

Roll No.

Total Pages : 3

BT-8/M-20

38051

POWER PLANT ENGG.

Paper–ME-404E

Option–II

Time Allowed : 3 Hours]

[Maximum Marks : 100

Note : Attempt **five** questions in all, selecting at least **one** question from each Unit.

UNIT-I

1. (a) Explain the working of solar power plant, also mention its salient features.
- (b) Describe the various energy sources in India. 20
2. (a) Draw a schematic diagram of Hydro plant and explain its operation. 12
- (b) Explain the following :
 - (i) Hydrographs
 - (ii) Rain fall. 8

UNIT-II

3. (a) Describe the general layout for the thermal power plant and discuss the working of each major component in it. 12

38051/K/508

P. T. O.

- (b) Write short notes on the following :
- (i) Air preheaters
 - (ii) Super heaters. 8
4. (a) Discuss various systems of diesel power plant.
- (b) Explain the super charging of Diesel engines.
- (c) Give the advantages and disadvantages of Diesel Plant over Thermal Power plant. 20

UNIT-III

5. (a) What is function of moderator in Nuclear Power Plant, name the three moderators used in it ? 8
- (b) (i) Define the term Breeding.
- (ii) Explain the working of pressurized water reactor nuclear power plant with its advantages and disadvantages. 12
6. (a) Explain the purpose of heating, regeneration and intercooling in gas power plants. 14
- (b) Write short note on the Gas Power characteristics. 6

UNIT-IV

7. (a) Explain the term Depreciation and discuss various methods of calculating the depreciation of an electrical plant.
- (b) Explain the load curves and load duration curves. 20
8. (a) What is tariff ? Discuss two part tariff and three part tariff with suitable example.
- (b) Describe load division among generators. 20