

TB142380C

Reg. No:.....

Name:.....

B. Sc. DEGREE (C.B.C.S.S.S) EXAMINATION, APRIL 2018
(2014 Admission Supplementary)
SEMESTER II - COMPLEMENTARY COURSE (CHEMISTRY)
CHE2BOC - BASIC ORGANIC CHEMISTRY
(For Home Science)

Time: Three Hour

Maximum Marks: 60

PART A

I. Answer all questions. Each question carries 1 mark

1. Mesotartaric acid is optically inactive due to
2. Most stable conformation of ethane is
3. Cis- Trans isomerism is also known as.....
4. Hyper conjugation is also known by the name.....
5. Peroxide effect is also known as.....effect
6. Give one example for an electrophile
7. Give one example for a group having +I effect
8. Give one example for a thermosetting polymer.....

(8x1=8)

PART B

II. Answer any six questions. Each question carries 2 marks

9. What is a chiral molecule? Give example.
10. What is meant by resolution?
11. Draw the most stable conformation of methyl Cyclohexane.
12. Draw the meso-form of tartaric acid
13. Why do alkenes show geometrical isomerism?
14. Explain resonance effect
15. What is hybridization?
16. Differentiate homolytic and heterolytic fission
17. Draw the structure of natural rubber
18. Outline the preparation Nylon 6.

(6x2=12)

PART C

III. Answer any four questions. Each question carries 4 marks

19. Discuss conformation in n- Butane.
20. Explain geometrical isomerism exhibited by Aldoximes and Ketoximes
21. Explain the chair and boat conformation of Cyclohexane. Which is more stable? Why?
22. Write a note on the structure and stability of free radicals
23. Compare the mechanism of nitration and sulphonation of benzene
24. Write a note on biodegradable polymers.

(4x4=16)

PART D

IV. Answer any two questions. Each question carries 12 marks

25. Discuss optical isomerism in organic compound. Distinguish between enantiomers and diastereomers using suitable examples.
26. Explain sp , sp^2 and sp^3 hybridisation with suitable examples.
27. Discuss substitution reactions S_N1 and S_N2 with necessary examples.
28. (a) Discuss the preparation, structure and applications of i) Phenol-formaldehyde resin,
ii) Polyethylene (PE)
(b) Write a note on Vulcanization of Rubber.

(2x12=24)