

2071

M.Sc. (Applied Chemistry/Pharmaceutical) Fourth Semester  
Paper – 403: Industrial Aspects and Management

Time allowed: 3 Hours

Max. Marks: 60

**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) What is COD?
- b) What is Ozone layer depletion?
- c) Write in brief about ambient air quality.
- d) What is impact of pollutants on human body?
- e) What is water hardness? Tell its types.
- f) Write in brief about solid waste management.

(6x2)

UNIT – I

II. a) Explain various types of air pollution. Write their effects on human beings.

b) Write about composition of atmosphere.

(7,5)

III. Explain the following:-

- a) Photochemical smog
- b) Gaseous pollutants

(7,5)

UNIT – II

IV. a) Discuss in detail gas chromatography technique used for air quality measurement.

b) Discuss chemical reaction and incineration method to control air pollution. (6,6)

V. Write notes on the following:-

- a) gravity settling chamber
- b) Wet scrubbing techniques

(6,6)

UNIT – III

VI. Discuss the following in detail:-

- a) BOD
- b) Water Quality Parameters

(6,6)

P.T.O.

(2)

VII. Write complete notes on the following:-

- a) Nygards and polymers pollution indices
- b) Preservation and handling of samples

(7,5)

UNIT – IV

VIII. Discuss in detail disaster planning 'Onsite and offsite'.

(12)

IX. Write notes on the following:-

- a) Aerobic and facultative lagoons
- b) Electrostatic treatment of water

(7,5)

x-x-x