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Roll No

CE - 8043**B.E. VIII Semester**

Examination, June 2015

Air Quality Monitoring and Control

(Elective - II)

Time : Three Hours**Maximum Marks : 70**

- Note :** i) Solve any one question from each unit.
ii) All question carry equal marks.

Unit - I

1. a) What are the types and sources of particulate matter causing air pollution? Briefly explain them. 7
- b) Discuss the harmful effects of polluted air on human beings. 7

OR

2. a) Discuss any two famous historical episodes of air pollution with their effects on environment. 7
- b) Explain the importance of genetic and climatic factors in relation to the effects of air pollution on plants. 7

Unit - II

3. a) Explain the role of meteorological elements in the dispersion of air pollutants in the atmosphere. 10
- b) Write a detailed note on "Height of chimney". 4

OR

4. a) Explain the different kind of plumes with neat sketch. 10
- b) Discuss the toxicity of various pollutants in short. 4

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Unit - III

5. What do you understand by secondary pollution? Discuss with examples and chemical reactions of formation of secondary pollutants. 14

OR

6. Discuss the mechanism of acid formation in atmosphere with the control strategies and effects on human health, materials and terrestrial vegetation. 14

Unit - IV

7. a) What are the devices used for sampling gases and vapours? Describe any one in detail. 7
- b) Discuss the methods available to control air pollution by process changed with examples. 7

OR

8. a) Explain with the neat sketch the principle, construction, and working of a cyclone separator. 10
- b) Write advantages and disadvantages of electrostatic precipitators. 4

Unit - V

9. a) Explain sources of air pollution and methods of abatement in thermal power plants. 7
- b) Discuss the main features of the Air (Prevention and control of pollution) Act, 1981 of the Government of India. 7

OR

10. a) What do you understand by "Occupational Diseases"? Discuss silicosis and asbestosis in detail. 7
- b) Enumerate the industries involved in environmental hazards. Also suggest suitable methods to control or reduce for them. 7

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