

SYLLABUS FOR THE POST OF JLM IN TSTRASCO

SCHEME OF EXAMINATION

Paper	Subject	No. of Questions	Duration (Minutes)	Maximum Marks
1.	I.T.I(Electrical Trade) and General Knowledge	80 Questions (I.T.I(Electrical Trade): 65 Questions and General Knowledge: 15 Questions)	120	80

PAPER A : I.T.I (Electrical Trade)

1. Fundamentals of electricity: Electrical occupational safety, tools, Ohms law, Kirchoffs law, series, parallel, Kirchoffs law and star delta, problems – Electrostatics and capacitors. Earthing principles and methods of earthing
2. Batteries: primary and secondary, lead acid cells, methods of charging - testing and application of batteries, invertors, battery chargers and maintenance
3. Magnetism: Magnetic materials and properties - laws of magnetism – electromagnetism, electromagnetic induction
4. Fundamentals of AC: Simple problems of AC fundamentals, power, power factor, single phase and three phase circuits
5. Basic Electronics: Electronic components, rectifiers, amplifiers, oscillators and power electronic components
6. DC Machines: construction, working principle and simple problems on DC generators and motors, speed control and applications of DC motors – windings
7. Transformers: construction, working principle, basic concepts and simple problems on transformers – windings – auto transformers, power transformers, CT & PT
8. AC Machines: basic concepts, construction principle and simple problems on three phase and single phase induction motor, universal motor, alternators, synchronous motors and their applications and windings - concept of power electronic drives
9. Electrical measurements –Different types of AC and DC measuring instruments, Domestic appliances and Illumination concepts - types of electric lamps
10. Electric Power generation- thermal, hydal and nuclear, transmission and distribution system – basic concepts, non-conventional energy sources.

PAPER B: GENERAL KNOWLEDGE

1. Current affairs.
2. International Relations and Events.
3. General Science in everyday life.
4. Environmental Issues and Disaster Management.
5. Geography and Economy of India and Telangana.
6. Indian Constitution: Salient Features.
7. Indian Political System and Government.
8. Modern Indian History with a focus on Indian National Movement.
9. History of Telangana and Telangana Movement.
10. Society, Culture, Heritage, Arts and Literature of Telangana.
11. Policies of Telangana State.