

QP CODE: 24018294



24018294

Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, APRIL 2024

Fourth Semester

M Sc CHEMISTRY

Elective - CH800402 - ADVANCED ORGANIC CHEMISTRY

2019 ADMISSION ONWARDS

2AF951DF

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

• Answer any **eight** questions.

Weight **1** each.

1. What are Host, Guest and Host –guest Complex?
2. What are Siderophores?
3. What is meant by green synthesis?
4. How is mevalonic acid produced?
5. What are 'chiral auxiliaries? Give one example.
6. Outline the synthesis of atropine.
7. What is DNA sequencing? Mention the different methods of DNA sequencing.
8. What is molecular Modelling in drug design?
9. Write any two examples of conducting polymers.
10. Which are the different types of Research ?

(8×1=8 weightage)

Part B (Short Essay/Problems)

Answer any **six** questions.

Weight **2** each.

11. Write a note on Molecular clefts and tweezers.
12. Explain the synthesis of Ibuprofen by green alternatives.
13. Discuss the biosynthesis of cholesterol.
14. Explain the enantioselective synthesis of Corey Lactone.



15. How will you determine the primary structure of protein?
16. Write the structure of cephalosporin. Explain the uses and mode of action.
17. Explain the classification of dendrimers.
18. Explain the characteristics of a hypothesis .

(6×2=12 weightage)

Part C (Essay Type Questions)

Answer any **two** questions.

Weight **5** each.

19. Write a note on cation binding host in supramolecular chemistry.
20. a) What are green solvents? Write a note on its various types (9 Marks) b) Explain the principle of Microwave assisted organic synthesis (6 Marks).
21. Explain the processes involved in DNA replication
22. a) Write a note on the synthesis and application of Hyperbranched polymers (10 Marks) b) What are the medical applications of polymers? (5 Marks)

(2×5=10 weightage)

