Bachelor of Science (B.Sc.) Semester—V (C.B.S.) Examination
PRINCIPLES OF AIR AND NOISE POLLUTION
Paper—1
(Environmental Science)

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 diagram.

1. Name various sources of Nox pollutants in atmosphere. Explain the sources and adverse effects caused by them.   10

OR

(a) Explain the formation of photochemical smog in atmosphere.   5

(b) How Carbon Monoxide is toxic to the human being ?   5

2. What is acid rain ? How is it caused ? In which regions of India acid rain has been recorded ? Suggest the control measures.   10

OR

(a) Discuss the role of ventury scrubber in controlling air pollution.   5

(b) Write an informative note on Bhopal gas tragedy.   5

3. Discuss why catalytic reactor is necessary to control all major automotive exhaust pollutants.   10

OR

(a) Explain the necessity of the Motor Vehicles Act, 1988 and its provisions to counter vehicular pollution.
                                                                                         5

(b) How can you, as an individual prevent vehicular pollution ? Why such an effort at individual level is important ?   5

4. Describe the various measures needed for effective noise control in Industry.   10

OR

(a) Discuss the non-auditory effect of Noise pollution.   5

(b) How errors are classified ? Explain with examples.   5

5. Attempt any **TEN** :—

(i) Define environmental lapse rate.

(ii) Mention various categories of particulate.

(iii) Name any two secondary pollutants.

(iv) Write the full form of CPCB.

(v) What are the types of ESP ?

(vi) Enumerate the various particulate pollutants for which National ambient air quality standards have been given.

(vii) What is the composition of CNG ?

(viii) Name the pollutants emitted by the vehicle ?

(ix) Why CNG is expected to be less polluting than petrol and diesel ?

(x) Define confidence limits.

(xi) What is the unit of noise pollution ?

(xii) Calculate the mean and median for the following result obtained in the analysis of Chlorides in a water sample : 74.92, 75.05, 76.09, 75.11, 75.20 and 78.22. $1 \times 10 = 10$