

Total No. of Pages:

1

Register Number:

7245

Name of the Candidate:

DIPLOMA EXAMINATION, 2010

(ENERGY ENGINEERING)

(PAPER-II)

120. ENERGY GENERATION

Dec]

[Time : 3 Hours

Maximum : 100 Marks

Answer any FIVE questions

(5×20=100)

1. a) Discuss on the various sources of conventional energy and mention its type.
b) Compare hydro, thermal and gas turbine power conversion system.
2. a) With a neat sketch explain working of hydro electric power system
b) What are low, medium and high head power plants?
3. a) Explain the types of turbines and mention its advantages and disadvantages
b) Discuss on the site selection criteria for hydro electric power plant.
4. a) Explain the general layout of a thermal power plant.
b) Mention the merits and demerits of thermal power plant.
5. a) What is super critical and super charged boilers?
b) State the advantages of high pressure boiler.
6. a) Discuss on the working principle of gas turbine power plant with neat sketch.
b) What is gas steam cycle?
7. a) Explain the working principle of fuel cells with suitable sketch.
b) What are the advantages of magneto hydro dynamic generator?
8. a) What is thermionic energy convertor explain with suitable diagram.
b) Write short notes on (i) Boiler mountings and (ii) boiler accessories.
