PVP 14

Code: EE4T3

II B.Tech - II Semester – Regular/Supplementary Examinations
April 2018

ELECTRICAL POWER GENERATION
(ELECTRICAL & ELECTRONICS ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART – A

Answer ***all*** the questions. All questions carry equal marks

11 x 2 = 22

1.

a) Classify hydro power plants.
b) Define efficiency of hydro power plant.
c) Write function of condenser.
d) Write formula for overall efficiency of thermal power plant.
e) List different fissile materials.
f) List different nuclear reactor components.
g) What is a fuel cell.
h) Define load factor.
i) List different types of tariff.
j) What is main bus bar system?
k) What is an air insulated sub station.

PART – B

Answer any ***THREE*** questions. All questions carry equal marks.

3 x 16 = 48 M

2.a) Explain merits and demerits of hydro electric power station. 8 M

b) Briefly explain the operation of run off river plant without pondage. 8 M

3.a) Write short notes on ESP system of thermal power plant. 8 M

b) Explain the operation of economizers in thermal power plant with neat diagram. 8 M

4.a) Sketch general layout of nuclear power plant and elaborate. 8 M

b) Explain the operation of pressurized water reactor. 8 M

5.a) Write short note on load factor and diversity factor. 8 M

b) Explain the factors effecting tariff. 8 M

6.a) Write differences between indoor and outdoor substations. 8 M

b) Explain about different types of gas insulated substations. 8 M