

4. a) Explain the analysis of pollution from thermal power plants.  
b) Bring out the difference between the closed cycle and open cycle gas turbine power plant.
5. a) Compare the designs of ducting for air fuel, gases and pulverized fuels.  
b) What do you mean by optimum insulation thickness and cost? Discuss.
6. a) State and brief discuss various preliminary acceptance tests for various components of thermal power plant.  
b) Discuss the following terms in thermal power plant:
  - i) Maintenance logging.
  - ii) Drop setting.
  - iii) Heat balance of items.
7. a) Discuss how specifications and contract documents prepared?  
b) Write short about seismic analysis.
8. Write technical note on following:
  - a) Purchase and contract for fuel supplies.
  - b) Training of power plant personnel.
  - c) Ejector and vacuum pumps.

Roll No .....

## **MMTP - 201**

**M.E./M.Tech., II Semester**

Examination, June 2014

### **Thermal Power Plant Engineering**

**Time : Three Hours**

rgpvonline.com **Maximum Marks : 70**

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

1. a) State advantages and limitations of super-critical power plants.  
b) State the importance and significance of various performance curves used in thermal power plants.
2. a) Discuss the materials which are used for gas turbine and compressors. What properties should the blade material possess?  
b) What is pulverization? What is the mechanism of pulverized fuel firing system?
3. a) What is drift? How is the drift eliminated in the cooling towers?  
b) Explain the working of steam turbine driven feed pump.