Rajiv Gandhi University of Health Sciences

First Semester M. Pharm Degree Examination - DEC-2017

[Time: 3 Hours] [Max. Marks: 75]

Advanced Organic Chemistry -I

Q.P. CODE: 5118

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

LONG ESSAY (Answer any Three) **3 X 10 = 30 Marks**

1. Define and classify Carbocations. Write short note on structure and reactions of carbocations.
2. Explain the mechanism involved in Vilsmeir-Haack and Michael addition reaction.
3. Explain any two methods for synthesis of Quinoline and imidazole.
4. Explain basic principle and advantages of retro-synthesis. Explain the methods followed to disconnect a carbon-halogen bond.

SHORT ESSAY (Answer any Nine) **9 X 5 = 45 Marks**

5. Explain mechanism of SN1 with suitable example.
6. Explain rearrangement of carbocations with suitable example.
7. Define and explain Ullmann coupling reactions.
8. Explain Mannich reaction with one example.
9. Explain synthetic applications of Aluminium isopropoxide and diazopropane.
10. Write short note on brominating agents used in organic synthesis with their application.
11. Explain the role of triphenyphosphine in Wittig reaction.
12. Explain the synthesis and uses of 5-F-Uracil.
13. Write the structure and uses for any five imidazole containing drugs.
14. Explain stereochemical and topological stratagies adopted in retrosynthesis.

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