

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. Name the various sources of NO₂ pollutant in atmosphere. What are the adverse effects caused by them ? 10

OR

- (a) What are particulates ? Mention various types of particulates. 5
 (b) Explain the formation of photochemical smog in the atmosphere. 5
2. What is meant by Acid Rain ? How is it formed ? In which regions of India Acid Rain has been recorded ? 10

OR

- (a) Explain briefly with sketch a gravity settling chamber for cleaning gas. 5
 (b) Enumerate various air pollutants for which National ambient air quality standards have been given in India. 5
3. Discuss the sources of air pollution from automobiles. 10

OR

- (a) Explain why catalytic reactor is necessary to control all major automotive exhaust pollutants. 5
 (b) Discuss the salient features of Motor Vehicles Act, 1988. 5
4. Describe the various measures needed for effective noise control in industry. 10

OR

- (a) Distinguish between precision and accuracy with suitable examples. 5
 (b) Explain any two types of methods of minimization of errors. 5

5. Solve any **TEN** :

- (a) Define wind roses.
 (b) Define wind velocity.
 (c) Explain the basic concept of green house effect.
 (d) What is the long form of CPCB ?
 (e) Name the gas which is responsible for Bhopal Gas Tragedy.
 (f) What are the types of scrubbers ?
 (g) Why CNG is expected to be less polluting than petrol ?
 (h) What are the principle pollutants emitted by the vehicle ?
 (i) Tabulate the Euro standards prescribed for vehicular emission.
 (j) Define decibel scale.
 (k) What are the acceptable noise levels for different areas as per WHO ?
 (l) Define confidence limit. 1×10=10