

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B. Pharm Degree Examination – 21-Jun-2022

Time: Three Hours**Max. Marks: 70 Marks****PHARMACEUTICAL ORGANIC CHEMISTRY – I (RS4)****Q.P. CODE: 2628**

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. Explain kinetics, mechanism, stereochemistry and reactivity of E2 and E1 reactions
2. Discuss the mechanism involved in a) Benzoin condensation b) Cannizzaro reaction
3. Define and give the mechanism of Markonikovs and Anti-markonivkovs addition

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

4. Explain the Bayer's strain theory
5. Explain the mechanism of Fridel-Crafts alkylation
6. What are conjugated dienes? Explain the stability of conjugated dienes
7. Discuss Knoevenagel condensation reaction with mechanism
8. Explain the acidity of carboxylic acids
9. Explain the mechanism of Hoffman's rearrangement
10. Write reaction and mechanism involved in Sandmeyer's diazocoupling reaction
11. Discuss the theory of orientation in electrophilic aromatic substitution reaction

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

12. Write the structure and IUPAC name of a) Butyric acid b) Acetaldehyde
13. Define carbocation with examples
14. Define hyper conjugation with example
15. Explain aromaticity with example
16. Write Diels Alder reaction
17. Define hemolysis and heterolysis with examples
18. Compare SN1 and SN2 reactions
19. How do you convert Benzoic acid to **Benzamide**?
20. Compare the basicity of the following: Methylamine and Aniline
21. What is crossed aldol condensation? Give examples
