

2071
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. I which is compulsory and selecting one question from each Unit.

x-x-x

I. Attempt the following:-

- a) Name different air pollutants
- b) Define accuracy.
- c) What is the function of a gauze?
- d) Write in brief about biosphere.
- e) Write SI units of density.
- f) Tell statutory limits of noise pollution.
- g) Give composition of combustion gases.
- h) What is aerobic digestion?
- i) Which substances are used in mist eliminators?
- j) Write two points for industrial safety. (10x1½)

UNIT – I

- II. a) Discuss in detail nitrogen cycle.
- b) Write a complete note on pesticide pollution. (8,7)
- III. a) Provide the detailed classification of water pollutants.
- b) Discuss the effect of air pollutants on human beings and animal life. (8,7)

UNIT – II

- IV. a) Explain Sedimentation process in detail.
- b) Discuss in detail principle and instrumentation of aerobic treatment of effluent water. (7,8)
- V. Write complete notes on the following:-
 - a) Electrostatic precipitator
 - b) Bag filters (8,7)

P.T.O.

(2)

UNIT – III

- VI. a) Discuss concept of measurement and accuracy of lab instruments.
b) Explain in detail any two methods for solid waste management. (8,7)
- VII. Write in brief about the following:-
a) HPLC
b) Ion Chromatography (7,8)

UNIT – IV

- VIII. Give construction and working of following:-
a) Vapour filled thermometer
b) Resistance thermometer (8,7)
- IX. Write notes on the following:-
a) Pirani Gauzes
b) Diaphragm type pressure gauzes (7,8)

x-x-x