



(LQ 4252)

**FEBRUARY 2020**

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) Describe Kekule structure of Benzene. Write its resonance structure of Benzene.  
b) Elaborate mechanism, kinetic, stereochemistry of Aliphatic Nucleophilic substitution reactions SN1 & SN2.
2. a) Write preparation of Alkyl halides.  
b) Briefly enumerate preparation and synthetic utility of Malonic ester  
c) Write properties of Alpha Beta unsaturated carbonyl compounds.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Explain Baeyer's strain theory and its limitations.
2. Explain Markownikoff's rule.
3. Give any five reactions of Anthracene.
4. Give preparation and medicinal uses of Saccharin.
5. Describe methods of preparation of Alcohols.
6. Explain Diels-alder reaction.
7. Write the preparation and synthetic utility of Grignard reagent.
8. Describe mechanism of addition reaction of Conjugated dienes.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Define Resonance and Conjugation.
2. Draw structure of Diethyl ether and Isopropyl alcohol.
3. What are chelating agents with examples?
4. Oxidation of primary alcohols.
5. Write two methods of synthesis of alkenes.
6. Define and classify hybridization with examples.
7. Huckel's rule.
8. Enumerate functional derivatives of carboxylic acid.
9. Epoxides.
10. Medicinal uses of Iodoform and Lactic acid.

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