

# Rajiv Gandhi University of Health Sciences, Karnataka

I Year Pharma-D Examination – Aug 2013

Time: Three Hours

Max. Marks: 70 Marks

## PHARMACEUTICAL ORGANIC CHEMISTRY

### Q.P. CODE: 2854

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. Give the method of preparation and uses of the following (a) Saccharin sodium (b) Ethylene chloride (c) Glyceryl trinitrate (d) Sodium lauryl sulphate.
2. Define Buffer's? explain different methods of adjusting pH of a Buffer System.
3. Discuss the mechanism, kinetics and stereochemistry of SN<sub>2</sub> reaction with suitable example.

#### SHORT ESSAYS (Answer any Six)

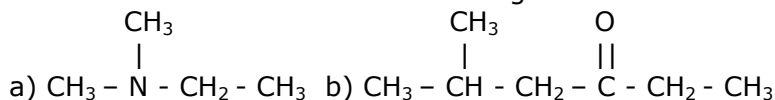
6 x 5 = 30 Marks

4. Explain Peroxide effect with examples and mechanism
5. Give a brief account of isomerism.
6. Discuss the role of solvents in SN<sub>1</sub> reaction.
7. Give the evidence for E<sub>2</sub> mechanism.
8. Give an account of Cycloaddition reactions.
9. Discuss modern theory of Electrolytes
10. Give the mechanism of Wittig reaction.
11. Explain Perkin condensation with mechanism.

#### SHORT ANSWERS

10 x 2 = 20 Marks

12. What do you mean by Dipole-dipole interaction?
13. How will you assay Chlorbutol?
14. Give structure of 1-buten-3-yne.
15. How will you convert a carboxylic acid to an amide?
16. What are halohydrins? Give an example for halohydrin formation.
17. Define melting point and mention its significance.
18. Classify alcohols with examples.
19. Refractive Index
20. Starting from toluene how will you prepare p-nitrobenzoic acid?
21. Give the IUPAC name for the following.



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