

# Rajiv Gandhi University of Health Sciences, Karnataka

## II Year B. Pharm Degree Examination – 14-Jan-2020

**Time: Three Hours****Max. Marks: 70 Marks****PHARMACEUTICAL ORGANIC CHEMISTRY – II (RS - 4)****Q.P. CODE: 2634**

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. Give the methods of preparation & chemical reactions of benzofuran and benzothiophene.
2. Explain the steps involved in the structural elucidation of Glucose.
3. What is racemic modification? Discuss the methods of resolution of racemic modification with examples.

**SHORT ESSAYS (Answer any Six)****6 x 5 = 30 Marks**

4. Give the various reactions of chiral molecules.
5. What are heterocyclic compounds? Write its classification with examples.
6. Write the resonance structures of Pyrrole, furan & Thiophene.
7. Give the chemistry of Maltose.
8. Write a note on hardening of oils.
9. Write any three methods of synthesis of amino acids.
10. Explain the use of Sodamide in Chichibabin reaction. Give its mechanism.
11. Explain essential and non-essential amino acids with suitable examples.

**SHORT ANSWERS****10 x 2 = 20 Marks**

12. Define the term specific rotation and optical rotation.
13. Give the structure of pyrimidine, pyridazine and pyrazine
14. Define aldose and ketose sugars. Give examples.
15. What is unsaponifiable matter and give its significance.
16. What is isoelectric point of amino acids? Give its significance.
17. Mention the techniques used for the determination of N-terminal amino acid residue of peptide.
18. Mention any four methods used for the determination of geometric isomers.
19. Define protection and deprotection of functional groups with examples.
20. Write the significance of carbonyl protective agents. Give two examples.
21. Give the structure and application of Sodium borohydride

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