

Rajiv Gandhi University of Health Sciences, Karnataka
Fourth Semester B. Pharm Degree Examination – MAY/JUNE 2019

Time: Three Hours

Max. Marks: 75 Marks

Pharmaceutical Organic Chemistry - III
Q.P. CODE: 5013

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Define configuration. Explain the sequence rule for R S system of nomenclature of optical isomers.
2. Discuss aromaticity and chemical reactivity of Furan, Thiophene and Pyrrole.
3. Explain the stereochemistry of biphenyls and conditions required for optical activity.

SHORT ESSAYS (Answer any Seven)

7 x 5 = 35 Marks

4. Mention the methods used for the resolution of racemic mixture and explain any two.
5. Explain any two reactions of chiral molecules.
6. Discuss the various conformational isomers of n-Butane.
7. Explain the systematic classification of heterocyclic compounds with example.
8. Write the method of synthesis and chemical reactions of Thiazole.
9. Write synthesis and reactions of Pyridine.
10. Compare the basicity of Pyrrole with Pyridine.
11. Explain the mechanism involved in Claisen-Schmidt condensation.
12. Write the Dakin reaction.

SHORT ANSWERS (Answer All)

10 x 2 = 20 Marks

13. Define Enantiomers with example.
14. Define alternative axis of symmetry with example.
15. Illustrate with example of E and Z nomenclature
16. Define Stereospecific reaction with example.
17. Write the resonance structures of Thiophene.
18. Write the structure and medicinal uses of Furan derivative.
19. Give any one method of synthesis of Pyrimidine.
20. Give the basic structure and uses of Azepines.
21. Give the structure and use of Lithium Aluminium hydride.
22. Enlist the importance of Oppenauer-oxidation reaction.
