) The lever crank.
   (*b*) The slider crank.
   (*c*) The steam engine with oscillating cylinder.
   (*d*) The elliptical compass.
3. Given a spur-wheel train consisting of three links only, show how to find its virtual centres.
4. What are the essential conditions to be fulfilled by the profiles of wheel teeth? Prove that these conditions are fulfilled by cycloidal curves, or by involute curves.
5. Describe Brown and Sharpe's method of describing involute teeth for spur-wheels. What are the advantages and disadvantages of involute as compared with cycloidal teeth?
6. What is meant by *epicyclic gearing*, and by a *reverted wheel train?* Give several examples of these, and show how to find the relative angular velocities of the last wheel and the revolving arm.
7. In the lever-crank mechanism *a*, *b*, *c* and *d* are the four links. Given the angular velocity of *a* relatively to *d*, compare the angular velocities of *a*, *b* and *c* relatively to *d*.
8. Explain, with the aid of sketches, the different modes of fracture of riveted joints. What do you understand by "the efficiency" of a riveted joint?
9. How is the diameter of the rivet dependent on the thickness of the plate for which it is intended? What diameter of rivet would you use with the following thicknesses of plate—$\frac{1}{4}''$, $\frac{5}{8}''$, $1''$?

GEOMETRICAL DRAWING.

Not more than SIX *questions to be attempted.*

1. Draw the involute of a circle of $2''$ diameter.

2. Two planes are mutually perpendicular; one of them is inclined to the horizontal plane at 60°, and their intersection is inclined at 50°. Show the planes by their traces.

3. Draw the plan and elevation of a cube of 3 inches side, having given the inclinations of the plane of two of its adjacent faces 30° and 80° respectively.

4. Show how to construct an isometric scale, and draw the isometric projection of a rectangular slab with an elliptical hole in it.

5. Draw the plan and elevation of the intersection of a hexagonal pyramid with a sphere. The pyramid to stand on the horizontal plane, and to pierce the sphere unsymetrically. Assume all necessary data.

6. Show how to draw a tangent plane to a sphere through a given straight line.

7. Draw accurately a double square-threaded screw, 3 inches in diameter, showing a complete turn of each thread. Pitch, $1\frac{1}{2}$ inches.

8. Make a perspective drawing of a flight of five steps, 12 feet long and one foot square. Assume all necessary data.

MATHEMATICS.

The same papers as those set in the First Year of the Faculty of Arts.

SECOND YEAR EXAMINATION.

APPLIED MECHANICS I.

MECHANISM AND MACHINERY.

Not more than SEVEN *questions to be attempted.*

1. Explain carefully the conception of instantaneous motion. Indicate clearly the relationship between the four following mechanisms—
   (*a*) The lever-crank
   (*b*) The slider-crank
   (*c*) The steam engine with oscillating cylinder
   (*d*) The elliptical compass.
2. What are the essential conditions to be fulfilled by the profile of wheel teeth? Prove that these conditions are fulfilled by involute curves. What are the advantages and disadvantages of involute as compared with cycloidal teeth?
3. In the lever-crank mechanism *a*, *b*, *c*, *d* are the four links. Given the angular velocity of *a* relatively to *d*, compare the angular velocities of *a*, *b* and *c* relatively to *d*.
4. Make a neat sketch of Joy's valve gear, and find the virtual centres which are necessary for the determining of the driving effort from the known valve resistance. What are some of the advantages claimed for this particular form of gear?
5. Explain in detail the various steps to be taken in order to construct an exact curve of twisting moments, when you are provided with a pair of indicator diagrams, and the necessary data concerning weights and dimensions.
6. What were the defects of Watts' original pendulum governor? Explain the meaning of the following terms as applied to the governor of a steam engine—Height, sensitiveness, stability, isochronism, powerfulness, "hunting."
7. Explain fully how you would proceed in order to determine the weight of the fly-wheel for a given fluctuation of speed.

8. Supply rules for computing the horse power that can be transmitted by shafts and belts. Describe by means of sketches at least two forms of ordinary shaft couplings and one form of friction coupling.

9. Make sketches of any good form of hydraulic hoist showing cylinder, packing, piston, pulleys, &c.

Show how you would calculate the diameter of the cylinder, and that of the lifting and lowering valves, for a given pressure.

APPLIED MECHANICS II.

Not more than SEVEN *questions to be attempted.*

1. Describe the Newcomen engine as used for pumping during the first half of the 17th century, and explain the steps taken by James Watt which led to the production of the modern steam engine.

2. What are some of the advantages of the entropy-temperature diagram as compared with the pressure-volume diagram?

Draw both descriptions of diagram for the following cases—

(*a*) The Carnot cycle

(*b*) A steam engine working without expansion

(*c*) An engine using superheated steam.

3. Show how to draw up a table of the properties of saturated steam. Explain carefully the meaning, and the method of computation, of the quantities in each column of the table, and if possible give approximately the figures for one or two steam pressures.

4. What is meant by the expression "cylinder condensation?" Describe briefly the effect which the various conditions of working have upon its amount.

Neglecting radiation losses, does all the steam which enters the cylinder *as steam* leave it as such?

5. Describe, with the aid of detail sketches, a Lancashire boiler and its setting.

6. "The use of the steam-jacket is a violation of a fundamental law of maximum efficiency of heat engines which requires that they should receive all their heat at the maximum and give it out at the minimum temperature. . . . .

It is a necessary evil justified only by the conditions affecting the use and the construction of the engine."

Discuss this statement fully.

7. Describe the cycle of operations in the Stirling hot-air engine, and explain how the use of the regenerator makes the cycle one of maximum efficiency.

8. Show by means of equations and graphical construction the methods of determining the curves of the guide-blades and wheel vanes of a Jonval Turbine.

9. Make diagram sketches of a reversed Joule Engine or dry-air refrigerating machine; also of a machine which depends upon the principle of evaporation and compression of a volatile liquid.

Explain clearly why the former is inferior to the latter.

10. Explain by means of sketches the three-wire system of distribution of electricity for tramways and other motors. Compare its advantages with the ordinary two-wire system.

11. Describe briefly, giving sketches, the characteristic features of the following Electrical Machines—

(*a*) Monophase Alternator
(*b*) Three-phase Alternator
(*c*) Synchronous Motor
(*d*) Rotary Transformer
(*e*) Statical Transformer.

12. Describe any system of electrical power distribution which you have read of, where continuous currents are used; also where alternating currents are used.

APPLIED MECHANICS III.

HONOURS.

Not more than FOUR *questions to be attempted.*

1. Write a short essay on the present position of the theory of the steam engine, illustrating it by the consideration of the various questions which would arise in designing an engine to produce 200 effective horse power with the least annual outlay of capital (including first cost).

2. Make a neat sketch of a modern form of gas engine, discuss its action fully, and give numerical particulars as to its performance. Under what circumstances would you recommend the equipment of a power station with gas or oil engines? If possible illustrate your remarks by reference to any actual stations so equipped.

3. It is required to supply alternating current of 2,000 volts and 400,000 watts for electric lighting. Give as many particulars as you can of the boilers, engines, and electrical appliances in the power-house or generating station which you consider suitable for the purpose, the current required being at its maximum for about five hours, and averaging one-fourth of its maximum for the rest of the 24 hours.

4. It is required to deliver 1,000 indicated horse power to a distance of two miles from the generating station. Compare the advantages, giving estimate of cost, of transmitting this power by means of—

   (*a*) Rope-driving

   (*b*) Compressed Air, with and without heating apparatus at the motors

   (*c*) Electricity.

   Describe briefly the plant you would use in each case.

5. A stream supplies 150 cubic feet of water per second falling 60 feet. Propose a scheme for utilizing this power for arc or incandescent lamps at a distance of two miles from the main station. Describe the various machines and appliances that you would use, and give numerical particulars.

6. Describe briefly, giving sketches where necessary, the characteristic features and uses of the following:—

   (*a*) Synchronous motor
   (*b*) Induction motor
   (*c*) Rotary transformer
   (*d*) Statical transformer.

