

## First B.Pharm (Ayurveda) Degree Examinations, October 2015

## PHARMACEUTICAL CHEMISTRY

Time : 3 hrs

Max marks : 100

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

**Essays**

(2x10=20)

1. Discuss Friedel craft acylation of benzene with mechanism. Explain the stability of carbonium ion.
2. Discuss acidity of phenol. Explain Cannizzaro reaction with mechanism.

**Short notes**

(10x5=50)

3. Enumerate the principle involved in the limit test for iron with equation.
4. Explain Baeyer's strain theory.
5. Preparation assay and uses of ammonium chloride.
6. Explain sandmeyer's reaction with mechanism.
7. Explain electrophilic addition on the basis of Markonikov's rule.
8. Mention the structural formula for the following:
  - m-Dinitrobenzene
  - Isopropyl alcohol
  - 1-pentyne
  - 4-methylhexanoic acid
  - Ethylmethanamine
9. Explain any two chemical reactions of alkyl halides with equations.
10. Kekule's structure of benzene.
11. Mention any two methods of preparation of alcohol with example.
12. Explain two general methods of preparation of carboxylic acid.

**Answer briefly**

(10x3=30)

13.  $sp^3$  hybridization.
14. Explain Rosenmund reduction.
15. Mention the reaction of alcohol with carboxylic acid.
16. List the applications of UV-Visible spectroscopy.
17. Any one preparation of alkene.
18. Hydrogen bonding.
19. Explain acid and alkali hydrolysis of ester
20. Wurtz-Fittig reaction.
21. How will you convert alkene to alkane
22. List any two identification test for aldehydes.

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