2053

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

- I. Attempt the following:
 - a) What do you mean by flora and fauna?
 - b) Write SI units of viscosity.
 - c) Tell in brief about sewage analysis.
 - d) Write different air pollutants.
 - e) Discuss filtration in brief.
 - f) What is the function of a gauze?
 - g) What is adsorption?
 - h) Give two points for industrial safety.
 - i) Write in brief about pesticide pollution.
 - j) What is meant by calibration?

 $(10x1\frac{1}{2})$

<u> UNIT – I</u>

- a) Give the detailed classification of water pollutants. II.
 - b) How is noise pollution determined? Explain its bad effects.

(7,8)

- III. a) Explain nitrogen cycle in detail.
 - b) Discuss pollution evaluation method.

(8,7)

UNIT - II

- Explain the construction and working of following equipments:-IV.
 - a) Absorber
 - b) Wet scrubber

(7,8)

- a) What is aerobic treatment of effluent water? Discuss its principle and V. instrumentation.
 - b) Write a note on sedimentation process.

(9,6)

<u>UNIT – III</u>

Vl.	Discuss in brief about the following:-	
	a) Atomic absorption spectrophotometer	
	b) HPLC	(8,7)
VII.	a) Explain concept of measurement, accuracy and precision.	
	b) Write a note on Ion chromatography	(7,8)
	<u>UNIT – IV</u>	
VIII.	Give construction and working of following:-	
	a) Bimetallic thermometer	
	b) Pressure spring thermometer	(8,7)
IX.	Write complete notes on the following:-	
	a) Viscosity measurement	
	b) Diaphragm type pressure gauzes	(7,8)