

First B. Pharm (Ayurveda) Degree Regular Examinations November 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 Friedel-Craft alkylation and acylation with the mechanism.
2. Define alkanes. Give general methods of preparation and properties of Alkanes.

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

3. Aldol condensation.
4. Explain the preparation and assay of NH_4Cl
5. Give general reactions of nitro compound.
6. Different tests to distinguish between aldehyde and ketone.
7. What is Kharash/peroxide effect.
8. Explain the decarboxylation reaction of carboxylic acid.
9. Discuss the stability of cyclic compounds.
10. General mechanism of nucleophilic addition reaction of carbonyl compound.
11. Explain the assay of borax.
12. Explain the halogenation of alkanes.

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

13. Difference between sigma (σ) and pi (π) bond.
14. Explain the diazotization reaction.
15. Explain chair and boat conformation of cyclohexane.
16. Give conversion from acid to ester.
17. Structural formula for 2,3-dimethylbutane.
18. Explain the effect of substituent on the acidity of Phenol.
19. Note on positive and negative inductive effects.
20. Williamson's synthesis.
21. Define limit test and its application.
22. Why phenol is more acidic than ethanol.
