The syllabus for written test for selection to the post of Junior Technical Assistant (Electrical) (MFCP)

- Basics of fundamental of electricity
- Fundamental terms, definition, units
- Effects of electrical voltage, current, energy, Basic theories
- Different types of cells and batteries and their measurement of voltage and current
- Net work theory and measurement of work, power and energy
- Electrical instruments & measurements
- AC fundamentals, series and parallel circuits and polyphase circuits
- Transformers, Induction motors and different types of starters
- Various types of Transformers
- AC to DC and DC to AC converters
- Stabilizers and controls
- Different types of Electric power generators
- Power factor improvement
- Substation elements
- Different types of wiring circuits
- Materials and tools used in electrical wiring
- Types of wires and cables standard wireguage
- Estimation of electrical wiring, Load calculations
- Specifications, standards for conduits and accessories, earthing, layout diagram for conduit wiring
- Fuses, protection and switch gear principles
- Protection for feeders, busbars and transmission lines
- Industrial utilization of electrical motors, Electrical heating, Lighting and controls
- Basic Electronics
- Working principle of commonly used electrical equipments in Hospital
- Electric safety and standards
- Elementary first aid
- Names of commonly used fire extinguishers and their use