

COURSE - X-RAYS AND E.C.G. TECHNICIAN

DURATION: 1 YEAR

- 1. ANATOMY & PHYSIOLOGY :** Cell, Cell Division, Tissue, Study of various system-respiratory, Cardio-Vascular, Urinary Tract genital System, Alimentary System, Skeletal System, Surface anatomy, Endocrine System, Components of food.
- 2. Dark Room Technique :** Basic structure of dark room, Various accessories in dark room (safe light, X-Ray films, Intensifying screens) Various stages of film processing, Developer and Fixer Film faults.
- 3. Radio physics :** X-Ray discovery, properties, production X-Ray Tube, Radiation hazards and protection devices Films badges. Fluoroscopic and intensifying screens. Grids Ultrasonography.
- 4. Electrical Physics (Including gen. Physics) :** Idea of units, work power energy, heat. Static Electricity, Current Electricity. Ohm's Law. Electrical circuits heating effect, Resistance. Magnetism Transformer Rectification in X-Ray tube. H.L. Cables, Earthing Electrical Hazards, Atomic Structure, Radio activity.
- 5. Radiography (1st Paper) :** General Principles of Radiography, X-Ray Machine operation, Records of patients, Medico-Legal aspects, stock taking and stock keeping, aspect of patient first aid.

2nd Paper - Radiography of upper limb : Humerus, shoulder, grid lower limb, hip joint, femur. Pelvic girdle, vertebrae column bones of thorax, skull mandible, dental salivary glands paranasal sinuses optic foramina temporal bones, respiratory system. Alimentary Tract Urinary Tract. Reproductive system, Myelography. Angiography. Sinography, Macro Radio System, Myelography, Angiography, Sinography, Macro Radiography, M.M.R. Cine-radiography, Foreign bodies contrast media, notice on exposure tablet Fluorescopy Common terms of diseases.

Syllabus of E.C.G (Electro Cardiography Technician) Course : Introduction Heart anatomy and Physiology, common heart ailments, Cardioversion Electrocardiogram machine, Normal Patterns and variations of the Electrocardiogram Intensive coronary care unit continuous E.C.G monitoring, method of analysis of the Electrocardiogram (Rate, Rhythm, Voltage, Axis, Deviation, P wave, R.R. interval, Q wave, QRS complex, ST segment, T wave, Q.T. interval, Ischemic heart diseases (Myocardial infarction, coronary).