

QP CODE: 22001950



Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, AUGUST 2022

Fourth Semester

M Sc CHEMISTRY

Elective - CH800402 - ADVANCED ORGANIC CHEMISTRY

2019 ADMISSION ONWARDS

74A4DEA4

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What are Calixarenes?
2. Write any two industrial applications of cyclodextrine highlighting its importance.
3. Explain atom economy.
4. How will you biosynthesise phenylalanine?
5. Discuss Evan's assymetric aldol condensation.
6. Draw the structure of β -carotene and camphor.
7. Give the method of synthesis of quercetin.
8. Differentiate drug selectivity and drug specificity with suitable example.
9. What are the applications of dendrimers?
10. What is the importance of review article in literature survey?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. What do you understand about naturally occurring siderophores.
12. What is sonochemical synthesis? Explain the principle with an example.
13. Explain the basic principles involved in the biosynthesis of carbohydrates.
14. Explain enantioselective catalytic hydrogenation developed by Noyori and Knowels.





15. Give an account on the structure of nucleic acids.
16. Write the structure of tetracyclin. Explain the uses and mode of action.
17. What are Hyperbranched polymers? Explain with applications.
18. What is scientific method and explain its steps? What are the limitations of the scientific method?

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. What do you meant by Molecular recognition? Explain the forces involved in molecular recognition.
20. Write a note on Green alternatives to organic synthesis.
21. How does DNA direct protein synthesis in a cell?
22. Explain the following a) Conducting polymers b)temperature resistant and flame retardant polymers c)polymers for medical applications.

(2×5=10 weightage)

