

Code No: **R41018****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, February/March - 2018****AIR POLLUTION AND CONTROL****(Open Elective)****Time: 3 hours****Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

- 1 a) Classify different types of air pollutants and indicate their sources. [8]
b) Discuss about primary and secondary air pollutants. [7]
- 2 a) Enumerate the phenomenon of ozone depletion indicating the causes, effects and remedial measures. [8]
b) What is acid rain? Discuss the causes, effects and remedial measures. [7]
- 3 a) Discuss the ways and means to reduce the Exhaust Emissions from an automobile. [8]
b) Explain the basic mechanism of kinetics of air pollution. [7]
- 4 a) Explain the importance of meteorology in air pollution control. [7]
b) Discuss the method for drawing Wind Roses. Explain its use. [8]
- 5 a) Define Plume. How will you estimate the Plume rise? [7]
b) Enumerate the phenomenon of Inversions. What are the conditions that favorable to Inversion with examples? [8]
- 6 a) With neat diagrams, explain the functioning of settling chambers & cyclones. [8]
b) What is a fabric filter? Describe the function of Bag house. [7]
- 7 a) Explain various methods for control of NO₂ emissions. [8]
b) Define the terms absorption and adsorption and differentiate with examples. [7]
- 8 a) Discuss about ambient air quality standards. [7]
b) What are the environmental guidelines for industries to ensure optimum use of natural and artificial resources? [8]