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B.A./B.Sc. (General) Sixth Semester
Industrial Chemistry
Paper – B [Opt. (iv)]: Waste Recycling

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) Incineration
- b) Reuse of cooling water
- c) Define oil refineries and significance
- d) Osmosis reverse process
- e) Economics of waste recycling

(5x3)

UNIT – I

II. Write a short note on:-

- a) Removal of solid contaminants from water
- b) Limitation of raw material resources and waste elimination.

(7,8)

III. Discussed in detail biological and chemical treatment of waste water treatment. (15)

UNIT – II

IV. Discuss in detail:-

- a) Ion exchange process
- b) Activated carbon adsorption

(7,8)

V. How the water is treated and reused in thermal power plants and oil refineries? Discuss separately. (15)

UNIT – III

VI. a) Discuss in detail activated sludge process.

b) Discuss the characteristic and management of dyestuff.

(7,8)

VII. Write a short note on:-

- a) Recovery of SO₂
- b) Electrostatic precipitation
- c) Dry grid arresters

(3x5)

P.T.O.

(2)

UNIT - IV

- VIII. a) Fermentation process with its uses.
b) Waste water treatment in slaughter houses. (7,8)
- IX. a) Explain water treatment process for the effluent of electroplating industry.
b) Describe water treatment process for the effluent of heavy metal industry. (7,8)

x-x-x