



Advanced Pharmaceutical Chemistry
(Revised Scheme 4)

Q.P. CODE: 9346

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

LONG ESSAY (Answer any TWO)

2 X 20 = 40 Marks

1. Explain the formation, structure and stability of carbocations and give the mechanisms involved in Wagner-Meerwein and Trans-annular rearrangements.
2. What is Sonochemistry? Enumerate the synthetic application and limitation of Microwave synthesis of organic chemistry.
3. Comment on the reactivity and stability of nitrenes with suitable examples. Explain their role in Hoffmann reaction.

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

4. Write a note on Wolff rearrangement and Reimer-Tiemann rearrangement.
5. Explain the mechanism of aromatic nucleophilic substitution reaction with suitable examples.
6. Discuss the various types of reduction strategies and explain their applications.
7. Write a note on applications of Retrosynthesis.
8. Describe the synthetic value of enzyme support systems used in combinatorial methods.
9. Explain the application of PTC in synthesis of heterocyclic compounds.

SHORT NOTES

2 X 5 = 10 Marks

10. Cope rearrangements
11. Macro Beads in Solid-Phase synthesis

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