

Rajiv Gandhi University of Health Sciences

First Year M.Pharm Degree Examination - <<>>

[Time: 3 Hours]

[Max. Marks: 100]

ADVANCED ORGANIC CHEMISTRY

(RS 2 & RS 3)

Q.P. CODE: 9202

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) Discuss the mechanism of different types of rearrangement reactions taking one example each
 b) Add a note on resonance theory of Benzene
2. Write down the mechanism, reaction and synthetic applications for the followings:
 a) Friedel – craft reaction
 b) Grignard reaction
 c) Reformatsky reaction
 d) Oppeneaur oxidation
3. a) Give a detailed account of mechanism and stereochemistry of E1 and E2 reaction with particular reference to aliphatic and alicyclic compounds.
 b) Add a note on free radical polymerization of alkenes

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

4. Write a note on concept of retrosynthetic analysis of drugs and its applications
5. Write the technique involved in preparing chiral drug. Explain with suitable example
6. Give an important synthetic method for preparing pyrimidine. Mention the physiological importance of derivative of pyrimidine
7. What are antihistamines? Give the synthesis, medicinal value of any three antihistaminic drugs.
8. Write the mechanism of
 a) Backmann rearrangement
 b) Wagner-Meerwein rearrangement
9. Write down synthesis and synthetic utility of malonic ester

SHORT NOTES

2 X 5 = 10 Marks

10. Explain bonding and antibonding
11. Explain Jacobsen epoxidation

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