

**Fourth Semester FYUGP Degree (Reg) Examination April
2026**

KU4SECHE101 - GREEN METHODS IN CHEMISTRY

2024 Admission onwards

Time : 1.5 hours

Maximum Marks : 35

Section A

Answer any 6 questions. Each carry 2 marks.

1. Name the aldehyde used for the preparation of azomethine with p-toluidine.
2. What is the purpose of sodium fusion test ?
3. Write the molecular formula of ibuprofen.
4. Define green chemistry? Who is the father of green chemistry?
5. What is pollution prevention hierarchy?
6. What is dry ice?
7. What is meant by prevention of waste in green chemistry?
8. What is acoustic cavitation?

Section B

Answer any 4 questions. Each carry 4 marks.

9. Discuss the phenomenon which conducts the reaction under sonication
10. Explain the preparation of propene by dehydration of propanol.
11. Discuss the importance of atom economy in green chemistry.
12. Explain the preparation of manganese (II) acetylacetonate using green methods
13. Explain the role of accurate measurement in volumetric analysis.
14. Explain the mechanism of the benzil–benzilic acid rearrangement.

Section C

Answer any 1 questions. Each carry 7 marks.

15. Explain the photoreduction of benzophenone to benzopinacol and the photolysis of aldehydes as examples of photochemical reactions.
16. Explain the principle, procedure, and advantages of the double burette method in volumetric analysis.