

Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.Pharm Degree Examination – Aug / Sep 2011

Time: Three Hours**Max. Marks: 80 Marks**

PHARMACEUTICAL ORGANIC CHEMISTRY - I
(Revised Scheme - 2)

Q.P. CODE: 1954

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. Discuss the dehydrohalogenation of alkylhalides with its mechanism. Comment on the stability of alkenes.
2. Explain: (a) Perkin's condensation (b) Allylic rearrangement
3. Define and classify isomerism with suitable example

SHORT ESSAYS (Answer any Eight)**8 x 5 = 40 Marks**

4. Define and give the mechanism of peroxide effect
5. Explain the acidity of carboxylic acids and add a note on effect of substitutions
6. Give the replacement reaction of diazonium salts
7. Outline the synthesis of dimercaprol and tartaric acid and mention their uses
8. Explain Keto – Enol tautomerism with examples
9. Explain the stability of conjugated dienes
10. Outline the synthesis of Glyceryl tri nitrate. Indicate its medicinal uses
11. Write the rules of nomenclature of alkane and alkene by taking an example
12. Discuss the mechanism of nitration of benzene
13. Explain the mechanism of claisen condensation

SHORT ANSWERS**10 x 2 = 20 Marks**

14. Draw the different conformation of 1, 2 – dichloroethane
15. Carbon dioxide has dipole moment zero, while water has dipole moment 1.84D. explain
16. Explain why phenols is acidic while alcohols are neutral
17. Explain Huckle rule
18. What is Tollen's reagent? Give its use in laboratory
19. Give reason why benzene is more reactive than nitrobenzene and less reactive than toluene
20. Hyperconjugation
21. Give the medicinal uses of : (a) Benzyl benzoate (b) Chlorbutol
22. What are electrophiles? Give two examples
23. Outline the conversion of Aniline to Benzoic acid