

## SE Electrical III EBSGS

24.5.17  
Q. P. Code : 542103

(3 Hours)

[Marks : 80]

- Note : (1) Question No 1 is compulsory  
(2) Solve any three out of remaining  
(3) Assume the suitable data required and mention the same

- Q.1 a) Explain load curve and load duration curve. 05  
b) What are different types of Hydro power plant? 05  
c) State advantages of Pumped storage plant. 05  
d) Explain nuclear fission and fusion. 05
- Q.2 a) Draw layout of Thermal power plant. 10  
b) Explain different types of tariffs. 10
- Q.3 a) Explain important factors governed for selection of site of Hydro power plant. Also state advantages and disadvantages of the plant 10  
b) Explain operation of Diesel power plant with layout. 10
- Q.4 a) Explain effects of fluctuating load on operation of power plant. Also describe methods of meeting fluctuating load. 10  
b) Explain advantages and disadvantages of Gas power plant. 10
- Q.5 a) Explain operation of Vertical axis and Horizontal axis wind turbine. 10  
b) Describe operation of Solar pond with layout. 10
- Q.6 a) Explain operation of Solar PV cell. Describe method of manufacturing mono-crystalline and polycrystalline PV cells. 10  
b) Explain operation of PWR nuclear reactor. State its advantages and disadvantages. 10

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