

Code: 9A01706

R09

B.Tech IV Year I Semester (R09) Supplementary Examinations June 2016

AIR POLLUTION & CONTROL

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Discuss the natural and artificial sources of air pollution.
(b) What is meant by 'Smog'? Discuss its cause and effects.
- 2 (a) Explain with a neat sketch the mechanism of action of air pollutants on human beings.
(b) Write a short note on 'heat islands'.
- 3 Discuss in detail about thermodynamics and kinetics of air pollution.
- 4 Describe with neat sketches, how different atmospheric conditions give rise to different kinds of plumes.
- 5 Explain high pressure system and low pressure systems. Discuss the weather conditions generated by such systems in relation to air pollution problems.
- 6 Explain with neat sketch, the working principle of fabric filters. Also, discuss the factors affecting the efficiency of fabric filters and the problems associated with fabric filters.
- 7 With neat sketch, write explanatory notes on:
(a) Packed tower.
(b) Plate tower.
- 8 (a) Explain in detail the methods used for monitoring the SPM.
(b) Explain briefly the importance of air quality standards.
