

**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



11. Draw the structure of sulphapyridine and sulphadiazine.
12. Discuss the tautomerism in nitrocompounds.

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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 ?

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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 \times 10 =