APPLIED MECHANICS IV.

MACHINE DESIGN AND DRAWING.

(*Not more than* TWO *questions to be attempted.*)

1. Make a neat drawing of a boiler of the type illustrated by the experimental boiler in the laboratory, having given the

following dimensions:—Length overall, 11 ft.; length of tubes, 6 ft.; diameter of boiler, 33 in.; gauge pressure, 150 lbs. per square inch.

2. Make a detailed drawing of an hydraulic accumulator to store up 1,000-foot tons at a pressure of 1,000 lbs. per square inch.

3. Draw a section through the cylinder and valves of an engine fitted with Myers' gear, having given the following dimensions:—Stroke, 14 in.; diameter of cylinder, 10 in. Illustrate the action of the gear by means of Zeuner's diagram.

4. Draw a section through the pump cylinder of a Worthington steam pump.

SURVEYING.

THREE *questions in each section to be attempted.*

I.

1. Given a line in position, and of known length, it is required to fix therefrom the position of a point. In how many ways may this be done? What instruments would be used? How can accuracy be secured? and what generally are the conditions governing survey practice in such cases?

2. The length of a line has to be ascertained certainly to within $\frac{1}{100,000}$ part. What precision would be requisite on the lineal measurement in respect of alignment, both (*a*) horizontal and (*b*) vertical, (*c*) temperature, (*d*) sag-correction, and in respect of (*e*) standard, supposing the error in each case to be equal in amount and of the same size? Assuming that the errors in (*a*), (*b*), (*c*), (*d*) and (*e*) are kept within the limit so found, state what the order of precision would probably be.

3. How would you measure with accuracy any angle, and set out any given angle, treating specially the cases of angles of 45°, 60° and 90°, supposing in the latter instances the graduation of the instrument to be quite unreliable?

4. Write an essay on the measurement of earthworks and volumes generally.

5. How can a survey be made by photogrammetry? Sketch out the principle of the surveying camera, and show how from the photographs taken by it the features of a country can be delineated, both in plan and elevation.

6. What is the advantage of a thorough system of coördinated survey based upon a triangulation, both as regards the field work and preparation of maps?

II.

7. With an available head of 4 feet on the centre of an orifice it is required to discharge 1,200 cubic feet per minute. What would be the necessary size of the orifice, supposing it (*a*) to be of standard form, (*b*) or to have several forms of adjutages?

8. What are the circumstances of flow in regular channels, and how may their discharges be gauged? State several ways in which this may be done, and discuss any instruments you propose to use.

9. Under certain circumstances it is possible for the flow in a pipe to first become unsteady and then to be greatly reduced in amount. Shew how this may occur, and what could be done to avoid it. Also state how you would obtain the maximum flow in any pipe of given length.

10. How can gauging be effected by means of weirs and overfalls? What advantages has a triangular notch over a rectangular? Shew how the theoretical form of the weir formula may be derived from the theory of flow through orifices.

11. How would you deal with the question of erecting a dam to raise the level of a stream? Deal with the two cases, viz., (*a*) where the height of the dam is greater than the original depth; (*b*) when it is less than the original depth of the stream.

CIVIL ENGINEERING I.

HYDRAULIC ENGINEERING.

The same paper as that set in the Third Year Examination.

MATHEMATICS.

HONOURS.

The same papers as those set in the Second Year in the Faculty of Arts.

THIRD YEAR EXAMINATION.

CIVIL ENGINEERING I.

HYDRAULIC ENGINEERING.

FOR CIVIL ENGINEERING AND MINING STUDENTS.

Only SIX *questions to be attempted.*

1. Describe and illustrate by means of sketches the system of constructing large earthwork dams. State the precautions which would be necessary to ensure water-tightness at the junction with the sides of the valley, and show how you would design the "waste-weir," "bye-wash," and the outlet works.
2. Describe and illustrate by sketches the method of constructing an ordinary sand filter bed. What is the average rate of filtration? Name the various materials other than sand which have been used for the filtration of water, and compare them with sand in cost and efficiency.
3. Show how you would design an open water conduit on a grade of 1 in 50, semicircular in cross section, 8 feet in diameter, in average ground. Write a specification for the materials used in lining and the building of the conduit.
4. Make sketches showing how you would arrange the sub-soil and house drainage in a large suburban residence built upon a clay formation. Show details of the connections for baths, lavatory, W.C.'s, sinks, gulleys, &c., such as would be approved by the Water and Sewerage Board. Assume the main sewer to be situated conveniently to the residence.
5. Explain, with the aid of sketches, how you would carry a sewer or a water course over a wide valley at a height of say 100 feet above it in the deepest part. Write a specification to govern the quality of the materials used, and mention any precautions which are likely to be necessary in the construction of the works.

6. Write a short description of Mr. Stoney's method of constructing quay walls with concrete blocks.
7. Write an essay on pile-driving, giving the various methods which have been adopted for driving piles, and the formulæ for calculating their safe bearing pressure.
8. Write a description of the methods employed in building large bridge piers, and give a few examples.
9. Describe and illustrate by sketches the Worthington Pumping Engine as used in the Crown Street Waterworks, and explain fully the High Duty attachment.
10. Write a specification for the following materials—
    (*a*) Concrete for filling 100-ton bags for breakwaters.
    (*b*) Concrete for a retaining wall.
    (*c*) Stone for bridge abutments, giving tests.
    (*d*) Bricks for sewer construction, giving tests.
11. Give an account of the theory of wave motion, and the force exerted by waves with especial reference to the construction of breakwaters.

CIVIL ENGINEERING II.

HYDRAULIC AND RAILWAY ENGINEERING.

HONOURS.

Only FIVE *questions to be attempted.*

1. Write an essay on one of the following subjects—
    (*a*) The block system as applied on the New South Wales railways.
    (*b*) The Westinghouse automatic quick-acting brake as applied to freight trains.
    (*c*) The characteristic features of the construction of light railways to act as feeders to main trunk lines.
    (*d*) The location of railways in mountainous countries, giving examples.
    (*e*) The removal of bars at the mouths of rivers such as the Clarence and Richmond in New South Wales.

2. A railway embankment crosses a stream which drains an area of 400 square miles approximately square in shape, which in times of flood may be assumed to deliver one-half of the rainfall to the stream. The fall of the land towards the embankment is about 1 in 100.

   Calculate the area of the bridge opening which would be capable of discharging a rainfall of one inch per hour falling for six hours.

   (*a*) Using formulæ.

   (*b*) On first principles without using formulæ.

3. Describe fully the various steps you would take, and the plant you would use in order to line a tunnel with cement concrete. Write a specification for the supply of the materials and the mixing of the concrete.

4. A railway, 50 miles long with 15-chain curves, is estimated to cost £12,000 per mile. By sharpening the curves to 10 chains a saving of £2000 per mile in earth-works and culverts may be effected, but the line is lengthened six miles.

   The annual cost of maintenance is £60 per mile, the train expenses 4s. per mile, in each case neglecting the effect of curvature, and the receipts 6s. per mile. Show the relative advantages of the two routes, assuming five trains per day in each direction.

5. A railway 50 miles long, with a ruling grade of 1 in 50, is estimated to cost £10,000 per mile. By lengthening the line 6 miles and increasing the cost to £11,000 per mile, the ruling grade can be reduced to 1 in 60. Assuming the expenses and receipts for the 1 in 50 grade as given in the last question, show the relative advantages of the two routes and the methods of grading for 5 trains per day as before.

6. Make a sketch cross section of the standard permanent way of the New South Wales railways. Also sketch an earth road bed as used on some pioneer railways. Write a short specification for the steel rails used, giving chemical composition and mechanical tests.

7. Describe generally and illustrate by sketches the construction of a tunnel in heavy ground. State the considerations

which would influence you in deciding whether a top or bottom heading should be driven, and the method of procedure in connection with the mining and lining of a length.

