

(LP 4258)

AUGUST 2019

Sub. Code: 4258

**B.PHARM. DEGREE EXAMINATION  
SECOND YEAR  
PAPER III – ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY**

*Q.P. Code: 564258*

**Time: Three hours**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 20 = 40)**

1. a) What are Cardiac glycosides? Explain the stereo chemistry of Cardiac glycosides.  
b) Elucidate the structure of Ephedrine.
2. a) Explain the nomenclature of heterocyclic compounds.  
b) Explain the structure, reactivity, preparation and chemical reaction of pyridine.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Explain the electrophilic substitution reaction of pyrrole.
2. Explain the chemistry and use of Vitamin – K.
3. Give the reaction and mechanism of Meerwein-Ponndorf reduction.
4. Structural elucidation of uric acid.
5. Discuss about the chemistry of hesperidin.
6. Explain the chemistry and constitution of Papaverine.
7. Chemistry of Vitamin - A.
8. Explain the chemistry and constitution of citral.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Synthesis of Acridine.
2. Two applications of Lead Tetra acetate.
3. Define Enantiomers.
4. Two important reactions of Oxazole.
5. Cis – trans Isomerism.
6. Define plane of symmetry.
7. Structure and Numbering of Phenothiazine.
8. What is 1, 3 diaxial interaction?
9. Define stereo-selective synthesis.
10. Define Isomers and Isomerism.

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