

Code : R7410311

R07

IV B.Tech I Semester (R07) Supplementary Examinations, May 2012

POWER PLANT ENGINEERING

(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE questions

All questions carry equal marks

1. Explain with a neat sketch the working principle of pulverized coal ball mill & pulverized ball and race mill system.
2. Explain with a neat sketch the working principle of electrostatic precipitator & its advantages and disadvantages.
3. Explain with a neat sketch the working principle of a fuel injection pump in a diesel power plant.
4. Explain the working principle of gas turbine cycle with inter cooling and also reheat gas turbine cycle.
5. Explain with a line diagram the working principle of governing mechanism of turbines.
6. Explain with a neat sketch the working principle of various types of fuel cells and its advantages and disadvantages.
7. Explain with a neat sketch the working principle of a nuclear thermal reactor and fast breeder reactor.
8. Explain the various environmental aspects of power plants.
