

# Rajiv Gandhi University of Health Sciences, Karnataka

Second year B.Pharm Degree Examination – August 2010

Time: Three Hours

Max. Marks: 70 Marks

## PHARMACEUTICAL ORGANIC CHEMISTRY - II (Revised Scheme 3)

**Q.P. CODE: 2610**

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 optical activity. Explain elements of symmetry with examples
2. Define carbohydrates. Classify them with examples and establish the open chain structure of glucose
3. Give any two method of synthesis, reactions and their medicinally important compounds with uses of a) Naphthalene b) Anthracene

### SHORT ESSAYS (Answer any Six)

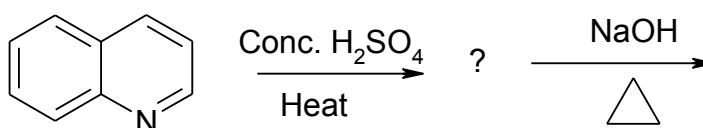
6 x 5 = 30 Marks

4. Explain R & S configuration. Give their sequence rules with examples
5. Give reaction and mechanism of Fischer indole synthesis
6. Describe the electrophilic substitution reaction and its orientation in pyrrole
7. Give two synthesis of Imidazole and Pyrazole
8. Define and classify proteins in detail with examples
9. Discuss the chemistry of maltose
10. Enlist analytical constants of oils and fats. Describe any one method to determine iodine value with its significance
11. Discuss the stereochemistry of Biphenyls

### SHORT ANSWERS

10 x 2 = 20 Marks

12. Define geometrical isomers with example
13. Give the structure and uses of Diazepam
14. Define the isoelectric point with its significance
15. Give structure and uses of any one compound with pyridine nucleus
16. Outline the Chichibabin reaction
17. Give the pharmaceutical applications of fats and oils
18. What are essential amino acids? Give example
19. Explain Kiliani synthesis
20. Outline the Strecker's synthesis of amino acids
21. Complete the following reaction



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