

- (b) What is flame test? How will you detect carbohydrates on the basis of flame test? Write one confirmatory test for carbohydrates?
- (c) Who is known as the father of periodic table? How are the elements arranged in the periodic table? (6,5,4)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 5823

H

Unique Paper Code : 2174001004

Name of the Paper : GE: Chemistry and Society

Name of the Course : **All Undergraduate Courses except with Chemistry Discipline.**

Semester : IV

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. Answer any **four** questions in all.
 3. **All** questions carry equal marks.
 4. Attempt **all** parts of a question together.
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1. (a) What is the role of chemistry in day to day life, explain with suitable examples.

- (b) What is biodegradability? How will you differentiate between natural and synthetic plastic?
- (c) How will you detect the presence of copper in natural samples? Give the test to determine copper in the sample. (6,5,4)
2. (a) Describe briefly the types of air pollution. What are the ways to monitor and control air pollution?
- (b) What is biodiesel, give its preparation? Write the advantages and disadvantages of using biodiesel.
- (c) What is adulteration? How will you detect the presence of starch in milk? (6,5,4)
3. (a) Who proposed the twelve principles of green chemistry? Explain any five principles with suitable examples.
- (b) What is chemical bonding? Why do elements react to form bonds, explain with example.
- (c) What are antibiotics? Give any one example with its structure and uses. (6,5,4)

4. (a) What are the renewable sources of energy and how can these sources be made more economically viable?
- (b) Describe the heritage and historical significance of silver.
- (c) What is ionisation energy? Explain the trends of ionisation energy in the periodic table. (6,5,4)
5. (a) Define the term biocompatibility. Discuss the medicinal uses and future prospects of Iron.
- (b) What is the difference between soap and detergents? Explain how do soap and detergent work.
- (c) "Green chemistry is sustainable chemistry", explain the statement with suitable examples. (6,5,4)
6. (a) What do you understand by Zero waste chemistry, explain with suitable example. Discuss its benefits.