D 50572 **(Pages : 2)** **Name.....**

Reg. No.....

FIFTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
NOVEMBER 2023

Chemistry

CHE 5B 07—ORGANIC CHEMISTRY—II

(2019 Admission onwards)

Time : Two Hours Maximum : 60 Marks

Section A (Short Answers)

Answer questions up to 20 *marks.*
Each question carries 2 *marks.*

1. How will you prepare an azo dye ?
2. What is Libermann's nitroso reaction ?
3. How will you convert 2-amino propane to isopropanol ?
4. What is Williamson's synthesis ?
5. What product is formed when CH_3MgBr reacts with acetone followed by hydrolysis ?
6. How will you distinguish between aldehyde and ketone ?
7. What is Borsche's reagent ? What is its use ?
8. How will you convert acetic acid to acetone ?
9. What is Rosenmund's reduction ?
10. Describe how the following conversion is carried out

Turn over

11. Draw the structure of sulphapyridine and sulphadiazine.

12. Discuss the tautomerism in nitrocompounds.

(Ceiling of marks : 20)

Section B (Short Answers)

Answer questions up to 30 *marks.*
Each question carries 5 *marks.*

13. What is Claisen rearrangement ? Explain its mechanism.

14. What is Aldol condensation ? Explain the mechanism.

15. What is haloform reaction ? What is its utility ?

16. How will you prepare β hydroxy carboxylic acids using organozinc compound ?

17. How will you bring about the following conversions

    Acetic acid $\rightarrow$ Propanoic acid

    Propanoic acid $\rightarrow$ Acetic acid

18. What is Schotten-Baumann reaction ? What is its use ?

19. How will you distinguish between 1°, 2°, and 3° amines ?

(Ceiling of marks : 30)

Section C (Essay)

Answer any **one** *question.*
The question carries 10 *marks.*

20. Explain the reduction products of nitrobenzene under different conditions.

21. a) How will you prepare ethylacetoacetate ?

    b) Write notes on any *four* synthetic applications of ethylacetoacetate.

(1 × 10 = 10 marks)