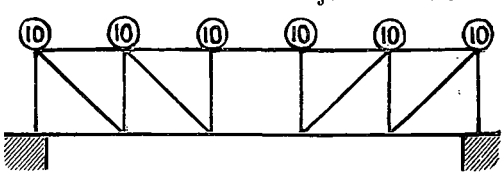
MATERIALS AND STRUCTURES I.

FOR CIVIL AND MINING ENGINEERS.

PASS.

Not more than FIVE *questions to be attempted, of which the* FIRST *must be included.*

1. Write a specification to govern the supply of the following materials—
   (*a*) Cast Iron for columns in a building,
   (*b*) Mild Steel for Bridges and for Boilers,
   (*c*) Portland Cement for Concrete Retaining Walls,
   (*d*) Stone for the abutments and piers of bridges,
   (*e*) Bricks and Mortar for abutments and piers of bridges.
   (*f*) Timber for pile foundations and for beams and floors of bridges.
2. Determine the stresses in the subjoined frame—



Angle of bracing 45°.

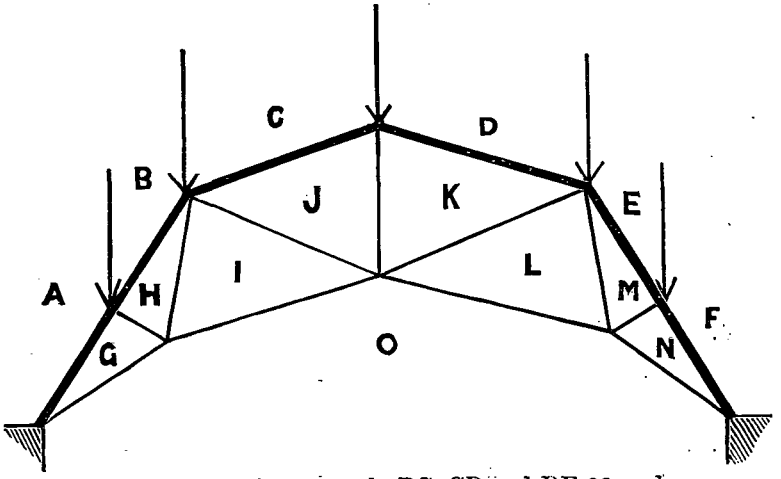
3. Assuming the three left-hand loads were increased to 20 each, determine the stresses. State whether the frame is suited to endure them without modification, and, if not, suggest the required modification.
4. What sections and dimensions would you recommend for the various parts of the above frame, with loads as in question 2, the material being mild steel, the span 25 feet, and the loads tons?
5. Write a short essay on the strength of columns, illustrating the same by diagrams.

6. Discuss as fully as you can the proportions of eye-bars and their connecting pins. What advantages have they as tension members of bridge and roof frames?
7. Give all the information you can on the subject of wind pressure and its effect upon engineering structures.
8. A reservoir wall is 10 feet high, 2 feet thick at top, and 6 feet at bottom, its inner or wet face being vertical. Discuss its stability fully, the material weighing 150 lbs. per cubic foot.
9. A continuous beam of three equal spans carries a uniformly distributed load. Determine the magnitude and distribution of bending moment and shear, and show how it will be modified by cutting the beam into three separate beams.

MATERIALS AND STRUCTURES II.

Not more than FIVE *question to be attempted.*

1. Determine the stresses on the various bars of the subjoined truss—



AB and EF being 10 each, BC, CD and DE 23 each.

2. A strut in a steel bridge consists of a girder section 10 inches by 5 inches by $\frac{1}{2}$ inch, 25 feet long, fixed at the ends, and braced at the centre by a T iron, the direction of which is in the plane of the web of the strut. Compute its strength and criticise the arrangement.
3. A suspension bridge consists of two land spans of 100 feet each, and a centre span of 200. All these spans have stiffening girders, connected to the main cables by numerous vertical rods. Explain carefully how you would determine the stresses on the various parts under dead and live loads, giving all necessary formulæ.
4. Determine the central deflection of the truss in question 1, the span being 36 feet, the material mild steel, and the stress 12,000 lbs. per square inch.
5. Make an outline-sketch of a Pratt Truss suitable for a railway bridge carrying a single line of rails, and show how you would determine the stresses in one panel by Mr. Theodore Cooper's concentrated load system, assuming all necessary data.
6. Write an essay on the Monier System of Construction, and explain fully how you would design a Monier beam to carry a given load.
7. Explain fully by means of sketches and equations how you would design a concrete reservoir dam for a height of 100 feet, assuming all necessary data.
8. Make an outline sketch of a modern swing bridge, and show how to calculate the stresses in one panel.

MATERIALS AND STRUCTURES III.

HONOURS.

1. Describe fully the methods of calculating the stresses in an arched rib, hinged at the springing and partially loaded, and make detail sketches showing how you would construct the rib and the method of attaching it to the abutments.
2. Investigate the equations of bending moments, shear, slope, and deflection in a continuous girder of two spans, loaded with two concentrated loads on each span.

3. Write an essay on the design of modern swing bridges for road and railway traffic, and give sketches of one good example.
4. Make a sketch of a Pratt truss suitable for a railway bridge of 150 ft. span, and show how you would determine the stresses by means of Mr. Theodore Cooper's concentrated load system.
5. Referring to the last question, explain fully how you would calculate the deflection of the truss when it is loaded equally at the panel points.

SURVEYING.

SIX *questions to be attempted. Students in Mining Engineering must include* THREE *questions of Section II.*

I.

1. Indicate how hydrographic surveying is carried out. What are the vulgar and corrected establishments of a port?
2. Write an essay on tidal theory and its application to hydrographic surveying; and state what are the objects of the harmonic analysis.
3. How may the complete barometric theory be simplified in the case of the aneroid? What are the limitations of barometric hypsometry, and why in general does it not give measures of height comparable in precision to the possibilities of precision in pressure measurement?
4. How may longitude be ascertained from the measurement of lunar distances? Give a complete account of the method.
5. Show how the convergence of meridians may be computed for a spheroidal earth, and why on such a figure the trace of a line on the surface, determined by the section of a vertical plane through A containing a second point B, is not the minimum distance on the surface.
6. Discuss the correction of a triangulation so as to eliminate the unavoidable errors of observation.
7. How would you find the meridian line with great accuracy?
8. How, in finding latitude, may instrumental errors be reduced to a minimum? State how you would endeavour to get the best possible results, say, with geodetic transit-theodolites.

9. How is a triangulation carried out practically?
10. Write an essay on base-line measurement.

II.

11. What are the distinctive features of mining and underground surveying generally? How is accuracy obtained? and how would you ensure all your bearings being accurately related to the initial surface meridian?
12. Write an essay on underground surveying (*a*) with the miner's dial and chain; (*b*) with the ordinary theodolite and chain.
13. Give graphic methods for determining the strike and dip of veins, the direction and dip of intersecting veins, and similar problems of mining surveying.
14. The relation between two points A and B is determined by accurate survey over a mountain of unsymmetrical section. Afterwards in tunnelling through the mountain from A to B, what difference would exist in the levels of these points, and in their distance, as found by going over the hill and by going through it?

MATHEMATICS.

HONOURS.

The same papers as those set in the Third Year in the Faculty of Arts.

*MATRICULATION EXAMINATION.

LATIN.

PASS.

1. Translate into English, extracts from Livy, Book II.

2. Translate and explain—

   (*a*) Ante omnes de provocatione adversus magistratus ad populum sacrandoque cum bonis capite eius, qui regni occupandi consilia inisset, gratae in vulgus leges fuere.

   (*b*) Ardens igitur ira tribunus viatorem mittit ad consulem, consul lictorem ad tribunum, privatum esse clamitans, sine imperio, sine magistratu.

3. Translate into English—

   Ubi haec fremere militem in castris consul sensit, contione advocata, "Quemadmodum" inquit "in Algido res gesta sit, arbitror vos, milites, audisse. Qualem liberi populi exercitum decuit esse, talis fuit; consilio collegae, virtute militum victoria parta est. Quod ad me attinet, id consilii animique habiturus sum, quod vos mihi feceritis. Et trahi bellum salubriter et mature perfici potest. Si trahendum est, ego, ut in dies spes virtusque vestra crescat, eadem, qua institui, disciplina efficiam; si iam satis animi est decernique placet, agite dum, clamorem, qualem in acie sublaturi estis, tollite hic indicem voluntatis virtutisque vestrae."

