

Rajiv Gandhi University of Health Sciences, Karnataka
Second Semester B.Pharm Degree Examination – MAY-2018

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. What are addition reactions? Explain the mechanism of electrophilic and free radical addition reactions of alkenes with the suitable example.
2. a) Define and classify carbocation. Add a note on stability of carbocation.
b) Differentiate between SN_1 & SN_2 reactions.
3. Describe the reaction mechanism of Perkin and Benzoin condensation.

SHORT ESSAYS (Answer any Seven)

7 x 5 = 35 Marks

4. Give the IUPAC name of (a) Formamide (b) Ethyl acetoacetate (c) Diethyl ether (d) Methanol (e) acetaldehyde.
5. Write the kinetics and mechanism of E_1 reaction.
6. Write a note on Free radical substitution reaction of alkanes.
7. Discuss any four general methods of preparation of alcohols.
8. Discuss any four general methods of preparation of alkyl halides.
9. Explain the reaction and mechanism of Cannizzaro reaction.
10. Explain the reaction and mechanism of Aldol condensation.
11. Discuss any four chemical reactions of carboxylic acids.
12. Discuss any four general method of preparation for aliphatic amines.

SHORT ANSWERS (Answer All)

10 x 2 = 20 Marks

13. Write the structures of (a) 2,2-Dimethyl propane (b) 3-Chloro pentanone.
14. Enlist the different types of structural isomerism.
15. Enlist evidences for E_1 reaction.
16. Give an example of Diel's alder reaction.
17. Give the structure and use of Chlorobutanol an Glycerol.
18. Write any one qualitative test for formaldehyde and paraldehyde.
19. Write the structure and uses of acetone and chloralhydrate.
20. Why trichloro acetic acid is more acidic than acetic acid.
21. Write the structure and uses of salicylic acid and benzoic acid.
22. Write any two qualitative test for amines.
