Rajiv Gandhi University of Health Sciences

Second Semester M. Pharm Degree Examination - JUNE-2019

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

Advanced Organic Chemistry -II

Q.P. CODE: 5158

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 asymmetric synthesis. Explain with example the asymmetric synthesis using chiral pool, chiral auxiliaries and catalytic asymmetric synthesis.
2. Explain deactivation and regeneration of heterogeneous catalysis.
3. Explain with case studies the sequential strategies for solution phase in peptide synthesis.
4. Explain the effects of solvents and super heating effects of microwave assisted reactions.

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

5. Explain deprotection and cleavage from resins.
6. Explain the principles of green chemistry.
7. Write the types of sonochemical reactions and give their synthetic applications.
8. Explain with example chiral induction and Ziegler-Natta catalyst.
9. Define the following optical activity, specific rotation and racemates.
10. Explain with suitable examples the photochemical reactions.
11. Note on green reagents.
12. Explain Cahn, Ingold, Prelog (CIP) sequence rule.
13. Explain metal catalysed reactions.
14. Write a note on synthetic applications of continuous flow reactors.

* * * * *