4. Translate into Latin—

   (*a*) The prayers of the Senate could not induce Appius Claudius to yield to the threats of the plebs.

   (*b*) If you hope to conquer you must fight as bravely as you can and resist all the attempts of the enemy.

   (*c*) If they had known that their strength would be broken by treachery, they would have used more prudent plans.

* NOTE.—The time allowed for each paper is three hours, except where otherwise stated.

(*d*) At length, upon the fifth day, Xerxes ordered a chosen body of Medes to advance against the presumptuous foes and bring them into his presence. Remembering their former glory as the masters of Asia, and anxious to avenge their defeat at Marathon, the Medes fought with bravery; but their superior numbers were of no avail in such a narrow space, and they were kept at bay by the long spears and steady ranks of the Greeks. After the combat had lasted a long time with heavy loss to the Medes, Xerxes ordered his ten thousand "Immortals" to advance. But they were equally unsuccessful.

GREEK.

PASS.

Candidates must answer either A and C, or B and C. No candidate is to answer both A and B.

A.—Xenophon, Hellenica, Book I.

1. Translate extracts from Xenophon, Hellenica, Book I.
2. Explain προσεκαλέσαντο παράνομα φάσκοντες συγγεγραφέναι. In what respect were the proceedings against the generals in command at Arginusae illegal?

B.—Plato, Apologia and Crito.

1. Translate extracts from Plato, Apologia and Crito.
2. How does Socrates in the Apologia account for the feeling against him?

C.

1. Translate into Greek—
   (*a*) News was brought to him that he had been banished by the people in his absence.
   (*b*) If I win the victory, I shall make peace between the Greeks and the Persians.
   (*c*) Whether it is better to live or to die, no one but God can tell.
   (*d*) If he had been willing to disobey the law, he would have escaped.

GERMAN.

PASS.

1. Translate into English extracts from Freytag, Die Journalisten.
2. (*a*) Write out in full the imperative and the past subjunctive of the underlined verbs in the above passages—*vergass, geben, nahm, streicht, schreiben, bringe.*

   (*b*) Give the genitive singular and nominative plural of the following words: *Art, Herz, Haupt, Graf, Wort, Bett.*

   (*c*) Translate—Let him go. Will you let him go? I have let him go. I have not let him go.

   (*d*) Translate into idiomatic German—Bring me another cup of tea and a glass of warm water. How long have you been in Sydney? I am a foot and a half taller than you. —You are a good little child.

3. Translate into German—

   (*a*) At half-past six in the morning the soldiers had breakfast, and by eight were ready for the battle. The general made a short speech to his officers. He told them that they were fighting not for conquest or revenge, but for their honour, their families and their country. "Though we are few in numbers," he said, "we have right on our side. Much depends on our behaviour to-day and I am sure no soldier of mine will shame his flag."

   (*b*) Louis the Fifteenth treated his daughters with great unkindness and indignity. These poor ladies never saw him except for a few minutes on his return from the hunt, when he expected them to be in attendance, and gave them a hurried embrace. Otherwise they were quite neglected, and had no amusement but needlework, and the books read to them by their ladies. But they were kind-hearted women, much loved by their attendants, and by the little nephews and nieces, who sometimes enlivened them. The second daughter entered a convent, where she had a much more cheerful life than in the palace.

4. Translate—

   (*a*) Es war noch ſehr früh, als ich Göttingen verließ. Vor dem Thore begegneten mir zwei eingeborne kleine Schulknaben, wovon der eine zum andern ſagte: „Mit dem Theodor will ich gar nicht mehr umgehen, er iſt ein Lumpenkerl, denn geſtern wußte er nicht

(*d*) At length, upon the fifth day, Xerxes ordered a chosen body of Medes to advance against the presumptuous foes and bring them into his presence. Remembering their former glory as the masters of Asia, and anxious to avenge their defeat at Marathon, the Medes fought with bravery; but their superior numbers were of no avail in such a narrow space, and they were kept at bay by the long spears and steady ranks of the Greeks. After the combat had lasted a long time with heavy loss to the Medes, Xerxes ordered his ten thousand "Immortals" to advance. But they were equally unsuccessful.

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   (*c*) Whether it is better to live or to die, no one but God can tell.
   (*d*) If he had been willing to disobey the law, he would have escaped.

(*e*) Those who went away from the city were more in number than those who remained in it.

2. Translate into English—

'Αχιλλέως ἀποθανόντος ὑπὸ Ἕκτορος ἐν τῇ μάχῃ, οἱ μὲν Τρῶες ἐπηυλίσθησαν ἐγγὺς τῶν νεῶν, ὡς φυλάξοντες τοὺς 'Αχαιούς· ὑπώπτευον γὰρ αὐτοὺς ἀποφεύξεσθαι τῆς νυκτός· ὁ δὲ Ἕκτωρ ἀνεχώρησεν εἰς τὴν πόλιν παρά τε τοὺς γονέας καὶ τὴν γυναῖκα, χαίρων τοῖς πεπραγμένοις, ἐπὶ τοῦ στρατεύματος καταλιπὼν Πάριν. ὁ δ' αὐτός τε καὶ τῶν Τρώων τὸ πλῆθος ἐκάθευδεν, ὡς εἰκὸς ἦν κεκοπωμένους καὶ οὐδὲν προσδεχομένους κακόν. ἐν τούτῳ δὴ οἱ τῶν 'Αχαιῶν στρατηγοὶ βουλευσάμενοι σιωπῇ καθείλκυσαν τῶν νεῶν τὰς πολλάς· ταῦτα δὲ ποιήσαντες ἀπέπλευσαν εἰς τὴν χερρόνησον, τῶν κτημάτων πολλὰ καταλιπόντες. ἅμα δὲ τῇ ἡμέρᾳ φανεροῦ γενομένου τοῦ πράγματος, ὁ μὲν Ἕκτωρ ἠγανάκτει καὶ τὸν Πάριν ἐλοιδόρει· ἔφη γὰρ τοὺς πολεμίους αὐτὸν ἐκ τῶν χειρῶν ἀφεῖναι· τὰς δὲ σκηνὰς ἐνέπρησαν οἱ Τρῶες καὶ διήρπαζον τὰ καταλειφθέντα.

ἐπαυλίζεσθαι, to encamp on the field; κόπος, weariness; ἀγανακτεῖν, to be vexed.

FRENCH.

PASS.

The answers are to be given up in two separate bundles, and marked clearly A and B. Answers given up in the wrong bundle will receive no marks. Each sheet must be clearly marked with the letter A or B.

A.

1. Translate into English extracts from Racine, Les Plaideurs.
2. (*a*) Write out in full the Present, the Past Definite, and the Past Indefinite of the underlined verbs in the above passages: (*battre, dis, prétends, pronouncer, juger, sortir*).

   (*b*) Distinguish between the use of the Imperfect and the Past Definite.

   (*c*) When is *feu* inflected.

   (*d*) Write down the plural of the following compound nouns, and in each case explain the rule:—*Petit-maître, arc-en-ciel, avant-coureur, passe-partout.*

B.

3. Translate into French—

(*a*) It is to-day the 30th of April, but I shall not send away this letter till the 1st of May. When you receive it, it will be summer with you but winter with us. Here, however, it is never very cold. We seldom wear great coats and we always have flowers. I remember how it used to snow in England. In the country the roads were sometimes buried a foot and a half deep. But I don't know how long it is since I have seen any snow at all.

(*b*) Several French gentlemen called on me two days ago, and when the name of Cervantes was mentioned in our conversation, broke out in praise of his books. They asked me about his age, his profession, his rank and fortune. I told them that he was an old man, a soldier, a gentleman, and very poor. One of them cried, "But does not Spain keep such a man rich, and supported at the public expense?" Another interrupted, saying very acutely, "If it is poverty that makes him write, may he never have abundance, so that, poor himself, he may make the whole world rich."

