

Reg. No:

--	--	--	--	--	--	--	--	--	--

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)

B.Tech IV Year II Semester Regular & Supplementary Examinations July-2021

POWER PLANT ENGINEERING

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units 5 x 12 = 60 Marks)

UNIT-I

- 1 a What is the present position of power in India? L1 6M
b Differentiate demand factor and diversity factor. L4 6M

OR

- 2 Draw the layout of hydel power plant and explain. L2 12M

UNIT-II

- 3 a Describe high pressure boilers and their advantages. L2 6M
b What are the types of coal? Brief them. L1 6M

OR

- 4 a Illustrate the working of a chain grate stoker. L2 6M
b Analyze the pollutants and how they are measured. L4 6M

UNIT-III

- 5 a How would you classify IC engines? Brief them. L2 6M
b Explain the process of reheating and regeneration. L2 6M

OR

- 6 a What is an IC engine? Explain its applications. L1 6M
b What is meant by super charging and mention the advantages? L1 6M

UNIT-IV

- 7 a Define drainage area and its characteristics. L1 6M
b Differentiate between storage and pondage. L4 6M

OR

- 8 a Discuss hydrograph and flow duration curve and their use for hydro plants. L2 6M
b Classify Hydroelectric power plants L4 6M

UNIT-V

- 9 a Discuss true chain reaction. L2 6M
b Define critical mass, breeding and fertile materials L1 6M

OR

- 10 a Summarize the radiation hazards on living beings? L2 6M
b Define shielding and its purpose L1 6M

*** END ***