

6. (a) Are you aware of any government initiatives to reduce pollution? Mention those.
- (b) What kind of eco-friendly products and materials do you use in your daily life for the sake of environment?
- (c) Describe the manufacture of nitrogen and oxygen gas by the cryogenic separation of Gases.

(5, 5, 5)

(200)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 1503 I

Unique Paper Code : 2173540012

Name of the Paper : INDUSTRIAL CHEMICALS
AND ENVIRONMENT

Name of the Course : B.Sc. Prog. Analytical
Chemistry

Semester : V DSE

Duration : 2 Hours

Maximum Marks : 60

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any **four** questions in all.
3. All questions carry equal marks.

1. (a) What do you mean by distillation and explain the processes involved.

P.T.O.

- (b) What is clean technology? Give some examples.
- (c) What is the principle and procedure of solvent extraction. Explain with the help of an example. (5,5,5)
2. (a) Describe the physical and health hazards of gases?
- (b) Explain the manufacture of sulfuric acid by contact process.
- (c) Give some important uses of potassium permanganate. (5,5,5)
3. (a) Write a note on reverse osmosis method of water treatment.
- (b) What do you understand by the term "BOD". How it is measured?

- (c) Why do we need green technology? (5,5,5)
4. (a) What are the cares that must be taken for sulfuric acid exposures?
- (b) What are the advantages and disadvantages of solar energy?
- (c) What do you understand by the total hardness of water and how it can be removed? (5,5,5)
5. (a) What is photochemical smog and how it is created? Also discuss about the remedial measures to be taken.
- (b) Explain about the nuclear pollution in detail.
- (c) Which sources of pollution do you consider the most problematic? Write in detail. (5,5,5)