4. Translate (at sight)—

(*a*) Ecoutez, je vous prie, une chose qui est, à mon sens, fort belle: il me semble que je lis l'histoire romaine. Saint-Hilaire, lieutenant-général de l'artillerie, fit prier M. de Turenne, qui allait d'un autre côté, de se détourner un instant pour venir voir une batterie; c'était comme s'il eût dit: Monsieur, arrêtez-vous un peu, car c'est ici que vous devez être tué. Un coup de canon vient donc, et emporte le bras de Saint-Hilaire, qui montrait cette batterie, et tue M. de Turenne; le fils de Saint-Hilaire se jette à son père, et se met à crier et à pleurer. *Taisez-vous, mon enfant,* lui dit-il; *voyez* (en lui montrant M. de Turenne roide mort), *voilà ce qu'il faut pleurer éternellement, voilà ce qui est irréparable;* et sans faire nulle attention sur lui, se met à crier et à pleurer cette grande perte.

(*b*)

S'il est un charmant gazon
Que le ciel arrose,
Où brille en toute saison
Quelque fleur éclose,
Où l'on cueille à pleine main
Lis, chèvrefeuille et jasmin,
J'en veux faire le chemin
Où ton pied se pose!

GERMAN.

PASS.

1. Translate into English extracts from Freytag, Die Journalisten.
2. (*a*) Write out in full the imperative and the past subjunctive of the underlined verbs in the above passages—*vergass, geben, nahm, streicht, schreiben, bringe.*

   (*b*) Give the genitive singular and nominative plural of the following words: *Art, Herz, Haupt, Graf, Wort, Bett.*

   (*c*) Translate—Let him go. Will you let him go? I have let him go. I have not let him go.

   (*d*) Translate into idiomatic German—Bring me another cup of tea and a glass of warm water. How long have you been in Sydney? I am a foot and a half taller than you. You are a good little child.
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   (*a*) At half-past six in the morning the soldiers had breakfast, and by eight were ready for the battle. The general made a short speech to his officers. He told them that they were fighting not for conquest or revenge, but for their honour, their families and their country. "Though we are few in numbers," he said, "we have right on our side. Much depends on our behaviour to-day and I am sure no soldier of mine will shame his flag."

   (*b*) Louis the Fifteenth treated his daughters with great unkindness and indignity. These poor ladies never saw him except for a few minutes on his return from the hunt, when he expected them to be in attendance, and gave them a hurried embrace. Otherwise they were quite neglected, and had no amusement but needlework, and the books read to them by their ladies. But they were kind-hearted women, much loved by their attendants, and by the little nephews and nieces, who sometimes enlivened them. The second daughter entered a convent, where she had a much more cheerful life than in the palace.
4. Translate—

   (*a*) Es war noch ſehr früh, als ich Göttingen verließ. Vor dem Thore begegneten mir zwei eingeborne kleine Schulknaben, wovon der eine zum andern ſagte: „Mit dem Theodor will ich gar nicht mehr umgehen, er iſt ein Lumpenkerl, denn geſtern wußte er nicht

mal, wie der Genitiv von mensa heißt." So unbedeutend diese Worte klingen, so muß ich sie doch wieder erzählen, ja, ich möchte sie als Stadt-Motto gleich auf das Thor schreiben lassen; denn die Jungen piepsen, wie die Alten pfeifen. Auf der Chaussee wehte frische Morgenluft, und die Vögel sangen gar freudig, und auch mir wurde allmählich wieder frisch und freudig zu Mute. Eine solche Erquickung that not. Auf der Landstraße fing es schon an lebendig zu werden. Milchmädchen zogen vorüber; auch Eseltreiber mit ihren grauen Zöglingen. Dann und wann rollte auch ein Einspänner vorüber, wohlbepackt mit Studenten, die für die Ferienzeit oder auch für immer wegreisten. In solch einer Universitätsstadt ist ein beständiges Kommen und Abgehn, alle drei Jahre findet man dort ein neue Studentengeneration.

(*b*) Hähnchen sprach zum Hühnchen: „Jetzt ist die Zeit, wo die Nüsse reif werden; da wollen wir zusammen auf den Berg gehen und uns einmal recht satt essen, ehe sie das Eichhorn alle wegholt." —„Ja," antwortete das Hühnchen, „komm, wir wollen uns einen lustigen Tag mit einander machen." Da gingen sie zusammen fort auf den Berg, und weil es ein heller Tag war, blieben sie bis zum Abend. Nun weiß ich nicht, ob sie zu viel gegessen hatten, oder ob sie übermütig geworden waren,—kurz sie wollten nicht zu Fuß nach Haus gehen, und das Hähnchen mußte einen kleinen Wagen von Nußschalen bauen.

ARITHMETIC.

PASS.

1. Find the smallest number that must be added to eight million two hundred and fifty thousand and one, so that the sum may be exactly divisible by eighty-seven thousand nine hundred and twenty-five.
2. Find the value of 22 tons 12 cwt. 3 qrs. 10 lbs. at £4 4s. a ton.
3. Find the H.C.F. and L.C.M. (in factorial form) of 461131 and 765187.
4. If 1853 metres = 1·1507 miles, express a metre in inches.
5. Find the square root of 810 correct to four places of decimals.
6. What is the difference between the true discount and the commercial discount on £876 for 117 days, at 4 per cent. interest (simple)?

7. What is the present value of £125 due five years hence, at $3\frac{1}{2}$ per cent. compound interest?

8. Minute guns are heard at intervals of 58 seconds. If sound travels at the rate of 1147 feet a second, at what rate in miles per hour is the observer approaching the gun?

9. A bankrupt's estate amounts to £910 3s., and his debts are £1875. If the cost of realising the estate is 5 per cent. of the assets, how much will a creditor lose on a debt of £228?

10. A man has 4 per cent. stock which is quoted in the market at $133\frac{3}{8}$. He sells out and re-invests in 3 per cent. stock. Owing to brokerage, $\frac{1}{8}$ per cent. on the face value of the stock, being charged on both transactions, he finds his income is unaltered. At what price is the 3 per cent. stock quoted?

11. An importer sells goods to a merchant at 10 per cent. profit; the merchant to a shopkeeper at 15 per cent. profit; the shopkeeper to his customer at 20 per cent. profit but allows 5 per cent. discount for cash. What is the importer's cost price for goods for which the customer pays £14 8s. 5d. cash?

ALGEBRA.

PASS.

1. Divide x^4+y^4 by $x^2+xy\sqrt{2}+y^2$.

2. Simplify $\left\{\frac{a+b}{a-b}+\frac{a^2+b^2}{a^2-b^2}\right\}\div(a^3-b^3)$.

3. If each of two numbers is added to the square of the other, the difference of the results, divided by the difference of the original numbers, is less by unity than the sum of the original numbers.

4. Reduce to its lowest terms

$$\frac{6(x^3+y^3)+xy(x-8y)}{6(x^3+y^3)+xy(3x-5y)}$$

5. If $x+y+z=0$, prove that

$$(x+y)(x^2+xy+y^2)+(y+z)(y^2+yz+z^2)+(z+x)(z^2+zx+x^2)=0.$$

6. Resolve the following into simple factors, and hence find their L.C.M. in factorial form

$$x^2(x+1)^2-2x(x+1),$$
$$(x^2+3x)^2-2(x^2+3x)-8.$$

7. Solve the equations

(i.) $\frac{1}{x-1}+\frac{6}{2x-1}=\frac{12}{3x-1}$

(ii.) $2x+\frac{2}{y}=8-x=30-9x-\frac{5}{y}$

(iii.) $(a+b)x^2+(b+c)x+c=a.$

8. The area of a certain rectangle is equal to that of another rectangle, formed by lengthening two sides by $2a$, and shortening the two other sides by a. Prove that the sides of the one rectangle must be respectively double and half the sides of the other.

