

Code: 9A01706

B.Tech III Year II Semester (R09) Supplementary Examinations December/January 2015/2016

AIR POLLUTION & CONTROL

(Mechanical Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Write short notes on:
(i) Aerosols.
(ii) Secondary air pollutants.
(b) Discuss the stationary and mobile sources of air pollutants.
- 2 (a) Explain the importance of genetic and climatic factors in relation to the effects of air pollution on plants.
(b) Discuss on global warming and its effects.
- 3 With neat sketch, discuss in detail on atmospheric stability.
- 4 (a) Explain the role of meteorological elements in the dispersion of air pollutants in the atmosphere.
(b) Write a short note on maximum mixing depth and its significance in air pollution control.
- 5 (a) Discuss on lapse rates and explain its influence on dispersion of pollutants in the atmosphere.
(b) Write a short note on Gaussian dispersion model.
- 6 (a) List the various types of collection equipment for particulates and discuss the factors to be considered while selecting a suitable control equipment for particulate removal.
(b) Discuss the economic aspects of various control equipment for particulates.
- 7 Mention the common methods of control of gaseous contaminants and describe any one of them in detail.
- 8 (a) Write a short note on national ambient air quality standards.
(b) What are the devices used for sampling gases and vapor? Describe anyone in detail.
