

P. Pages : 2

Time : Three Hours

**AW - 3149**

Max. Marks : 80

- Notes :
1. Answer **three** question from Section A and **three** question from Section B.
  2. Due credit will be given to neatness and adequate dimensions.
  3. Assume suitable data wherever necessary.
  4. Diagrams and chemical equations should be given wherever necessary.
  5. Illustrate your answer necessary with the help of neat sketches.
  6. Use of cell phones strictly prohibited.
  7. Use of pen Blue/Black ink/refill only for writing the answer book.

**SECTION - A**

- 1 a) Give the description and main source of various particulates and gaseous pollutants. 7
- b) Describe the phenomenon "Acid Rain". 6

**OR**

2. a) Explain the effect of air pollution on humans. 7
- b) Discuss air pollution and its sources. 6
3. a) Discuss the effect of air pollution on Animals and vegetation. 7
- b) Explain Greenhouse effect. 6

**OR**

4. a) Discuss the formation of ozone and ozone layer depletion with its effect. 7
- b) Discuss the air pollution effect on physical structure and materials in brief. 6
5. a) Explain following terms in details. 7
- i) Lapse Rate
- ii) Atmospheric stability
- iii) Plume rise
- b) Explain atmospheric stability and turbulence. 7

**OR**

6. Discuss classification of sampling methods and consideration of sampling. 14

**SECTION - B**

7. a) Discuss the various types of equipments that are used for collecting aerosols. 7

- b) Discuss the air pollution control in metallurgy industries.

7

OR

8. a) Explain air pollution control in Thermal power plant in brief. 7  
b) Describe particulate control by centrifugal and electrostatics precipitation. 7

OR

9. a) Mention the function of central board and state board for monitoring and control of pollution. 7  
b) Explain air quality standards in brief. 6

OR

10. a) Discuss in detail, the process of setting up National ambient air quality standards. 7  
b) Discuss Air Act 1981 (Prevention and control of pollution) in briefs. 6
11. a) Discuss the classification of analytical method for analysis of atmospheric samples. 7  
b) Explain the sedimentation process for sampling. 6

OR

12. a) Write a short note on "Air pollution due to automobiles". 7  
b) Give basic principles of sampling and analysis. 6

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