

(LP 4252)

AUGUST 2019

Sub Code: 4252

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

*Q.P. Code: 564252*

**Time: Three hours**

**Maximum: 100 Marks**

**I. Elaborate on:** (2 x 20 = 40)

1. a) Classify Alcohols with examples. Give the preparation and reactions of alcohols.  
b) Explain the mechanism of Electrophilic addition reaction across a double bond.
2. a) Give the structure, nomenclature, preparation and reaction of Cycloalkanes.  
b) Explain the mechanism, reactivity and orientation of E2 reaction.

**II. Write notes on:** (8 x 5 = 40)

1. What are Carbocations? Explain its application in organic synthesis.
2. Give the synthetic utility of Diazonium salts.
3. Write the properties of alpha beta unsaturated carbonyl compounds.
4. Write the preparation, test for purity, and medicinal uses of Vanillin and Mephesisin.
5. Explain Coulson and Moffitts modification.
6. Explain Markownikoff's rule and Peroxide effect.
7. Write the preparation and properties of Naphthalene.
8. Compare and Contrast SN1 and SN2 reaction.

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

1. Tautomerism.
2. Hoffmann degradation of amines.
3. Mesomeric effect.
4. Saytzeff's rule.
5. Structure and medicinal uses of Carbromal.
6. Ionic and non-ionic solutes.
7. Resonance structure of benzene.
8. Write the Ozonolysis reaction.
9. Structural formula and IUPAC name of Acetone.
10.  $4n + 2$  rule.