

G 18000973



18000973

Reg. No.....

Name.....

M.Sc. DEGREE (C.S.S.) EXAMINATION, MAY 2018

Fourth Semester

Faculty of Science

Branch III : Chemistry–Pure Chemistry

CH 4E 02—ADVANCED ORGANIC CHEMISTRY

(2012 Admission onwards)

Time : Three Hours

Maximum Weight : 30

Section A

*Answer any **ten** questions.*

Each question carries a weight of 1.

1. What is the mechanism of thiamin catalysed synthesis of benzoin ?
2. Write short notes on green redox reaction.
3. What are calixarenes ?
4. Explain host guest complex formation with an example.
5. Why the concept of reducing chemical waste at source if consider green where as the waste treatment at the end of the chemical reaction ? Explain with an example.
6. Give two applications of hyper branched polymers.
7. Give two applications of Nano materials in Medicine.
8. What are Crown Ethers ?
9. Write a note on protein biosynthesis.
10. How alkaloids are classified.
11. Give the structure of β carotene.
12. What do you mean by chiral pool ?
13. Explain the classical and comprehensive reference.

(10 \times 1 = 10)

Turn over





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Section B

*Answer any **five** questions.*

Each question carries a weight of 2.

14. What are the principles of green chemistry ?
15. How do you classify nano materials using TEM.
16. Explain hyper branched polymers.
17. Explain the synthesis of atrophy.
18. Write short note on (1) Chloramphenicol and (2) Cephalosporosis.
19. Explain the briefly the application of the dendrimes.
20. Give the mechanism of green alternative to organic synthesis of pinacol-pinacolene and benzidine rearrangement.
21. What do you mean by chiral auxiliaries ?

(5 × 2 = 10)

Section C

*Answer any **two** questions.*

Each question carries a weight of 5.

22. Explain the general principles of microwave and ultrasound assisted organic synthesis with suitable example.
23. Explain :
 - (a) Assymetric diels alder reaction.
 - (b) Assymetric epoxidation.
24. Write notes on :
 - (i) Molecular recognition.
 - (ii) Molecular receptor.
 - (iii) Organic superconductors.
 - (iv) Supramolecular liquid crystals.
25. Indicate the manufacture of the cephalosporins and chloranophenol.

(2 × 5 = 10)

