

NRT/KS/19/2155

Bachelor of Science (B.Sc.) Semester–V Examination

PRINCIPLES OF AIR AND NOISE POLLUTION

Optional Paper–1

(Environmental Science)

Time : Three Hours]

[Maximum Marks : 50

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

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

1. Classify the types of air pollutants. Discuss the oxides of Nitrogen and their effects on human health. 10

OR

- (a) How does photochemical smog form in the atmosphere ? 5
(b) Explain how wind velocity and humidity affect the air pollution. 5

2. Describe methods of control of air pollution. Add a note on gravity settling chamber. 10

OR

- (a) Explain the Air Pollution Control Act. 5
(b) Write a note on Bhopal Gas Tragedy. 5

3. Describe in detail the mechanism of origin of air pollution from automobiles. 10

OR

- (a) Discuss the major sources of vehicular air pollution. 5
(b) Why are catalytic converters necessary to control all major automotive exhaust pollutants ? 5

4. Describe sources and effects of Noise pollution. 10

OR

- (a) Write an informative note on noise control in industrial establishment. 5
(b) Explain the sources of determinate and indeterminate errors. 5

5. Write in brief (Attempt any **ten**) :

- (a) Mention the types of particulate matter.
(b) What is the utility of wind roses in air pollution studies ?
(c) Define temperature inversion.
(d) Illustrate the formation of Nitric Acid in Acid Rain.
(e) What is stone leprosy ?
(f) What are the operating problems associated with cyclonic separators ?
(g) State the advantages of using CNG in vehicles.
(h) Why petrol and diesel are not environmentally clean fuels ?
(i) Mention the Euro standards prescribed for vehicular emission.
(j) Name the various acoustical absorptive materials used for noise control.
(k) Distinguish between accuracy and precision.
(l) Define the confidence limit. 1×10=10