

# Rajiv Gandhi University of Health Sciences, Karnataka II Year B.Pharm Degree Examination – 14-Jan-2020

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)

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

- 1. (a) Define polynuclear hydrocarbons. Give five examples with structure and numbering of carbon.
  - (b) Write the method for the synthesis of diphenyl methane.
- 2. Define and classify amino acids with examples. Write any four reactions and synthesis of amino acids.
- 3. Give the stereochemistry of butane and cyclohexane.

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

 $8 \times 5 = 40 \text{ Marks}$ 

- 4. Explain the stereochemical mechanism of addition of halogen to alkenes.
- 5. What are triglycerides? Describe the significance of their iodine values.
- 6. Why Pyrrole is more reactive than Pyridine towards electrophilic reagent?
- 7. What are optically active compounds? Write a note on elements of symmetry.
- 8. Give the synthesis and reactions of Phenanthrene.
- 9. What is meant by absolute configuration? Describe the R & S system of nomenclature of optical isomers.
- 10. Outline the method for conversion of pentose into a hexose.
- 11. Outline two synthesis of Furan and Thiophene.
- 12. What are fats and oils? Write a note on rancidity.
- 13. Give Haworth's synthesis of Naphthalene. Give its chemical properties.

#### **SHORT ANSWERS**

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

- 14. Define isoelectric point.
- 15. Outline the Chichibabin reaction.
- 16. Write the zwitter ions structure of glycine.
- 17. Write the two synthesis of Benzofuran.
- 18. What are aldoximes and ketoximes? Give examples.
- 19. What are epimers? Give examples.
- 20. How do you convert Naphthalene into 2-Nitro naphthalene?
- 21. What is hydrogenation of oils?
- 22. Explain with an example R & S configuration.
- 23. Write the structures of Beta-D-Glucopyranose and Beta-D-Glucofuranose.

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