9. A persons sells a acres more than p^{th} part of his estate, and there remain b acres less than the q^{th} part. Prove that his estate originally was $pq(a-b)\div(pq-p-q)$ acres.

GEOMETRY.

PASS.

1. Define a plane superficies, a right angle, a segment of a circle, and write out all the definitions relating to triangles.

2. Draw a straight line perpendicular to a given straight line of unlimited length, from a given point without it.

3. From a given point without a given straight line, draw a line making an angle with the given line equal to a given rectilineal angle.

4. If a straight line fall upon two parallel straight lines, &c. Complete the enunciation and prove the proposition.

5. Describe a parallelogram that shall be equal to a given triangle, and have one of its angles equal to a given rectilineal angle.

6. ABCD is a quadrilateral having AB parallel to CD, and AB, CD are bisected in E and F. Shew that AEFD is equal to BCFE in area.

7. If a straight line be divided into any two parts, the square on the whole line is equal to the squares on the two parts together with twice the rectangle contained by the two parts.
8. Describe a square equal to a given rectilineal figure.
9. The diameter is the greatest straight line in a circle, and of all others that which is nearer the centre is always greater than one more remote, and the greater is nearer the centre than the less.
10. A segment of a circle being given, describe the circle of which it is a segment.

[*The four Honour papers which follow were set in November*, 1897, *in addition to those set for the Senior Public Examination and Matriculation Honour Examination conjointly, which are printed in the Manual of Public Examinations.*]

GENERAL PAPER—LATIN.

ONE HOUR AND A HALF.

HONOURS.

1. "So far as the office of the historian is to investigate facts, Livy falls short of any respectable ideal."
   Comment on this statement.
2. Give an account of Ennius.
3. "Virgil may seem to us to force himself (especially in the later books) into material not well adapted to the distinctive Virgilian treatment."
   Discuss this.
4. "Roman prose always retained a rhetorical colour in accordance with the Roman character."
   Comment on this.
5. Scan the following lines and comment on any metrical peculiarities :—
   (*a*) Sceptra Palatini sedemque petit Evandri.
   (*b*) Hanc sine me spem ferre tui; audentior ibo.
   (*c*) Victor apud rapidum Simoenta, sub Ilio alto.
   (*d*) Versibus quos olim Fauni Vatesque canebant.

GENERAL QUESTIONS—GREEK.

ONE HOUR AND A HALF.

HONOURS.

Not more than FOUR *questions are to be answered.*

1. When and where, for what sort of audience, and in what state of society, is it probable that the Odyssey was composed?

   Give reasons for your answer.

2. Explain the importance of Alexander's Asiatic conquests as a turning-point in Greek History.

3. Give an account of Herodotus as a historian, *or* of Sophocles as a tragedian.

4. Describe some of the current Greek notions about death and a life after death.

5. Express, in the form of an imaginary speech, the views and feelings of a contemporary Athenian sincerely opposed to the teaching of Socrates.

FRENCH II.

HONOURS.

1. Translate—

   Le dessin est une langue universelle, et une langue (notez ce point) que les illétrés eux-mêmes savent lire. Nous avons tous eu l'occasion de voir un enfant de deux ans se jeter sur un livre d'images, et le lire avec intérêt d'un bout à l'autre, sans poser les yeux sur le texte, qui est encore lettre morte pour lui. L'année suivante, il reverra ce livre avec plaisir, et il fera quelques petiss efforts pour déchiffrer les légendes. Les désœuvrès de tout âge résistent rarement à la tentation de feuilleter un ouvrage où le dessin entrecoupe et anime la prose.

   Il est vrai que l'habitant des villes oublie en un rien de temps les gravures ou les tableaux qui l'ont arrêté au passage. Il en voit tant dans les musées, dans les salons, à l'étalage des marchands! Il a d'ailleurs le cerveau farci de tant d'idées et de tant de faits qu'il garde au plus le souvenir des chefs-d'œuvre. Mais l'habitant d'une

cabane toute nue, l'homme qui n'a rien vu, qui ne sait rien, qui n'a guère l'esprit plus meublé que sa maison, celui-là ouvre de grands yeux devant la moindre enluminure. De toutes les merveilles que l'art a semées sur la terre, il ne connaît qu'un papier barbouillé de rouge, de jaune et de bleu. C'est de portrait de Napoléon Ier, ou l'image du patron de sa paroisse, ou le tableau à bon marché qui représente le Juif Errant à Bruxelles, ou Sainte Geneviève de Brabant, ou meme la mort du pauvre Crédit, tué par les mauvasis payeurs.

2. Translate into French—

New the rosy-fingered morning, issuing from her saffron house, calls up the moist vapours to surround her, and goes veiled with them as long as she can: till Phœbus, coming forth in his power, holds uninterrupted empire from his burning throne. Now the mower begins to make his sweeping cuts more slowly, and resorts oftener to the beer. Now the carter sleeps atop of his load of hay, or plods with double slouch of shoulder looking out with eyes winking under his shaded hat, and with one side of his mouth twisted upward. Now the little girl at her grandmother's cottage door watches the coaches that go by, with her hand held over her sunny forehead. Now labourers look well resting in their white shirts at the doors of rural inns. Now the elms attract us, with the seats under them; and horses drink out of the trough, stretching their yearning necks with loosened collars; and the traveller calls for his glass of ale; and his horse stands wincing at the flies, giving sharp shivers of his skin, and moving to and fro his ineffectual docked tail. Now men with powdered heads envy those that are unpowdered, and stop to wipe them, with countenances that seem to expostulate with destiny.

3. (*a*) Explain historically the derivation of the following words and phrases:—*Leur*, *aninerais*, *bataille*, *genou*, *ma mie*, *de par le roi*.

(*i*) From what language is French descended, and what other languages have at various times added most to its vocabulary?

(*c*) Compare the methods of the Classical drama in France and the Elizabethan drama in England.

(*d*) What writers in France chiefly contributed to the Revolution ?

(*e*) Tell what you know of any two of the following characters in French poetry and fiction :—*Panurge*, *Tartufe*, *Candide*, *Porthos*, *Jean Valjean*.

GERMAN II.

HONOURS.

1. Translate into German—

The Continental revolutions of the eighteenth and nineteenth centuries took place in countries where all trace of the limited monarchy of the middle ages had long been effaced. The right of the prince to make laws and to levy money had, during many generations, been undisputed. His throne was guarded by a great regular army. His administration could not, without extreme peril, be blamed even in the mildest terms. His subjects held their personal liberty by no other tenure than his pleasure. Not a single institution was left which had within the memory of the oldest man, afforded efficient protection to the subject against the utmost excess of tyranny. We cannot, therefore, wonder that when men who had been thus ruled succeeded in wresting supreme power from a government which they had long in secret hated, they should have been impatient to demolish and unable to construct.

2. Translate—

Heinrich von Bayern hatte die Fürſten Deutſchlands mit vielem Stolz behandelt und war ihnen auf dem italieniſchen Feldzug ſehr gebieteriſch begegnet. Auch jetzt, nach Lothars Tode, bemühte er ſich, nicht ſehr um ihre Freundſchaft und machte ſie dadurch nicht geneigt, ihre Wahl auf ihn zu richten. Ganz anders betrug ſich Konrad von Hohenſtaufen, der den Zug nach Italien mitgemacht und auf demſelben die Fürſten, beſonders den Erzbiſchof von Trier, für ſich einzunehmen gewußt hatte. Außerdem ſchwebte die kürzlich feſtgeſetzte Wahlfreiheit des deutſchen Reichs den Fürſten noch zu lebhaft vor Augen, und alles kam jetzt darauf an, den geringſten Schein einer Rückſicht auf das Erbrecht bei der Kaiſerwahl zu vermeiden. Heinrichs Verwandtſchaft mit Lothar war alſo ein Beweggrund mehr, ihn bei der Wahl zu übergehen. Zu

dieſem allem kam noch die Furcht vor ſeiner überwiegenden Macht, welche, mit der Kaiſerchürde vereinigt, die Freiheit des deutſchen Reichs zu Grunde richten konnte.

