

Rajiv Gandhi University of Health Sciences, Karnataka

II Year B. Pharm Degree Examination – JAN-2019

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)

 $2 \times 10 = 20 \text{ Marks}$

- What are heterocyclic compounds? Classify them with examples and add a note on aromaticity of heterocyclic compounds.
- 2. What are essential Amino acids? Classify them with examples. Describe the reactions of Amino acids.
- 3. What are oils and fats? Give the classification of oils with examples. Enlist the analytical constants of fats and oils with their significance.

SHORT ESSAYS (Answer any Six)

 $6 \times 5 = 30 \text{ Marks}$

- 4. Give two methods of synthesis and two reactions of naphthalene.
- 5. Write a note on Asymmetric synthesis.
- 6. Give the structure and uses of the following:
 - a. Diazepam
 - b. Morphine
 - c. Nikethamide
- 7. Discuss the chemistry of Oximes.
- 8. Explain the Fischer Kiliani's reaction of converting aldopentose to aldohexose.
- 9. What are the stereo selective and stereo specific reactions?
- 10. Compare the aromaticity of Pyrrole, Thiophene and Furan.
- 11. What are Peptides? Describe a method for their synthesis.

SHORT ANSWERS $10 \times 2 = 20 \text{ Marks}$

- 12. What is isoelectric point? Give its significance.
- 13. Define epimers with examples.
- 14. Define chirality and meso structures.
- 15. Give the oxidation reactions of naphthalene.
- 16. Explain 'E' and 'Z' system of nomenclature.
- 17. Give the conversion of Furan to Furoic acid.
- 18. What are optical isomers? Give examples.
- 19. Draw the cis and trans isomers of 2-Butene.
- 20. What are non-reducing sugars? Give example.
- 21. Define the term configuration. Draw S-Bromochlorofluoromethane.
