

First B.Pharm (Ayurveda) Degree Supplementary Examinations April 2019

Pharmaceutical Chemistry

Time: 3 hrs

Max marks: 100

- Answer all questions
- Write equations wherever necessary
- Draw diagrams wherever necessary

Essays

(2x10=20)

1. Discuss general methods of preparation and reactions of carboxylic acids.
2. Discuss on methods of preparation and reactions of alkyl halides

Short notes

(10x5=50)

3. Structure and reactions of carbocation.
4. Mechanism of free radical substitution reaction of alkanes.
5. What are deactivating groups. How they affect reactivity and orientation of electrophilic aromatic substitution reactions.
6. Methods of preparation and reactions of acid anhydrides.
7. Mechanism of electrophilic aromatic substitution.
8. Preparation and assay of borax.
9. NMR spectroscopy and its applications.
10. Compare acidity of alcohols and phenols.
11. Preparations and reactions of aldehydes.
12. Methods of preparation of amines and diazonium chloride.

Answer briefly

(10x3=30)

13. Reactions of calcium
14. Reactions of esters
15. Explain SP hybridization with a suitable example.
16. Methods for preparation of nitro compounds.
17. Boat and chair conformations of cyclohexane.
18. Resonance theory.
19. Ionic bond and multiple bond.
20. Write structures of 3-buten-2-ol and 2,4,6-tribromoaniline.
21. Methods of preparation and reactions of aryl halides.
22. Hyper conjugation