

Rajiv Gandhi University of Health Sciences, Karnataka

Second Semester B.Pharm Degree Examination – 06-Nov-2023

Time: Three Hours

Max. Marks: 75 Marks

Pharmaceutical Organic Chemistry-I Q.P. CODE: 5006

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary
All the questions are compulsory

LONG ESSAYS

2 x 10 = 20 Marks

1. Explain the kinetics, mechanism, stereochemistry and order of reactivity for SN^2 reaction.
OR
 - a. Explain about stability of conjugated dienes.
 - b. Write the mechanism of free radical addition reaction of conjugated dienes.
2. Explain the reaction mechanisms of Aldol condensation and Cannizzaro reaction.

SHORT ESSAYS

7 x 5 = 35 Marks

3. Write the IUPAC rules used in nomenclature of branched alkanes.
OR

Explain the SP^2 hybridization with suitable example.
4. Write a note on basicity of amines.
OR

Explain the kinetics and mechanism of E_1 reaction.
5. Explain about the effect of substituents on acidity of carboxylic acids.
6. Write the mechanism of Perkin condensation.
7. Explain the factor affecting SN^1 reaction.
8. What is peroxide effect? Give its mechanism.
9. Write two qualitative tests for alcohols and aldehyde.

SHORT ANSWERS

10 x 2 = 20 Marks

10. What is ozonolysis? Give its reaction.
11. What is chain isomerism? Give examples.
12. Write the structure and uses of Tartaric acid and Acetyl salicylic acid.
13. Write the IUPAC nomenclatures of Formaldehyde and Acetone.
14. What is Electromeric effect? Give examples.
15. Give the structure and uses of Ethylene diamine and Amphetamine.
16. What are hydride and alkyl shifts?
17. Write the structure and uses of glycerol and oxalic acid.
18. Write the esterification test for carboxylic acids.
19. Define a) Nucleophile b) Free radical
