Name
Reg. No

FIFTH SEMESTER U.G. DEGREE EXAMINATION, NOVEMBER 2021
(CBCSS—UG)
Chemistry
CHE 5B 07-ORGANIC CHEMISTRY-II
(2019 Admissions)

Time : Two Hours

## Section A (Short Answers)

Answer at least eight questions.
Each question carries 3 marks. All questions can be attended. Overall Ceiling 24.

1. Which is more acidic, propanol or isopropanol? Why ?
2. An alkoxide is a stronger base than hydroxide ion. Justify.
3. How will you convert phenol to salicylaldehyde?
4. What is PTC ? Give examples.
5. Complete the reaction :


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6. Suggest reactions for the conversion of ethyl magnesium chloride to 1-propanol.
7. What products are formed when $\mathrm{CH}_{3} \mathrm{MgI}$ is treated with ethanol?
8. What is urotropine? How it is prepared?
9. What is Etard's reaction?
10. Which is more acidic, acetic acid or chloroacetic acid? Why?
11. What is Hofmann's Bromamide degradation ? Explain with examples.
12. Pyridine undergoes nucleophilic substitution reaction easily. Why?

## Section B (Short Answers)

Answer at least five questions.
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.
13. How will you prepare phenolphthalein ? Explain its colour change with pH .
14. Explain oximercuration-demercuration reaction for the preparation of alcohols.
15. What is Claisen rearrangement? Explain its mechanism.
16. What is Tollen's reagent ? How it is used to test the presence of aldehydes?
17. How will you convert acetic acid to acetaldehyde and acetic acid to acetone?
18. What is Hofmann's elimination ? Explain with suitable examples.
19. Write notes on Fischer Indole synthesis.

## Section C (Essays)

Answer any one question.
The question carries 11 marks.
20. How will you separate a mixture of $1^{\circ}, 2^{\circ}$, and $3^{\circ}$ amines?
21. Write notes on : Kolbe's electrolysis; HVZ reaction ; Reformatsky reaction; and Chichibabin reaction.
( $1 \times 11=11$ marks )

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