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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)