3. (*a*) "Goethe has written the best dramatic poem, the best domestic epic, the best philosophical romance of the century."

Explain this statement.

(*b*) Tell what you know of any two of the following characters in German poetry and fiction:—*Mignon*, *Franz Moor*, *Siebenkäs*, *Tellheim*, *Undine*.

(*c*) In what ways did the Reformation assist, and in what did it retard, the growth of German Literature?

(*d*) Explain and illustrate the influence exerted by the accent on the spelling of Modern German words and forms.

(*e*) Explain the derivation of the following proper names:—*Kuno*, *Oswald*, *König*, *Mainz*, *Homburg*, *Wertheim*.

*ENTRANCE EXAMINATION

FOR THE

FACULTIES OF LAW, MEDICINE AND SCIENCE.

LATIN.

1. Translate an extract from Livy, Book II.
2. Translate and write short explanatory notes on—
   (*a*) In hac tantarum expectatione rerum sollicita civitate dictatoris primum creandi mentio orta.
   (*b*) Agi dein de concordia coeptum, concessumque in condiciones, ut plebi sui magistratus essent sacrosancti, quibus auxilii latio adversus consules esset.
   (*c*) In multa temperarunt tribuni: cum capitis anquisissent, duo milia aeris damnato multam dixerunt.
3. Translate an extract from Virgil, Æneid, Book IX.
4. Translate the following passages, and comment on the words underlined—
   (*a*) Vos, o Calliope, precor adspirate canenti.
   (*b*) "Sed periisse semel satis est": peccare fuisset Ante satis.
   (*c*) Dat Niso Mnestheus pellem horrentesque leonis Exuvias.
5. Translate—

   Gallos quoque velut obstupefactos miraculum victoriae tam repentinae tenuit. et ipsi pavore defixi primum steterunt velut ignari, quid accidisset; deinde insidias vereri; postremo caesorum spolia legere armorumque cumulos, ut mos eis est, coacervare. tum demum, postquam nihil usquam hostile cernebatur, viam ingressi haud multo ante solis occasum ad urbem Romam perveniunt. ubi cum praegressi equites non portas clausas, non stationem pro portis excubare, non armatos esse in muris rettulissent,

*NOTE.—The time allowed for each paper is three hours, except where otherwise stated.

aliud priori simile miraculum eos sustinuit; noctemque veriti et ignotae situm urbis, inter Romam atque Anienem consedere exploratoribus missis circa moenia aliasque portas, quaenam hostibus in perdita re consilia essent.

6. Translate into Latin—

When the troops were just going to break up the bridge as Darius had commanded, Coes, the leader of the Mytilenians, spoke thus to the Persian King: "O great King, seeing that thou art about to march upon a land where no cultivated ground will be seen nor any inhabited town, do thou therefore let this bridge remain where it is, leaving to guard it those same men who constructed it. Then, if we find the Scythians, and fare as we desire, we have a way of return; and even if we shall not be able to find them, at least our way of return is secured; for that we should be worsted by the Scythians in fight, I never feared yet, but rather that we might not be able to find them, and might suffer some disaster in wandering about."

FRENCH.

The answers are to be given up in two separate bundles, and marked clearly A and B. Answers given up in the wrong bundle will receive no marks. Each sheet must be clearly marked with the letter A or B.

A.

1. Translate into English extracts from Racine, Les Plaideurs.
2. Translate into English extracts from Guizot, Alfred le Grand.

B.

3. Translate into French—

(*a*) It is to-day the 30th of April, but I shall not send away this letter till the 1st of May. When you receive it, it will be summer with you but winter with us. Here, however, it is never very cold. We seldom wear great coats and we always have flowers. I remember how it used to snow in England. In the country the roads were sometimes buried a foot and a half deep. But I don't know how long it is since I have seen any snow at all.

(*b*) Several French gentlemen called on me two days ago, and when the name of Cervantes was mentioned in our

conversation, broke out in praise of his books. They asked me about his age, his profession, his rank and fortune. I told them that he was an old man, a soldier, a gentleman, and very poor. One of them cried, "But does not Spain keep such a man rich, and supported at the public expense?" Another interrupted, saying very acutely, "If it is poverty that makes him write, may he never have abundance, so that, poor himself, he may make the whole world rich."

1. Translate (at sight)—

(*a*) Ecoutez, je vous prie, une chose qui est, à mon sens, fort belle: il me semble que je lis l'histoire romaine. Saint-Hilaire, lieutenant-général de l'artillerie, fit prier M. de Turenne, qui allait d'un autre côté, de se détourner un instant pour venir voir une batterie; c'était comme s'il eût dit: Monsieur, arrêtez-vous un peu, car c'est ici que vous devez être tué. Un coup de canon vient donc, et emporte le bras de Saint-Hilaire, qui montrait cette batterie, et tue M. de Turenne; le fils de Saint-Hilaire se jette à son père, et se met à crier et à pleurer. *Taisez-vous, mon enfant*, lui dit-il; *voyez* (en lui montrant M. de Turenne roide mort), *voilà ce qu'il faut pleurer éternellement, voilà ce qui est irréparable;* et sans faire nulle attention sur lui, se met à crier et à pleurer cette grande perte.

(*b*)

S'il est un charmant gazon
Que le ciel arrose,
Où brille en toute saison
Quelque fleur éclose,
Où l'on cueille à pleine main
Lis, chèvrefeuille et jasmin,
J'en veux faire le chemin
Où ton pied se pose!

GERMAN.

1. Translate into English extracts from Goethe, Sesenheim.
2. Translate into English extracts from Freytag, Die Journalisten.
3. Translate into German—

(*a*) At half-past six in the morning the soldiers had breakfast, and by eight were ready for the battle. The general

made a short speech to his officers. He told them that they were fighting not for conquest or revenge, but for their honour, their families and their country. "Though we are few in numbers," he said, "we have right on our side. Much depends on our behaviour to-day, and I am sure no soldier of mine will shame his flag."

(*b*) Louis the Fifteenth treated his daughters with great unkindness and indignity. These poor ladies never saw him except for a few minutes on his return from the hunt, when he expected them to be in attendance, and gave them a hurried embrace. Otherwise they were quite neglected, and had no amusement but needlework, and the books read to them by their ladies. But they were kind-hearted women, much loved by their attendants, and by the little nephews and nieces, who sometimes enlivened them. The second daughter entered a convent, where she had a much more cheerful life than in the palace.

4. Translate—

(*a*) Es war noch sehr früh, als ich Göttingen verließ. Vor dem Thore begegneten mir zwei eingeborne kleine Schulknaben, wovon der eine zum andern sagte: „Mit dem Theodor will ich gar nicht mehr umgehen, er ist ein Lumpenkerl, denn gestern wußte er nicht mal, wie der Genitiv von mensa heißt." So unbedeutend diese Worte klingen, so muß ich sie doch wieder erzählen, ja, ich möchte sie als Stadt-Motto gleich auf das Thor schreiben lassen; denn die Jungen piepsen, wie die Ulken pfeifen. Auf der Chaussee wehte frische Morgenluft, und die Vögel sangen gar freudig, und auch mir wurde allmählich wieder frisch und freudig zu Mute. Eine solche Erquickung that not. Auf der Landstraße fing es schon an lebendig zu werden. Milchmädchen zogen vorüber; auch Eseltreiber mit ihren grauen Zöglingen. Dann und wann rollte auch ein Einspänner vorüber, wohlbepackt mit Studenten, die für die Ferienzeit oder auch für immer wegreisten. In solch einer Universitätsstadt ist ein beständiges Kommen und Abgehn, alle drei Jahre findet man dort ein neue Studentengeneration.

