

First B. Pharm (Ayurveda) Degree Supplementary Examinations
August 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. Define hybridization. Explain different hybridizations.
2. What happens when propene is treated with hydrogen bromide in presence of peroxide. Discuss the mechanism.

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

3. Explain the mechanism of aldol condensation.
4. What is nucleophilic addition reaction. Write a general reaction of nucleophilic addition reaction in aldehydes.
5. Define diazocoupling reaction with example.
6. Chloroacetic acid is more acidic than acetic acid, give reason.
7. How do you convert carboxylic acid into its esters and amides, give reaction.
8. Limit test of heavy metals.
9. Give occurrence and properties of Copper.
10. Explain structure of benzene (kekule structure and dewar structure).
11. Give general methods of preparation of ketone.
12. Explain UV spectroscopy.

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

13. Bond polarity.
14. Write the structure of (a) 1,3-butadiene (b) 2,4,6-tribromo aniline (c) 2-chloropropanal
15. Explain molecular orbital.
16. What is resonance.
17. Give any one method of preparation of alkene, alkane, and alkyne.
18. Any three applications of NMR spectroscopy.
19. Give structure IUPAC name of the following.
(a) Formaldehyde (b) Formic acid (c) Acetic acid
20. Steric effect.
21. Give the structure of nitrobenzene, toluene and acetone.
22. Write the halogenation of methane.
