

Rajiv Gandhi University of Health Sciences, Karnataka
Second Semester B.Pharm Degree Examination – 16-Nov-2021

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. Discuss the mechanism, stereochemistry and kinetics involved in the SN_2 reaction with appropriate example

OR

What is isomerism? Classify structural isomerism giving examples

2. Discuss the mechanism of a) Perkin condensation b) Cannizzaro reaction

SHORT ESSAYS

7 x 5 = 35 Marks

3. What is peroxide effect? Write the reaction mechanism of peroxide effect

OR

Explain the stability of conjugated dienes

4. Describe halogenation of alkanes

OR

How do you convert acetic acid into acetamide and ethyl acetate?

5. Discuss the stability of allyl cation.
6. Explain the effect of substituents on the acidity of carboxylic acids.
7. What is Saytzeff rule? Illustrate with an example.
8. Explain with mechanism nucleophilic addition to carbonyl compounds.
9. Give any three qualitative tests for alcohols with reaction.

SHORT ANSWERS

10 x 2 = 20 Marks

10. What is free radical? Give their order of stability.
11. What is Diel-Alder reaction?
12. What are Electrophiles? Give examples.
13. How do you convert salicylic acid into methyl salicylate?
14. Write the structure and uses of hexamine.
15. What is carbocation? Give example.
16. Write the structures of cetostearyl alcohol and glycerol.
17. What are protic solvents? Give examples.
18. Write the structures of chloroform and dichloromethane.
19. Give the structure of a) Paraldehyde b) Dimethyl phthalate.
