

2054
B.A./B.Sc. (General) Fourth Semester
Industrial Chemistry
Paper – B: Pollution

Time allowed: 3 Hours

Max. Marks: 75

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

1. Attempt the following.

- (a) Write composition of combustion gases.
- (b) Express temperature in different units.
- (c) Give statutory limits of noise pollution.
- (d) Define least count.
- (e) What is urban waste.
- (f) List the green house gases.
- (g) Tell in brief about biosphere.
- (h) Which substances are used in mist eliminators.
- (i) Write different agents of radiation pollution.
- (j) Name the different sources of water.

(10x1.5)

UNIT-I

- 2. (a) Discuss the effect of air pollutants on human beings and animal life.
- (b) Discuss Nitrogen cycle in detail.

(8,7)

3. Write notes on the following.

- (a) Pesticide pollution
- (b) Sewage analysis

(7,8)

UNIT-II

- 4. (a) Discuss in detail the process of filtration.
- (b) Explain principle and instrumentation of aerobic treatment of effluent water.

(7,8)

5. Discuss the following in detail.

- (a) Electrostatic precipitator
- (b) Wet scrubbers

(8,7)

UNIT-III

- 6. (a) What is solid waste. Describe the process of solid waste management by recycling technique.
- (b) Explain accuracy and precision.

(9,6)

7. Discuss the following briefly.

- (a) Ion chromatography
- (b) Gas chromatography

(7,8)

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UNIT-IV

8. Explain construction and working of following thermometers.
- (a) Resistance thermometer
 - (b) Bimetallic thermometer

(7,8)

9. Write notes on the following.
- (a) Pirani gauzes
 - (b) Density measurement

(8,7)

X-X-X