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**DIPLOMA IN MECHANICAL ENGINEERING
(DME)**

Term-End Examination

June, 2013

BME-058 : POWER PLANT ENGINEERING

Time : 3 hours

Maximum Marks : 70

Note : Answer any seven questions. Assume if any data is missing.

1. (a) Describe briefly various types of hydroelectric power plant and also discuss the advantages and disadvantages. 5
- (b) Discuss briefly the process of nuclear fission and nuclear fusion. 5
2. (a) Describe briefly various types of boilers and also discuss the advantages and disadvantages. 5
- (b) Describe and give the layout of LAMONT Boiler. 5
3. Compare the steam power plant with nuclear power plant and briefly describe the Health Hazards. 10

4. (a) Describe briefly the economics of selection of power plant. 5
- (b) Explain briefly the different methods of calculating depreciation cost. 5
5. Explain the different elements in a diesel power plant. 10
6. Describe and explain the various injection schemes used in diesel power plant. 10
7. (a) Describe the advantage of steam turbine over reciprocating engine. 5
- (b) What are the requirements of good condensing system ? 5
8. (a) What is nuclear binding energy and explain briefly using a nuclear binding energy curve. 5
- (b) Discuss briefly the different types of nuclear material. 5
9. What is cooling tower ? Describe the different types of cooling towers. 10
10. Describe in detail with the help of a sketch the functioning of a turbo shaft engines. 10
