

15

SE-EE - CBCS (Choice Based)

07/12/17

Sem-III - CNCPG

Q. P. Code:-23915

[Time: Three Hours]

[Marks:80]

- Note : 1) Question No.1 is compulsory.
 2) Attempt any 3 questions from remaining five questions.
 3) Figure to the right indicate full marks.
 4) Make suitable assumptions wherever necessary.
 5) Draw suitable diagram wherever necessary

Q 1. Attempt any Four 20

- a) Describe the Load Factor and Plant Capacity Factor.
- b) State and Explain the selection criteria for Hydro Power Plant.
- c) Explain Nuclear Fission and Fusion.
- d) What Factors affect a Runoff data at a particular site?
- e) Write about the Conventional and Non-Conventional sources of energy.

Q2 a) Explain the Thermal Power Plant in detail with its neat block diagram.
 b) Explain Pressurized Water Reactor with its advantages and disadvantages. 20

Q3 a) Explain Operation of Diesel Power Plant with layout.
 b) Discuss the role of Super Heater and its impact on the performance of power plant. 20

Q4 a) Explain the performance of Gas Turbine Power Plant.
 b) Discuss the broad classification of Hydro Electric Power Plant with figure. 20

Q5 a) Explain Ash handling plant in Steam Power Station.
 b) Describe Solar Power Plant. Write short notes on Solar Active and Passive Collectors. 20

Q6 a) Explain operation of PWR Nuclear Reactor with its advantages and disadvantages. 20

b) The maximum demand of a power station is 9600KW. It has to supply the load as follows:-

Time (Hrs)	0-6	6-8	8-12	12-14	14-18	18-22	22-24
Load (MW)	48	60	72	60	84	96	48

1) Draw Load Curve and Load Duration Curve. 2) Calculate Load Factor.
