

(LP 2039)

SEPTEMBER 2019

Sub. Code: 2039

B.PHARM. DEGREE EXAMINATION
PCI Regulation – SEMESTER IV
PAPER I – PHARMACEUTICAL ORGANIC CHEMISTRY – III

Q.P. Code: 562039

Time: Three hours

Maximum: 75 Marks

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

1. Discuss the sequence rules and RS system of optical isomers.
2. Explain the determination of configuration of geometrical isomers.
3. Write the synthesis, properties and medicinal uses of pyridine.

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

1. Element of symmetry.
2. Stereoisomerism of biphenyl compounds.
3. Relative aromaticity and reactivity of pyrrole, furan, and thiophene.
4. Dakin reaction.
5. Beckmann's rearrangement.
6. Stereospecific and stereoselective reaction.
7. Racemic modification.
8. Write the synthesis and medicinal uses of imidazole.
9. Explain electrophilic reaction of oxazole.

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

1. Explain the stability of axial and equatorial substitution of cyclohexane.
2. Define configurational and conformational isomers.
3. Explain the optical activity of meso and racemic form.
4. Write the Paalknoor synthesis of pyrrole.
5. Write the Skraup synthesis of quinoline.
6. Write the Chichibabin reaction.
7. Write the medicinal uses of indole.
8. Write the reduction by Zn-Hg.
9. What is Wolff Kishner reduction?
10. Write the importance of Birch reduction.
