

## 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 (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)

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

- 1. What are conformers? Discuss in detail the stereochemistry of cyclohexane.
- 2. How will you convert the following?
  - a. Aldopentose into Aldohexose
  - b. Aldose into its corresponding ketose.
- 3. Classify proteins with examples. Describe the synthesis of Amino acids.

## **SHORT ESSAYS (Answer any Six)**

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

- 4. Write the structure of Naphthalene and discuss its reactions.
- 5. Give the methods of synthesis and reactions of Pyrrole.
- 6. Give the reaction and mechanism of Fischer-Indole synthesis.
- 7. Write the structure of heterocyclic nucleus present in the following drugs.
  - a. Nikethamide
  - b. Metronidazole
  - c. Diazepam
  - d. Chloroquine
  - e. Sulphadiazine
- 8. Write a note on derivatives of cellulose.
- 9. Explain about stereochemistry of biphenyl compounds.
- 10. Give any two methods of synthesis and two reactions of Phenanthrene.
- 11. Write the structure and uses of any four drugs containing six membered heterocyclic compounds.

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

- 12. What is Chirality?
- 13. What is rancidity? Give classification.
- 14. Give the structure and uses of Propranolol.
- 15. Outline the Chichibabin reaction.
- 16. What are 'Syn' and 'Anti' elimination reactions?
- 17. What is Peptide linkage? Give its structure.
- 18. Define Epimers with examples.
- 19. What happens when Furfural is treated with aqueous NaOH solution? Name the reaction.
- 20. Give the reduction products of Pyridine and Pyrrole.
- 21. Define optical isomers and give an example.

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