

(LN 2016)

SEPTEMBER 2018

Sub. Code: 2016

B.PHARM. DEGREE EXAMINATION
PCI REGULATION – SEMESTER II
FIRST YEAR
PAPER II – PHARMACEUTICAL ORGANIC CHEMISTRY – I

Q.P. Code: 562016

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions. (2 x 10 = 20)

1. Define Elimination reaction. Discuss the mechanism of E₁ and E₂ reactions.
2. Explain the free radical addition reaction of conjugated dienes with examples.
3. Describe the mechanism, kinetics and stereochemistry of SN₂ reaction.

II. Write notes on: Answer any SEVEN questions. (7 x 5 = 35)

1. Explain the acidity of carboxylic acids.
2. Stability and rearrangement of carbocations.
3. Mechanism and examples of aldol condensation.
4. Explain the effect of substituents on basicity of amines.
5. Explain Diels Alder reaction with examples.
6. How to differentiate primary, secondary and tertiary alcohols?
7. SN₁ versus SN₂ reactions.
8. Benzoin condensation.
9. Explain about Markownikoff's rule.

III. Short answers on: Answer ALL questions. (10 x 2 = 20)

1. Define SP₃ hybridization.
2. Define optical isomerism with one example.
3. Give the structure of 2-Pentanol and isopropyl alcohol.
4. Define nucleophilles and electrophilles.
5. Structure and use of formaldehyde and paraldehyde.
6. Define conjugated dienes with examples.
7. What is tautomerism?
8. Any two qualitative test for aldehyde.
9. Structure and uses of methyl salicylate.
10. Define electromeric effect.
