

**DIPLOMA IN MECHANICAL ENGINEERING
(DME)**

Term-End Examination

00382

December, 2016

BME-058 : POWER PLANT ENGINEERING

Time : 2 hours

Maximum Marks : 70

Note : Answer any seven questions. All questions carry equal marks.

1. Describe the different types of water turbines with neat sketch. 10
2. Explain in detail the wind power generation. 10
3. (a) Describe the natural draft cooling tower.
(b) Describe the nuclear chain reactions. 5+5
4. Explain the methods to improve the efficiency of gas turbine cycle. 10
5. Describe both Schmidt-Hartmann and LaMont Boilers with neat sketches. 10

6. (a) Explain the following terms :
- (i) Load factor
 - (ii) Plant capacity factor
- (b) Explain the load curve. 5+5
7. Describe the Cander type reactor in detail. 10
8. What are the health hazards in setting up a nuclear power plant ? Explain in detail. 10
9. (a) Describe the functions of a governor.
- (b) Describe the advantages and disadvantages of a gas turbine engine. 5+5
10. What are the various elements of a diesel power plant ? Explain air intake system with neat sketch. 10
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