

# Rajiv Gandhi University of Health Sciences, Karnataka

## II Year B.Pharm Degree Examination – JAN-2019

**Time: Three Hours****Max. Marks: 80 Marks**

### Pharmaceutical Organic Chemistry - II (Revised Scheme - 2) Q.P. CODE: 1960

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. What are fats and oils? Add a note on their composition. Describe their chemical properties.
2. (a) Describe the various methods for the resolution of racemic mixtures.  
(b) Write a note on asymmetric synthesis giving examples.
3. Give any two methods of synthesis, reactions and their medicinally important compounds with uses of (a) Imidazole (b) pyridine.

**SHORT ESSAYS (Answer any Eight)****8 x 5 = 40 Marks**

4. Give the structure and medicinal uses of (a) Isoniazid (b) Diethyl carbamazine (c) Carbimazole (d) Pyrimethamine (e) Diazepam.
5. What are geometrical isomers? Add a note on their nomenclature.
6. Outline the synthesis of Pyrimidine and describe the medicinal importance of it.
7. Write a note on stereochemistry of alicyclic compounds.
8. Give pharmaceutical applications of Cellulose and its derivatives.
9. Explain the stereochemistry of Biphenyls.
10. How do you determine iodine value? Explain.
11. Explain the structure and chemistry of Sucrose.
12. Write a note on conformational isomers. Explain the conformation of Butane.
13. Illustrate a peptide linkage.

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

14. What are Enantiomers?
15. Give the structure and uses of a compound containing Naphthalene nucleus.
16. Give the structure, systematic chemical name and medicinal uses of Sulphadiazine.
17. Outline the E<sub>2</sub> mechanism.
18. Write the structure of Azepine and Purine.
19. Define epimers.
20. Define Mutarotation.
21. What is an invert sugar?
22. Write a note on optical isomers.
23. Give the structure and medicinal uses of Codeine.

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