

QP Code: 222006

Reg. No.....

**Second Semester B.Pharm Degree Supplementary Examinations
June 2019**

**Pharmaceutical Organic Chemistry I
(2017 Scheme)**

Time: 3 Hours

Max. Marks: 75

- Answer all questions
- Write equations wherever necessary

Essays

(2x10=20)

1. Outline any four methods of preparation of alcohols. Discuss in detail various reactions of aliphatic alcohols.
2. Discuss the mechanism, kinetics, stereochemistry and relative reactivity of alkyl halides in bimolecular nucleophilic aliphatic substitution reaction.

Short Notes

(7x5=35)

3. Explain the positional and functional isomerism with examples.
4. Discuss any five nucleophilic addition reactions of ketones.
5. Write structure and uses of: ethylenediamine, amphetamine, acetyl salicylic acid, glycerol
6. Explain the effect of substitution on acidity of carboxylic acids.
7. Explain the mechanism of halogenations of alkanes.
8. Outline any four methods for the preparation of amines.
9. Summarize aldol condensation and perkin condensation.

Answer Briefly

(10x2=20)

10. Saytzeffs rule
11. sp^2 hybridisation
12. Inductive effect
13. Mention any two qualitative tests for alcohols.
14. Order of stability of carbocations
15. Mention any qualitative test for distinguishing aldehydes and ketones
16. Construct the structure of the following: 1-bromo-2,4-dimethylpentan-3-one, 2-(1-aminoethyl)pentan-1-ol
17. Oxidation of aldehyde and secondary alcohol.
18. Benzoin condensation
19. List out the derivatives of carboxylic acids.
