

**II B.Pharmacy I Semester Supplementary Examinations, Jan - 2015
ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY****Time: 3 hours****Max Marks: 75****Answer any FIVE Questions
All Questions carry equal marks**

1. (a) Write the structure, numbering chemical reactions of Quinoline
(b) Write the structure and Chemical reactions of Acridine [7+8]
2. (a) Discuss the structure and reactions of Benzimidazole?
(b) Discuss the structure and reactions of Phenothiazine? [8+7]
3. Write a note on
(a) Racemic mixture
(b) Optical activity
(c) Enantiomers
(d) chirality [4+4+4+3]
4. (a) What are carbohydrates? Give various classes of carbohydrates with suitable examples.
(b) Explain pharmaceutical importance of carbohydrates. [8+7]
5. Write an account on:
(a) Structure and stereochemistry of α -Amino acids.
(b) Zwitter ionic nature of Amino acids.
(c) Isoelectric point
(d) Pharmaceutical nature [4+4+4+3]
6. (a) Write a note on α,β glycosidic linkages and enzymatic hydrolysis
(b) Give the principle and importance of : (i) Acid value (ii) Iodine value
(iii) Saponification value [8+7]
7. (a) Write the structures & uses of uric acid, caffeine, theophylline and theobromine
(b) Write a brief account on structure of DNA and RNA [8+7]
8. Write the mechanism and applications of:
(a) Beckmann rearrangement
(b) Mannich reaction
(c) Hoffmann rearrangement
(d) Schmidt reaction [4+4+4+3]
