

FEBRUARY 2011

[KY 741]

Sub. Code: 4232

SECOND B.PHARM. DEGREE EXAMINATION

**(Regulation 2004) Candidates Admitted from 2004-05 onwards
and 2009-2010 Lateral Entry Batch)**

Paper III – ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code : 564232

Time : Three hours

Maximum : 90 marks

I. Essay Questions :

Answer any TWO questions.

(2 x 20 = 40)

1. a) Explain the modern theory of double bonds.
b) Write conventions used in Stereo chemistry.
c) Elements of symmetry.
2. a) Stereo mutation of geometrical isomers.
b) Stereo chemistry of amines.
c) What is Chirality? Write their significance.
3. a) Discuss the following reaction as synthetic tools.
i) Oxidation with lead tetra acetate ii) Dehydrogenation
b) Write the nomenclature, synthesis and important reaction of pyridine and acridine.

II. Write Short Notes :

Answer any EIGHT questions.

(8 x 5 = 40)

1. Asymmetric synthesis.
2. Walden Inversion.
3. Configuration of Biphenyl compounds.
4. Write note on Proteins.
5. Chemistry and uses of (i) Citral (ii) Digoxin.
6. Elucidate the structure of atropine.
7. Hybridisation of orbital.
8. Give structure and uses of (i) Ephedrine (ii) Camphor (iii) Papaverine
(iv) Hecogenin (v) Vitamin B12.
9. Write note on podophyllotoxin.
10. Chemistry and pharmacological activity of morphine and related compounds.

III. Short Answers:

Answer any FIVE questions.

(5 x 2 = 10)

1. Catalytic hydrogenation.
2. Darzen's reaction.
3. Define Glycosides.
4. General properties of amino acid.
5. Vitamin – E.
6. Enantiomers.
7. Classification of terpenoids.
