

Rajiv Gandhi University of Health Sciences, Karnataka
Second Semester B.Pharm Degree Examination – JUNE-2019

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 the factors affecting SN1 and SN2 reactions.
2. a) Carboxylic acids are acidic in nature, Why? Chloro acetic acid more acidic than acetic acid. Give reason.
b) Explain the SP³ hybridization in alkanes.
3. Outline the mechanism of Perkin's condensation and Aldol condensation.

SHORT ESSAYS (Answer any Seven)

7 x 5 = 35 Marks

4. Explain in detail Free radical substitution reaction mechanism.
5. Explain the kinetics, mechanism and order of reactivity of E₁ reaction.
6. Explain the basicity of amines with suitable examples.
7. Explain Cannizzaro condensation with mechanism.
8. Write the structure and IUPAC name of a) Formic acid b) Neopentane c) Isopropyl alcohol d) Ethyl acetoacetate e) Formamide.
9. What are Cycloaddition reactions? Explain Diel's alder reaction with mechanism.,
10. Define and classify attacking reagents with examples.
11. Write the mechanism of Benzoin condensation reaction.
12. What is peroxide effect Write its mechanism.

SHORT ANSWERS (Answer All)

10 x 2 = 20 Marks

13. Define structural isomerism with example.
14. What are paraffins? Give two examples.
15. Write any one qualitative test for Benzyl alcohol and Benzoic acid.
16. Write structure and uses of Amphetamine and Chlorobutanol.
17. Write the structure and uses of Ethanolamine and Trichloroethylene.
18. Define free radical and nucleophile.
19. What is Inductive effect? Give example.
20. What is Cross Cannizzaro reaction?
21. What is markownikoff's reaction?
22. What is ozonolysis? Give example.
