

Bachelor of Science (B.Sc.) Semester–V (C.B.S.) Examination
PRINCIPLES OF AIR AND NOISE POLLUTION
(Environmental Science)

Paper–1

Time : Three Hours]

[Maximum Marks : 50

N.B. :— (1) **ALL** questions are compulsory and carry equal marks.

(2) Illustrate your answer with suitable examples and diagrams.

1. Explain the chemistry of air pollutants, brining out clearly the classification of air pollutants. 10

OR

(a) What are the factors affecting and influencing Air pollution ? How do you measure them ? 5

(b) What is Temp. Inversion and Lapse Rates ? Explain with the help of neat and labelled diagrams.

5

2. Describe with sketch tube and plate type electrostatic precipitators for removing the dust from gases.

10

OR

(a) Explain the chemical reactions in the formation of acid rain, suggest the control measures. 5

(b) What are the powers and responsibilities of MPCB in minimising the air pollution ? 5

3. Explain the mechanism of origin of air pollution from automobiles. 10

OR

(a) Explain any two Exhaust Gas Treatment Devices. 5

(b) Discuss the salient features of Motor Vehicle Act, 1988. 5

4. Explain in detail the Auditory and Non-auditory Effects of noise pollution. 10

OR

(a) Distinguish between "ACCURACY" and "PRECISION" with examples. 5

(b) Explain the Noise Control Criteria. 5

5. Attempt any **ten** :

- (i) What is "PAN" ?
- (ii) What is a "WIND-ROSE" ?
- (iii) What is "PHOTOCHEMICAL SMOG" ?
- (iv) What is a Cyclonic Scrubber ?
- (v) Name the gas responsible for Bhopal gas tragedy.
- (vi) What is the full form of MPCB ?
- (vii) What is Catalytic Converter ?
- (viii) What is a Thermal Reactor ?
- (ix) Name the gases analyzed under PUC.
- (x) When do you reject a measurement ?
- (xi) What is "STANDARD DEVIATION" ?
- (xii) What is the unit of noise measurement ?

$1 \times 10 = 10$