

**First B.Pharm (Ayurveda) Degree Supplementary Examinations,
April 2017**

PHARMACEUTICAL CHEMISTRY

Time : 3 hrs

Max marks : 100

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

Essays**(2x10=20)**

1. What are alkyl halides and explain with mechanism of nucleophilic substitution reaction of alkyl halides
2. Describe electrophilic addition reaction in detail and add a note on Anti-Markonikov's rule

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

3. Activating and deactivating groups in electrophilic aromatic substitution
4. Method of preparation of aryl halides
5. Basicity of amines
6. UV and IR spectroscopy with application
7. Explain Cannizzaro reaction with mechanism
8. Preparation and assay of borax
9. Explain the reaction to convert alkene to alkyl halides
10. Ring stability of cycloalkanes
11. Aromaticity of benzene
12. IUPAC nomenclature of alkanes

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

13. Stability of carbocation
14. Chemistry of primary and secondary amines
15. Hyper conjugation
16. Difference between electrophile and nucleophile
17. Mention the structural formula for the following
 - 2-chloroaniline
 - m-chlorophenol
 - 3, 4-dibromohexane
18. Test for Purity of Arsenic Compound.
19. Explain the reactivity of metals
20. Hydrogen bonding
21. SP hybridization with example
22. Preparation of diazonium salt
