



SYLLABUS FOR DEPARTMENTAL EXAMINATION IN

ENGINEERING PAPER

FOR

ELECTRICIAN GRADE – I

(100 Marks) Duration – 3 hours

1. Basic studies of Internal & External Electrification system used in Public Works Department in Mizoram:-
 - a) Different types of Internal & External Electrification works including:-
 - (1) Recess/conceal type of wiring for recess(3)
 - (2) Surface/open type of wiring for surface(3)
 - (3) Industrial type of wiring.(3)
 - (4) Cable laying in standard cable trenches(4)
 - (5) Cable laying in standard cable tray.(3)
 - (6) Commissioning & Erection of lighting fixtures for internal & External(3)
 - (7) Commissioning & Erection of L.T Panel Boards, Feeder Pillar Panel, Distribution Board, Switch boards,(4)
 - b) ILLUMINATION: Laws of Illumination, Simple calculation of illumination level in a given room and selection of fixtures type depending upon the site conditions.....(6)
 - c) ELECTRICAL PLAN DRAWING: Simple electrical plan drawing for Internal & External Electrification.(3)
 - d) CIRCUIT DIAGRAM: Simple circuit diagram/drawing for internal and external electrification(5)
 - e) LOAD CALCULATION: Simple load calculation, and designing of L.T Panel Board, Main Switch, MCB, DB/DB and standard sizes of wires (Copper & aluminium).(8)
 - f) EARTHING: Different types of earthing and its important and their construction.(5)
 - g) ESTIMATION & COSTING: Simple estimation and costing for internal electrification & external electrification.(10)
2. Basic construction, maintenance, fault diagnosis & repair of internal & External Electrification.....(5)
3. Basic General Principles and periodic maintenance of Diesel Generating Set....(5)
4. Basic General Principles and maintenance of Transformer & Other Electrical Machines.....(5)
5. Basic General Principles and uses of Electrical Measuring Instruments....(5)
6. Basic knowledge of General Principles and maintenance of Air Conditioning and Refrigeration and Lift/Elevator.....(5)
7. Accounting of Construction and Maintenance Electrical materials adopted by PWD Mizoram state.....(5)
8. Basic studies on Mizoram PWD Scheduled of rates for Electrical works Part-I (internal) & Mizoram PWD Analysis of rates for Electrical works Part –I (Internal).....(5)
9. Basic Technical specifications for Internal and external electrifications works....(5)
