TB173160C

Reg. No: .....

Name: .....

B. Sc. DEGREE (C.B.C.S.S.) EXAMINATION, NOVEMBER 2024
(2017 & 2016 Admissions Supplementary)
SEMESTER III - COMPLEMENTARY COURSE (CHEMISTRY)
CH3C03TB – BASIC ORGANIC CHEMISTRY
(Common for Botany, Zoology and Home Science)

Time: Three Hours **Maximum Marks: 60**

PART A

I. Answer all questions. Each question carries 1 mark

1. Give the structural formula of 1-Bromo -3-chloropropane
2. The monomer in polythene is.....
3. Hyperconjugation is also known by the name.....
4. ------- part of soap gets attached to oily dirt particles during washing.
5. What is flash point?

(5x1=5)

PART B

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

6. Write the structural formulae of the following :
   (1) Hex-1-en-4-yne (2) 2,3-Dimethyl-2-butene
7. What is sp hybridization? Explain the formation of acetylene
8. What are co-polymers? Give one example
9. Name any two polymerization reactions and give examples for each.
10. Define the term soaps and detergents.
11. Distinguish between natural and synthetic dyes.
12. What is an antiknock compound?
13. Explain the term octane number

(5x2=10)

PART C

III. Answer any five questions. Each question carries 5 marks

14. Write a note on hydrocarbons and its classification.
15. What are the different types of soaps? Briefly discuss the cleansing action of soap
16. Discuss S_N1 and S_N2 mechanisms taking the examples of alkaline hydrolysis of tertiary butyl bromide and methyl bromide hydrolysis.
17. Explain the Bergius process
18. Discuss how polymers become the cause of environmental hazards.
19. Give any one method for the preparation of carboxylic acid derivative.
20. Discuss the formation, structure and stability of carbocations and carbanions.

21. What are bio-degradable and non-biodegradable detergents?

(5x5=25)

PART D

IV. Answer any two questions. Each question carries 10 marks

22. What are the different types of stereoisomers? Explain with suitable example.
23. Explain the structure and types of hybridization in ethane, ethene and ethyne.
24. Give the classification of synthetic detergents with suitable examples.
25. Write a note on natural and synthetic rubbers

(2x10=20)