



[LF 4258]

AUGUST 2014

Sub. Code: 4258

SECOND YEAR B.PHARM. DEGREE EXAMINATION**Paper III – ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY*****Q. P. Code: 564258*****Time: Three Hours****Maximum: 100 Marks****Answer All Questions****I. Essay Questions:****(2 x 20 = 40)**

1. a) What is Walden Inversion explain in detail the mechanism of reaction and factors affecting Walden inversion.
b) Give important methods of preparation and chemical reactions of Pyridine.
2. a) Give the structural elucidation of Atropine.
b) Give the definition, mechanism of reaction and applications of Meerwein-Ponndorf reaction and Schmidt reaction

II. Short Notes:**(8 x 5 = 40)**

1. Explain Catalytic hydrogenation.
2. Explain the various methods of nomenclature of Geometrical isomers.
3. Write the chemistry of vitamin A.
4. Elucidate the structure of Caffeine.
5. Explain the chemistry of Lanatosides.
6. Give the Halogenation, Coupling reaction and Reduction reaction of Furan.
7. Write the synthesis of Pyrimidine.
8. Explain any five methods of resolution of racemic mixture.

III. Short Answers:**(10 x 2 = 20)**

1. Give the application of mercuric acetate.
2. Write the structure and medicinal uses of Digitoxin and Theophylline.
3. Write the Friedel-Crafts reaction and Coupling reaction of Pyrrole.
4. Write any two reactions of Acridine.
5. Give the structure and medicinal uses of Thymol and Hesperidin.
6. Define Enantiomer and Diastereoisomer
7. Define Clemmensen reaction with example.
8. Write any method of synthesis of phenothiazine.
9. List out the Alkaloidal reagents used for identification.
10. Classify glycosides based on the Aglycones present in it.

