Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.Pharm Degree Examination – JAN-2019

Time: Three Hours   **Max. Marks: 70 Marks**

PHARMACEUTICAL ORGANIC CHEMISTRY – I
(Revised Scheme 3)
Q.P. CODE: 2604

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. Write any two methods for the preparation of cycloalkanes. Explain the Bayer's strain theory with its limitations.
2. Define and give the mechanism of i) Cannizzaro's reaction ii) Benzoin condensation.
3. What do you mean by addition reaction? What happens when propene is treated with hydrogen bromides? Discuss the mechanism involved. What is peroxide effect?

SHORT ESSAYS (Answer any Six)   **6 x 5 = 30 Marks**

4. Outline the conversion of carboxylic acid in to their functional derivatives.
5. Explain the effect of substituents on the acidity of phenols.
6. Write a note on Saytzeff's elimination.
7. Explain the stability of conjugated dienes.
8. Discuss the mechanism involved in Aldol condensation.
9. Explain Diels alder reaction.
10. Write the rules of Nomenclature of alkane, alkene, alkyne with examples.
11. Discuss the mechanism involved in SN_1 and SN_2.

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

12. Define hydrogen bonding with example.
13. What is polar aprotic solvent?
14. Attacking reagent.
15. Distinguish between functional and positional isomerism with examples.
16. How is aniline is converted to chlorobenzene.
17. Write the IUPAC name and structure of:
    a) Ethyl alcohol b) Isopropyl alcohol.
18. Define an acid according to Lewis theory.
19. The dipolemoment of trans-dichloroethylene is zero. Why?
20. What is meant by free radical? Give an example.
21. Define carbene with example.

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