

(LF 4252)

AUGUST 2014

Sub Code: 4252

**FIRST YEAR B.PHARM. EXAM
PAPER II – PHARMACEUTICAL ORGANIC CHEMISTRY**

Q.P. Code: 564252

Time: Three hours

Maximum: 100 marks

Answer All Questions

I. Essay:

(2X20=40)

1. Describe the mechanism of electrophilic aromatic substitution with reference to nitration, sulphonation, Friedel-Craft's alkylation and halogenations in benzene.
2. Explain the mechanism, reactivity and orientation of E2 reaction.

II. Short Notes:

(8X5=40)

1. Describe Bayer's strain theory.
2. Mention the methods of preparation and reactions of Aldehydes.
3. Write about the types and stability of Dienes.
4. Give the preparation and properties of Diphenyl ethane.
5. Mention the preparation, test for purity and medicinal uses of Methyl salicylate and Glycol.
6. Describe sp³ hybridisation with suitable example.
7. Define and mention the types of electrophiles and nucleophiles with suitable examples.
8. Write the preparation and synthetic utility of malonic ester.

III. Short Answers:

(10X2=20)

1. Define Covalent bond.
2. Write about Saytzeff's rule.
3. Brief about Williamson ether synthesis.
4. Give the structural formula of Phenol and Aniline.
5. Define 'Resonance'.
6. Write the order of stability of different types of Carbanions.
7. Give the structural formula and IUPAC name of Acetone.
8. Mention the generation of free radicals.
9. Write the name and structural formula of any two Aprotic solvents.
10. Brief about oxidation of secondary alcohols.
