

First B. Pharm (Ayurveda) Degree Supplementary Examinations March 2025
Pharmaceutical Chemistry

Time: 3 hrs

Max marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw Diagrams wherever necessary • Write equations wherever necessary

Essays**(2x10=20)**

1. Explain cycloalkanes. How are they prepared. Describe their important reactions.
2. Describe the reaction and mechanism in • Cannizzaro reaction • Aldol condensation

Short notes**(10x5=50)**

3. Why alkenes are more reactive than alkanes. Explain.
4. Effect of substituents on the acidity of carboxylic acids.
5. Explain Markownikoff's rule with the mechanism.
6. Discuss the SN_1 and SN_2 reactions.
7. Discuss sp^3 hybridization in alkanes.
8. Explain the limit test for Arsenic.
9. Explain with mechanism of alkylation of aromatic compounds.
10. Mention the structural formula for the following
 - 2-pentene • 3,5-dichloroheptane • P-aminophenol
 - Ethanolamine • 1,1-dimethylcyclobutane
11. Effect of substituents on the basicity of aliphatic amines.
12. Give occurrence and properties of Iron.

Answer briefly**(10x3=30)**

13. Classify amines with examples.
14. Resonance theory.
15. Mention the IUPAC name of $CH_2=CH-CH_2-CH_3$.
16. Give one example of primary and secondary alcohols with structure.
17. Note on limit test for heavy metals.
18. Huckel's rule
19. Uses of Ammonium chloride.
20. Chemistry of diazonium salt.
21. Any two examples of dicarboxylic acid.
22. Note on the reduction of aromatic nitro compounds.
