Physical Principles Underlying Special Diagnostic Apparatus (including Kymograph tomograph, stereoscopic radiographs, localisation of foreign bodies, pelvic mensuration, cine-radiography).

Fluoroscopy: Physical principles, behaviour of eye at low brightness levels, image intensification.

Miniature Radiography: Physical principles, lens and mirror cameras.

Hazards and Protection: Factors influencing dose received by operators and patients; protective methods and materials, regulations governing use of X-ray equipment.

Electrotechnology

X-ray Apparatus (General): Motors, transformers, chokes, thermionic and dry rectifiers, stationary and rotating anode X-ray tubes, electronic and other types of timers, meters, stabilisers, oscillating and stationary grids, cones, cassettes and screens, photofluorography.

Electrical Circuits: Safety factors, self-rectified, single-valve, two-valve, four-valve; calibration charts, tube rating charts, cooling charts; controls, overload protection, line voltage compensation, filament current boosting, monitor controlled equipment, special features of shock-proof equipment, circuit diagrams of typical equipment.

Dark-room Procedures: Fundamentals of photography, characteristics of the X-ray film, the dark-room, safe lights, processing X-ray film developers, fixers, acceleration, restrainers, standard developers, temperature in relation to developing, tropical, sub-tropical conditions, hardening, washing, drying, cleaning developer tanks and film hangers, preparing and mixing chemicals, storage of materials, handling films, film faults and their interpretation.

Pathology: A course of tuition in general pathology and in special pathology of those conditions related to Diagnostic Radiology.

Radiological Diagnosis

(a) Technique of examination of all parts of the body, fluoroscopic methods. Use of contrast media. Location of foreign bodies. Special techniques.

(b) Interpretation of films; differential diagnosis; correlation with clinical findings. Methods of reporting and reading.

Anatomy


6. Brain and Spinal Cord: This cannot be adequately covered; but attention will be directed to the relations of the main cisterna and ventricles.

7. The Skull: Air sinuses, air cells, fossae, foramina and general survey.