

Rajiv Gandhi University of Health Sciences, Karnataka

Second Semester B.Pharm Degree Examination – 07-Jan-2020

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

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Explain Kinetics, mechanism, stereochemistry and reactivity of SN2 reaction.
2. What are elimination reactions? Discuss the kinetics, mechanism, orientation and reactivity of E1 reaction.
3. Explain the Benzoin condensation and Cannizzaro condensation with mechanism.

SHORT ESSAYS (Answer any Seven)

7 x 5 = 35 Marks

4. Write the stability order of free radicals. Give reason.
5. What is Aldol condensation? Discuss the mechanism involved.
6. Write any three methods of preparation of Alkanes.
7. Write the mechanism of Perkin condensation.
8. Explain the mechanism of anti-Markovnikov's addition reaction with suitable example.
9. Explain Factor affecting E₁ reaction.
10. Explain in detail saytzeff's rule with suitable example.
11. Discuss the rearrangement of carbocation with suitable examples.
12. What is isomerism? Classify them with suitable examples.

SHORT ANSWERS (Answer All)

10 x 2 = 20 Marks

13. Write the structure of a) 2-bromo 3-methyl hexane b) amphetamine.
14. What are Elimination and Substitution reactions?
15. Write the structure and IUPAC name of a) Ethyl methyl ketone b) Diethyl ether.
16. Define amines. Give the reason why amines are basic in nature.
17. Write structure and uses of Ethylenediamine and Formaldehyde.
18. Write qualitative test for Cinnamaldehyde and Acetone.
19. What are Nucleophiles? Give two examples.
20. Write two chemical tests for aldehydes.
21. What is Cross Aldol condensation?
22. Write structure and uses of Acetic acid and Lactic acid.
