

## Diploma in X-RAYS AND E.C.G. Technician

### **DURATION: 2 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 careens) Various stage if film processing, Developer and Fixer Film faults.
3. Radio physics: X-Ray discovery, properties, production X-Ray Tube, Radiation hazards and protection deveces Films badges. Flurocopic intensifying screens. Grides Ultrasonography.
4. Electrical Physics (Including gen. Physics) : Idea of units, Works power energy, Static Electricity, Current Electricity. Ohm's Law. Electrical circuits heating affect, Resistance. Magnetism Transformer Roctification in X-Ray tube. H.L. Cables, Earthing Electrical Hazards. Atomic Structure, Radio activity.
5. Radiography (1<sup>st</sup> Paper): General Principles of Radiography, X-Ray Machinesoperation, Records of patients, Medici-Legal aspects, stock taking and stock keeping, aspect of patient first aid.

IInd Paper – Radiography of upper Limb : Humerus, shoulder, gride lower limb, hip joint, femour. Pelvic girgte, certiberate column bones of thorax, skull mandible, dental salivary glands paranasal sinuse optic forming tepropal bones, respiratory system. Alimentary Tract Unnary Tract. Reproductive system, Myelography. Angiography. Sinography, Macroradio System, Myeloraphy, Sinography, Macro Radiography, M.M.R. Cineradso Graphy, Foreign bodies contrast media, notice on exposure tablet Flurescopy Common terms of diseases.

Syllabus of E.C.G. (Electro Oardiography Technician) Course : Introduction Haeartanatomy and Physiology, common heart ailments, Cardioversion Electrocardiogram Machine, Normal Patterns and varitations of the Electrocardigram Intensive cotonary care unit continous E.C.G. monitoring, method of analysis of the Electrocardiogram (Rate, Rhythm, Voltage, Axis, Deviation, P wave, R.R. interval, Q Wave, ORS complex, ST segment, T wave, Q.T. interval, Ischemic heart diseases (Myocardial intartion, cotonay)

#### Ref. Books :

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|--|---|-------------------------------|
| Manual of Dark Room Techniques           | - | WHO                           |
| Possitioning Radiography                 | - | K.C. Clark                    |
| Radiology of positioning Applied Anatomy | - | Dr. C.S. Gark                 |
| Surface and Radiological Anatomy         | - | A. Halim                      |
| Manual of Dark Room Techniques           | - | WHO                           |
| First year Physics for Radiographers     | - | Georde A. Hay & Donald Hughes |
| Fundamentals of Anatomy and Physiology   | - | Ross and Wilson               |