

**First B. Pharm (Ayurveda) Degree Regular/Supplementary Examinations
March 2024**

Pharmaceutical Chemistry

Time: 3 hrs

Max marks: 100

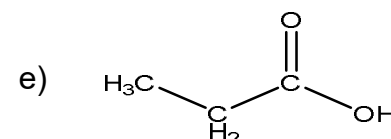
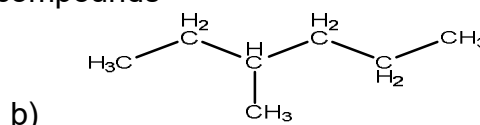
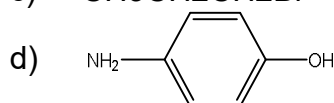
- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw Diagrams wherever necessary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

Essays**(2x10=20)**

1. Explain nucleophilic addition reactions of aldehydes. Outline any four methods for the preparation of aldehydes.
2. General Methods of preparation and reactions of Alkyl halides.

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

3. Explain the limit test for iron.
4. Give preparations for Borax
5. Discuss in detail the Kekule structure of benzene.
6. Mention the IUPAC name of the following compounds



7. What are carbocations. Explain the stability of carbocations with suitable examples.
8. Discuss about different types of hybridization.
9. Give the reactions of Alkenes.
10. Outline the methods for the preparation of Diazonium chloride.
11. Note on IR Spectroscopy.
12. Note on activating and deactivating groups in electrophilic aromatic substitution.

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

13. Note on Hydrogen bond with example.
14. Define Hyperconjugation.
15. What is NMR spectroscopy.
16. Give two examples for amine.
17. What are Alkynes.
18. Explain molecular orbital.
19. Mechanism of Esterification
20. Note on reactions of Calcium.
21. Uses of Borax
22. Define free radicals with examples.
