

**MIZORAM PUBLIC SERVICE COMMISSION**  
**DEPARTMENTAL EXAMINATIONS FOR JUNIOR GRADE OF M.E.S. (AE/SDO)**  
**UNDER POWER & ELECTRICITY DEPARTMENT,**  
**GOVERNMENT OF MIZORAM, JUNE-2024.**

**ENGINEERING PAPER – I**  
*Common Paper for all Engineers in Electrical Wing under P&E Cadre*

Time Allowed : 3 hours

FM : 100 PM : 40

*Marks for each question is indicated against it.*  
*Attempt all questions.*

**PART 'A' (50 MARKS)**

1. What are the causes for unwanted power interruption on EHV Transmission lines? (5)
2. Quarterly activities to be performed for maintenance of EHV Sub-Stations. (5)
3. What are the main reasons of Distribution transformer failure? (5)
4. What is the methodology being adopted by the P&E Deptt to arrive O&M expenses for Deposit work estimate? (5)
5. Precautionary measures to be followed while taking shutdown on electrical equipment to avoid accident? (5)
6. What are the step by step procedures to be carried out for repair maintenance on Circuit Breaker (CB) in the EHV Sub-Station? (5)
7. Write notes as mentioned in the Electricity Act, 2003 on; (5×2=10)
  - (a) Special Court
  - (b) Theft of electricity
  - (c) State Advisory Committee
  - (d) Open Access
8. Write short notes as per CEA (Deviation Settlement Mechanism & Related matters) Regulations, 2014 on; (5×2=10)
  - (a) Available Capacity
  - (b) Interface meters
  - (c) Deviation
  - (d) Actual injection
  - (e) Load Despatch Centre

**PART 'B' (50 MARKS)**

9. Write short notes as per JERC (M&M) Electricity Supply Code Regulations, 2013. (5×2=10)
  - (a) Billing cycle
  - (b) Connection point
  - (c) Maximum demand
  - (d) Minimum charge
  - (e) Fixed charge

10. What is the difference between Connected load and Contracted load? (6)
11. What is security deposit? What is the procedure to review security deposit? (6)
12. What are the procedures to replace defective consumer energy meter? (6)
13. Write process of handling complaints as per JERC (M&M) Standard of Performance Regulations, 2014. (6)
14. Write notes on compensation mechanism as per JERC (M&M) Standard of Performance Regulations, 2014. (6)
15. Write short notes as per JERC (M&M) Grid Code Regulations, 2010 on. (5×2=10)
  - (a) Partial shutdown
  - (b) Planned outage
  - (c) State Transmission Utility
  - (d) Under Frequency Relay
  - (e) Grid Code Review Committee

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