

Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.Pharm Degree Examination – Mar 2013

Time: Three Hours**Max. Marks: 70 Marks**

PHARMACEUTICAL ORGANIC CHEMISTRY – I
(Revised Scheme 3)

Q.P. CODE: 2604

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 reaction and mechanism involved in the following reactions;
a) Nitration b) Sulphonation
2. What are cycloalkanes? Describe their nomenclature, any four methods of preparation and stability.
3. What is electrophilic aromatic substitution reaction? Explain the effect of substituents with example.

SHORT ESSAYS (Answer any Six)

6 x 5 = 30 Marks

4. Explain the mechanism of dehydrohalogenation of alkyl halide.
5. State and explain Friedel Craft's acylation with mechanism.
6. Explain the stability of conjugated dienes.
7. Explain the basicity of amines.
8. What is peroxide effect? Explain its mechanism.
9. explain the factors affecting Nucleophilic aliphatic substitution reaction
10. Write short notes on hydrogen bonding.
11. Explain Aldol condensation with example and mechanism.

SHORT ANSWERS

10 x 2 = 20 Marks

12. What is diazotization reaction?
13. Curtius reaction
14. What are leaving groups? Give example.
15. classify alcohols with structural examples
16. Define the term hyperconjugation.
17. Reformatsky reaction
18. Fries rearrangement
19. Write the structure and IUPAC names of a) Butyraldehyde b) Diethyl ketone.
20. Outline Sandmeyer's reaction.
21. write the Resonance structure of Benzyl radical
