

B.Tech. SEM -IV Electrical 2014 Course (CBCS) : WINTER - 2018

SUBJECT: GENERATION, TRANSMISSION AND DISTRIBUTION

Day: Friday
Date: 16/11/2018

W-2018-2345

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N.B:

- 1) All questions are **COMUPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data if necessary.
- 4) Use of non programmable of **CALCULTOR** is allowed.

-
- Q.1** a) Draw block diagram of Hydro-electric power station and explain. (05)
b) Draw neat diagram of Nuclear power plant and explain its operation. (05)

OR

- Q.1** a) Draw neat diagram of gas power plant and explain its working. (05)
b) Explain different factors considered for selection of site for power plants. (05)

- Q.2** a) What is integrated load duration curve? (05)
b) Explain base load and peak load on power station. (05)

OR

- Q.2** a) Explain significance of high load factor and diversity factor. (05)
b) Explain concept of cogeneration and captive generation. (05)

- Q.3** a) Write a note on different types of Nonconventional energy sources. (05)
b) List major solar power plants in India. (05)

OR

- Q.3** a) Write a note on tidal energy. (05)
b) List major wind farm in India. (05)

- Q.4** a) List out different line support, explain one in detail. (05)
b) Obtain mathematical expression for string efficiency. (05)

OR

- Q.4** a) What is skin effect? (05)
b) Obtain mathematical expression for sag. (05)

- Q.5** a) Represent performance of long transmission line. (05)
b) Represent 'T' model of transmission line. (05)

OR

- Q.5** a) What is surge impedance loading? Explain in brief. (05)
b) Evaluate and estimate ABCD constants. (05)

- Q.6** a) Explain laying of Underground cables. (05)
b) Explain classification of distribution system in detail. (05)

OR

- Q.6** a) Explain requirement of distribution system. (05)
b) Explain dielectric stress in single core cable. (05)

* * * * *