Total No. of Questions : 4]

SEAT No. :

PC386

[Total No. of Pages : 2

[6359]-506

S.E. (Electrical Engineering) (Insem)

POWER GENERATION TECHNOLOGY

(2019 Pattern) (Semester-III) (203141)

Time : 1 Hour] *[Max. Marks : 30*

Instructions to the candidates:

1) ***Solve Q1 or Q2, Q3 or Q4.***
2) ***Figures to the right indicate full marks.***
3) ***Neat diagrams must be drawn wherever necessary.***
4) ***Assume suitable additional data, if necessary.***
5) ***Use of non-programmable calculator is allowed.***

Q1) a) Draw the complete schematic of a thermal power plant. Label each component and explain function of major components. **[6]**

b) Give the classification of steam turbines used in thermal power plants. **[4]**

c) Discuss the problems in ash handling. Explain one method of handling the ash. **[5]**

OR

Q2) a) What is a method of arresting ash from the flue gases? Explain it with neat sketch. **[6]**

b) Why the use of fire tube boilers is limited to low cost, small size and low pressure plants? **[4]**

c) Write a short notes on the following. **[5]**

i) Super heater in the thermal power plant

ii) Economiser in the thermal power plant

P.T.O.

Q3) a) Give advantages and disadvantages of a gas turbine power plant. **[6]**

b) What is meant by nuclear fission and chain reaction? **[4]**

c) What are the advantages of diesel plants over thermal plants? What are the drawbacks when used for high capacity compared to thermal plants? **[5]**

OR

Q4) a) Explain with neat diagram various parts of a nuclear reactor, mentioning clearly the function of each. **[6]**

b) Discuss two methods for improving the efficiency of gas turbine power plant. **[4]**

c) What are the various factors to be considered while selecting site for diesel power plant. **[5]**