

II B.Pharmacy I Semester Supplementary Examinations, Dec 2013
ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

Time: 3 hours

Max Marks: 75

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Give the examples with structure for fused ring systems with one hetero atom and write a note on aromaticity of Indole
(b) Write the reactions of Indole.
2. (a) Discuss the structure and reactions of Benzimidazole?
(b) Discuss the structure and reactions of Phenothiazine?
3. Explain the following
 - a) Racemisation
 - b) Chirality
 - c) Sequence rules
 - d) Asymmetric synthesis.
4. (a) What are monosaccharides? Give classification of monosaccharides with suitable examples.
(b) Write a note on pharmaceutical importance of carbohydrates.
5. Write briefly on:
 - (a) Physical properties of Amino acids, polypeptides and proteins
 - (b) Important reactions of Amino acids.
 - (c) Isoelectric point.
6. (a) What are glycosides? Classify them with examples?
(b) Enzymatic hydrolysis
(c) Characterization of lipids
(d) Rancidity of oils and fats
7. (a) Define the terms nucleic acids, nucleotides and nucleosides with examples
(b) Write an account on structure of DNA & RNA
8. Write the detailed mechanism and applications of:
 - (a) Beckmann rearrangement
 - (b) Phillips condensation reaction
 - (c) Mannich reaction
 - (d) Michael addition reaction