

Total No. of Questions : 8]

SEAT No. :

P3589

[Total No. of Pages : 2

[5152]-542

S.E. (Electrical Engineering)

POWER GENERATION TECHNOLOGIES

(2015 Pattern)

Time : 2 Hours]

[Max. Marks : 50

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right side indicate full marks.*

Q1) a) Explain site selection parameters for thermal power plant. [6]

b) Explain carnot cycle with PV and TS Diagram. [6]

OR

Q2) a) Explain working of super heater with neat sketch. [6]

b) With the help of diagram explain the Nuclear power plant. [6]

Q3) a) What is surge tank? Explain its importance in hydro electric power plant. [6]

b) Derive the relation for power in wind. [7]

OR

Q4) a) Explain the function of following component : [6]

i) Spillways

ii) Dam

b) Differentiate between horizontal axis and vertical axis wind turbine. [7]

Q5) a) What is PV system ? What are its advantages and disadvantages. [7]

b) Explain two methods of measurement of solar radiation. [6]

P.T.O.

OR

- Q6)** a) Write a short note on biomass energy conversion to electricity. [6]
b) With the help of diagram explain working of central receiver tower solar thermal power plant. [7]

- Q7)** a) Discuss the working of a flat plate collector with neat sketch. [6]
b) Write short note on Ocean Thermal Energy conversion. [6]

OR

- Q8)** a) Compare flat type solar collector with concentric solar collector. [6]
b) Explain grid connected renewable system and their requirements. [6]

