

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.Pharm Degree Examination – 17-Nov-2021

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. What is Markonikov's rule? Write the different addition reactions at carbon- carbon double bond?
2. Write the kinetics and mechanism of (a) S_N2 reaction (b) E_2 reaction.
3. Discuss the mechanism of Friedel craft's alkylation. Write the products obtained in Friedel crafts alkylation of phenol and benzoic acid?

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

4. Explain Hyper conjugation and resonance.
5. Discuss the Stability of carbocations.
6. Explain Claisen condensation.
7. Write the Applications of Diazonium salts in organic synthesis.
8. Define and classify Isomerism with examples.
9. Write the mechanism of Cannizaro reaction and crossed Cannizaro reaction.
10. Explain acidity of phenol.
11. Write the mechanism of Beckmann rearrangement.

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

12. What is Huckel's rule?
13. What is Keto-enol tautomerism?
14. Write the Stability of free radicals.
15. Write the Structures of (a) Allyl bromide (b) Acetophenone (c) Benzyl chloride (d) Salicylic acid.
16. Explain Saytzeff's rule.
17. Compare the basicity of Methylamine and Aniline.
18. Compare the acidity of Acetic acid and Chloro acetic acid.
19. Explain Kolbe's reaction.
20. Write the Conversion of acids to amides.
21. Explain Williamson synthesis.