(*b*) Hähnchen sprach zum Hühnchen: „Jetzt ist die Zeit, wo die Nüsse reif werden; da wollen wir zusammen auf den Berg gehen und uns einmal recht satt essen, ehe sie das Eichhorn alle wegholt." —„Ja," antwortete das Hühnchen, „komm, wir wollen uns einen lustigen Tag mit einander machen." Da gingen sie zusammen

fort auf den Berg, und weil es ein heller Tag war, blieben sie bis zum Abend. Nun weiß ich nicht, ob sie zu viel gegessen hatten, oder ob sie übermütig geworden waren,—kurz sie wollten nicht zu Fuß nach Haus gehen, und das Hähnchen mußte einen kleinen Wagen von Nußschalen bauen.

ARITHMETIC AND MENSURATION.

1. Find the least number which, when divided by 8, 9, 22, 27, 32, 49, and 121, will leave the remainder 5.
2. A number is divided by 3696 by dividing it successively by the factors 6, 11, 7, 8. The quotient is 5, and the remainders successively, beginning with the first, are 4, 9, 5, 5.

   Find the number.
3. Find the square root of 3925827 correct to three places of decimals.
4. A fraction, with an integral denominator, has 51 for its numerator, and its value to three places of decimals is ·06957. Find its denominator.
5. Find the greatest unit of time in terms of which 2 days 13 hours 9 minutes 11·7 seconds and 1 day 11 hours 5 minutes 18 seconds can both be expressed as whole numbers.
6. By selling an article for £3 3s. 3d., a tradesman loses $2\frac{1}{2}$ per cent. At what price should he sell it so as to gain $3\frac{1}{4}$ per cent.?
7. What sum will amount to £4342 4s. 11d. in three years, at 6 per cent. compound interest?
8. A tea blender makes use of three teas, one costing him $4\frac{1}{2}$d. per lb., second $6\frac{1}{2}$d., per pound, and a third 9 shillings per pound. Each pound of the blend contains $\frac{1}{2}$ oz. of the third tea. In what proportions must the first and second be mixed, so that he may sell the blend at 1s. 3d. per pound, and make a profit of 65 per cent. on his outlay?
9. If the front wheels of a carriage are 42 inches in diameter, and the hind wheels 47 inches, how far will the carriage have travelled when the front wheels have revolved 193 times more than the hind wheels?

10. A man, who has £5100 government 4 per cent. stock, sells out, and invests the proceeds in 3 per cent. bank deposit receipts at 15s. 5d. His income is thereby increased by £12. Brokerage at the rate of $\frac{1}{8}$ per cent. on face values was charged on each transaction. Find at what price he sold his stock.

11. Find the area inclosed between two tangents to a circle of 15 feet radius, at the extremities of a chord subtending an angle of 60° at the centre of the circle, and the circle.

12. If one cubic foot of iron weighs 7750 oz., find what area of boiler plate $\frac{1}{8}$ of an inch thick can be made out of 1 cwt. of iron.

ALGEBRA.

1. Divide $a^3+b^3+c^3-3abc$ by $a+b+c$.

   Hence simplify the following, without actual division;

$$\frac{(x-y)^3+(y-z)^3+(z-x)^3}{(x-y)(y-z)(z-x)}$$

2. Simplify

$$1+x+x^2+x^3+\frac{x^4}{1-x},$$

   and deduce a simplified form for

$$1+\frac{y-z}{y+z}+\left(\frac{y-z}{y+z}\right)^2+\left(\frac{y-z}{y+z}\right)^3+\frac{(y-z)^4}{2z(y+z)^3}.$$

3. Solve the equations

   (i.) $\begin{cases} (a+b)x+(a-b)y=2a, \\ (a^2-b^2)(x-y)=-4ab. \end{cases}$

   (ii.) $3x^2-4xy=8y^2-6xy=20(3x+4y-1)$.

   (iii.) $\begin{cases} ax=by=cz, \\ \frac{1}{x}+\frac{1}{y}+\frac{1}{z}=1. \end{cases}$

4. If $x=a$ is a solution of a rational Algebraical equation in x, prove that $x-a$ is a factor of the difference of the two members of the equation.

   Find all the roots of

$$x^3-a^2x=b^3-a^2b.$$

5. There are two Arithmetic Progressions, and the p^{th} and q^{th} terms of the first are respectively equal to the q^{th} and r^{th} terms of the second. Prove that the r^{th} term of the first is equal to the s^{th} term of the second, where
$$s(p-q)=r(p-r)+q(r-q).$$

6. If four numbers are proportionals, prove that the sum of the greatest and least is greater than the sum of the other two.

7. Shew how the square root of a quantity of the form $a+\sqrt{b}$ may sometimes be found.

   Extract the fourth root of $153-108\sqrt{2}$.

8. Find the number of permutations of n things taken r together, and deduce an expression for the corresponding number of combinations.

   How many permutations of 5 letters are possible, each containing 3 consonants and 2 vowels, selected from an alphabet of 21 consonants and 5 vowels?

9. Prove that any number and the sum of its digits, when divided by 9, leave the same remainder.

10. Find the sum of the squares of the first n integers, and shew that the sum of the squares of the next n integers is
$$\tfrac{1}{6}n(2n+1)(7n+1).$$

GEOMETRY.

PASS.

1. To a given straight line apply a parallelogram equal to a given triangle, and having one of its angles equal to a given angle.

2. If one of the angles of a right-angled triangle is equal to an angle of an equilateral triangle, the square on the longer of the two sides containing the right angle is three times the square on the shorter side.

3. Divide a given straight line into two parts, so that the square on one part shall be three times the square on the other part.

4. In every triangle the square on the side opposite an acute angle, &c. Complete this enunciation, and prove the proposition.

5. If one angle of a parallelogram is double another angle, the difference of the squares of the diagonals is equal to twice the rectangle contained by two adjacent sides of the parallelogram.

6. The three medians of a triangle are concurrent at a point which trisects each of the medians.

   Shew also that the longest median bisects the shortest side of the triangle.

7. The diameter is the greatest chord in a circle; and of others that which is nearer the centre is greater than one more remote.

8. Draw the transverse common tangents to two given non-intersecting circles, and shew that they intersect on the line of centres.

9. ABC is a circle whose centre is O, and OD is a line less than a radius. Find the points on the circumference at which OD subtends the maximum angle.

10. Circumscribe a circle about a given triangle.

11. Shew that no parallelogram but a rhombus or a square can be described about a given circle.

TRIGONOMETRY.

1. Prove from a figure

   $\sin 2A = 2 \sin A \cos A$

   $\cos A + \cos B = 2 \cos \frac{1}{2}(A+B) \cos \frac{1}{2}(A-B)$.

2. Find an equational relation between $\tan \theta$ and $\tan 2\theta$, and shew from a diagram why it might be anticipated that the equation would be of the first degree in $\tan 2\theta$ and of the second degree in $\tan \theta$.

3. Find $\cos 60°$, and give reasons for the statement that $\cos 120° = -\cos 60°$.

4. Prove that the sines of the angles of a triangle are proportional to the opposite sides.

   Simplify $a \sin(B-C) + b \sin(C-A) + c \sin(A-B)$.

5. Prove the formula

$$\tan \tfrac{1}{2}(B-C) = \frac{b-c}{b+c} \cot \tfrac{1}{2}A.$$

A straight line cuts the sides b, c of a triangle ABC in Q. R respectively, and is produced to meet BC produced at an angle θ. If AR is $\frac{c}{r}$, and AQ is $\frac{b}{q}$, prove that

$$\tan\left\{\theta+\frac{\mathrm{B}-\mathrm{C}}{2}\right\}=\frac{br-cq}{br+cq}\cot\frac{\mathrm{A}}{2}.$$

6. Find the area of a triangle in terms of the sides.

   If the sides are 13, 14, 15 feet, find the area, and the sines of all the angles

7. AD, BE, CF are the perpendiculars of the triangle ABC, intersecting in O. Prove that AD.OD.EF= $abc\cos\mathrm{A}\cos\mathrm{B}\cos\mathrm{C}$.

8. Prove that, when θ is small, then approximately $\sin\theta=\theta$ and $\cos\theta=1-\frac{1}{2}\theta^2$.

9. Find the distance of the horizon at sea visible from a given height neglecting refraction; and shew that, to double the distance, the height must be approximately quadrupled.