

Roll No

ME-602 (GS)

B.E. VI Semester Examination, June 2020

Grading System (GS)

Power Plant Engineering

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. Draw flow sheet of a typical 220 MW capacity steam turbine driven and coal fired thermal power plant.
2. Explain how tidal energy is converted to electrical energy. What do you mean by schedule and range of a tidal wave?
3. Discuss the working principle and applications of MHD Converter.
4. A forced circulation boiler delivering 36kg/s at 130 bar is operated with a circulation ratio of 5:1 the circulation pumps impart a head rise of 2.8 bar with suction conditions of 350°C and 140 bar. What would the ideal pump work amount to per kg of steam delivered?
5. What is the difference between the propeller and Kaplan turbine?
OR
State the function of cooling tower. Discuss its types.
6. Explain briefly the following tariff.
 - i) Straight meter rate
 - ii) Block meter rateOR
Why it is necessary to have combined operation of different types of power stations.
7. Explain the terms:
 - i) breeding ratio
 - ii) burner
 - iii) converter
 - iv) breeder
8. Write a short note of the following:
 - a) Fuel cell
 - b) Wind energy
 - c) Solar energy
