Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.Pharm Degree Examination – MAY 2017

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. What do you mean by addition reaction? What happens when propene is treated with hydrogen bromide? Discuss the mechanism involved. What is peroxide effect?
2. Explain Bayer's Strain theory of Cycloalkanes along with its merits and de-merits. Write a note on theory of strainless rings.
3. Discuss the mechanism, stereochemistry and kinetics involved in S_N2 reaction giving an appropriate example.

SHORT ESSAYS (Answer any Six)   **6 x 5 = 30 Marks**

4. Discuss the mechanism involved in chlorination of methane.
5. What is Hoffmann'a elimination? Explain with examples.
6. Benzene when treated with n-propyl chloride will not give n-propyl benzene as major product. Why? Discuss the mechanism.
7. What is Aldol condensation? Discuss the mechanism involved.
8. Explain Perkin condensation with mechanism.
9. What are dienes? Explain the stability of conjugated dienes.
10. Explain the effects of substituents on the acidity of carboxylic acids.
11. Write the Mechanism of E_1 and E_2 reaction.

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

12. What is Huckel's rule?
13. What is Ketoenol tautomerism? Give an example.
14. Write Kolbe's reaction.
15. What is polar protic solvent? Give two examples.
16. Write the IUPAC name of Neopentane and Formaldehyde.
17. Give an example for 1,2-addition and 1,4-addition reaction.
18. What is diazotization? Write an example.
19. Compare the basicity of the following: Methyl amine with Aniline.
20. What are acids according to Lewis theory? Give one example.
21. Write the conversion of acid to amide.

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