



**Rajiv Gandhi University of Health Sciences**  
**First Year M.Pharm Degree Examination - Nov 2011**

[Time: 3 Hours]

[Max. Marks: 100]

**ADVANCED PHARMACEUTICAL CHEMISTRY (ORG.)**

**PAPER II**

**(Revised Scheme 2)**

**Q.P. CODE: 9232**

Your answers should be specific to the questions asked.  
Draw neat labeled diagrams wherever necessary. Answer all questions

**LONG ESSAY (Answer any TWO)**

**2 X 20 = 40 Marks**

1. a) Write in detail about the formation, structure, reaction involving carbocations  
b) Discuss about aromatic nucleophilic reaction involved cyclohexadienyl anions
2. a) Discuss in detail, taking suitable examples the important rearrangement reaction involving carbon-nitrogen migration.  
b) Discuss the mechanism involved in Hoffmann rearrangement
3. a) Explain the mechanism and reactivity of addition reaction to carbon multiple bonds.  
b) Write a note on delocalized chemical bonding.

**SHORT ESSAY (Answer any FIVE)**

**5 X 10 = 50 Marks**

4. Write generation, stability structure and fact of carbonium ion.
5. Discuss the mechanism and synthetic importance of the following reformatsky reaction.
6. Give the appreciation of combinational chemistry.
7. What are the various approaches for deprotection of groups.
8. Explain the utility of phase – transfer catalysts
9. Discuss Homolytic and heterolytic bond fissions, considering suitable examples

**SHORT NOTES**

**2 X 5 = 10 Marks**

10. Discuss the mechanism involved in reamer – tiemen reaction
11. Aldol condensation

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