

Code: R7410109**R07****B.Tech IV Year I Semester (R07) Supplementary Examinations, May 2013****AIR POLLUTION & CONTROL****(Civil Engineering)**

Time: 3 hours

Max. Marks: 80

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Define air pollution and explain its significance by presenting at least two major episodes.
(b) Explain point and non point, line and area sources of air pollution.
- 2 (a) What are the harmful effects of polluted air on human beings? Explain.
(b) Write explanatory note on "Green house effect".
- 3 (a) Explain any two methods of controlling sulphur dioxide emissions from stationary combustion sources.
(b) How do you control exhaust emissions? Explain.
- 4 (a) Explain the role of meteorological elements in the dispersion of air pollutants in the atmosphere.
(b) How do you plan a town with reference to location of industries from the point of atmospheric pollution?
- 5 (a) Explain causes and effects of "Inversion" of atmosphere.
(b) Describe with neat sketches different kinds of plumes at different atmospheric conditions.
- 6 (a) What are advantages and disadvantages of settling chambers? Give their applications.
(b) With a help of neat sketch explain working of an electrostatic precipitator.
- 7 (a) Explain wet methods of removal of SO_x .
(b) Write a note on importance of activated carbon as an adsorbent.
- 8 (a) List out chemical methods available for monitoring air pollution and explain any two methods.
(b) Explain what do you understand by air quality standards.
