Total No. of Questions : 8] *[Total No. of Printed Pages : 2*

Roll No .....

ME-6005 (3) (CBGS)

B.E. VI Semester

Examination, May 2019

Choice Based Grading System (CBGS)

Power Plant Engineering

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) What is renewable energy? Explain with example.
   b) How can wind energy be converted to electrical energy.

2. a) What is mean temperature of heat addition and what is its effect on cycle efficiency?
   b) Write a note on feed water treatment.

3. a) How do you classify types of boilers of power plant?
   b) Explain the working and constructional detail of surface condensers.

4. a) Define radioactive decay and binding energy.
   b) What is the function of moderator in a nuclear plant? Which material is used as moderator.

5. Compare nuclear plant with thermal and hydroelectric plant.

6. a) Define run off. Discuss the factors which affect run off.
   b) State the purpose of surge tank. Why it is important in hydro plant?

7. a) What are elements which contribute to the cost of electricity?
   b) Discuss the salient features of interconnected systems.

8. a) What is load curve? Explain it's importance.
   b) A power station has maximum demand of 80 mw, a load factor of 0.7, plant capacity factor of 0.5 and plant use factor of 0.90. Find
      i) The daily energy produced
      ii) Reserve capacity of plant
      iii) The maximum energy that could be produced daily if the plant operating schedule is fully loaded when in operation.

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