

(LC 4252)

FEBRUARY 2013

Sub. Code: 4252

**FIRST YEAR B.PHARM. EXAM**

**Paper II – PHARMACEUTICAL ORGANIC CHEMISTRY**

*Q.P. Code : 564252*

**Time: Three Hours  
(180 Min)**

**Maximum: 100 marks**

**I. Elaborate on:**

**(2 x 20 = 40 marks)**

1. Define the terms 'Hybridization'. Explain various types of hybridization in carbon compounds with examples?
2. What are polynuclear aromatic hydrocarbons? Write the synthesis and properties of Diphenyl ethane, Phenanthrene and Naphthalene?

**II. Write notes on:**

**(8 x 5 = 40 marks)**

1. Explain Williamson ether Synthesis and Riemer-Tiemann reaction?
2. Explain the preparation of Glycerol?
3. Discuss Cannizzaro and crossed Cannizzaro reaction?
4. Write any two methods of preparation of carboxylic acid with its mechanism?
5. Explain Bayer's strain theory?
6. Give preparation, assay, use of Dimercaprol and Hexamine?
7. Give synthetic utility of diazonium salts?
8. Explain mechanism of Halogenation of alkanes. Discuss selectivity of halogens in this reaction?

**III. Short Answers**

**(10 x 2 = 20 marks)**

1. Diels-Alder reaction?
2. Dipole moment?
3. Aromaticity of benzene?
4. Energy of activation?
5. Medicinal use of Mephensorin and Benzyl benzoate?
6. Aniline with potassium permanganate -----→?
7. Hoffmann degradation of amines?
8. How will you distinguish 1, 2 and 3 alcohols?
9. Tautomerism?
10. Explain Why Alkynes are more reactive than alkenes?

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