

MIZORAM PUBLIC SERVICE COMMISSION
TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO
JUNIOR ENGINEER (J.E) CONTRACT BASIS
UNDER RURAL DEVELOPMENT DEPARTMENT, NOVEMBER, 2016.

ELECTRICAL ENGINEERING
PAPER - I

Time Allowed : 2 hours

Full Marks : 150

All questions carry equal marks of 2 each.

Attempt all questions

1. In steam power plant which of the following component needs more maintenance:
(a) Condenser (b) Boiler
(c) Turbine (d) Coal carrying system
2. For the flue gas flow, tick the correct sequence:
(a) Boiler-Air preheater- economizer- ID fan- Chimney
(b) Boiler- ID fan -Air preheater- Economizer- Chimney
(c) Boiler- Economizer- Air preheater- ID fan- Chimney
(d) None of these
3. Hydrogen cooling employed in large thermal power plant alternator:
(a) Increases the insulation life (b) Decreases the insulation life
(c) Does not effect the insulation life (d) None of these
4. Economizer is normally employed when boiler pressure exceeds:
(a) 70 kg/cm² (b) 50 kg/cm²
(c) 30 kg/cm² (d) can be used for all pressures
5. In thermal power plants the condenser used is of:
(a) surface type (b) jet type
(c) can be both surface type and jet type (d) none of these
6. The relation between traveling voltage wave and current wave is
(a) $e = i (L/C)^{1/2}$ (b) $e = i (C/L)^{1/2}$
(c) $e = i (iL/C)^{1/2}$ (d) $(L/iC)^{1/2}$
7. Stability of a system is not affected by
(a) Reactance of line (b) Losses
(c) Reactance of generator (d) Output torque.
8. In order to increase the limit of distance of transmission line
(a) series resistances are used
(b) synchronous condensers are used
(c) shunt capacitors and series reactors are used
(d) series capacitors and shunt reactors are used