

Code: CS5T5FE1, EE5T6FE2, ME5T6FE3, EM5T6FE1, IT5T5FE3

**III B.Tech - I Semester – Regular Examinations - November 2015**

**AIR POLLUTION & CONTROL**  
**(Common to CSE, EEE, ME, ECM, IT)**

Duration: 3 hours

Max. Marks: 70

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

- 1 a) Discuss the impact of man on environment mentioning the major environmental issues. 7 M
- b) Define Air pollution. Discuss the sources and classification of air pollution. 7 M
- 2 a) Name the global effects of air pollution and state pollutants responsible for each of those effects. 7 M
- b) What is green house effect? Which gases are causing Green house effect? How this effect can be reduced? 7 M
- 3 a) Explain in detail the meteorological aspects of air pollution. 7 M
- b) Write a short note on the properties of atmosphere. 7 M

- 4 a) Explain with neat sketches, how different atmospheric conditions give rise to different kinds of plume? 7 M
- b) What do you mean by atmospheric stability and explain the different types of inversion? 7 M
- 5 a) Describe with a neat sketch the principle and working of a centrifugal separator. 7 M
- b) Explain the working principle of Wet Scrubbers with a neat sketch. 7 M
- 6 a) Explain Nitrogen Oxides control technologies. 7 M
- b) Write about the condensation techniques involved in Gaseous emission controlling. 7 M
- 7 Explain the controlling measures of  $\text{SO}_x$  and  $\text{NO}_x$ . 14 M
- 8 a) Explain the stack monitoring for flue gases. 7 M
- b) Discuss the emission standards for air quality management. 7 M