

(Pages : 3)

R - 1264

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2023

First Degree Programme under CBCSS

Chemistry

Core Course X

CH 1641 : ORGANIC CHEMISTRY II

(2013-2016 Admission)

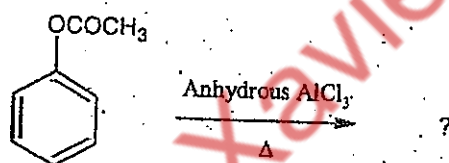
Time : 3 Hours

Max. Marks : 80

SECTION - A

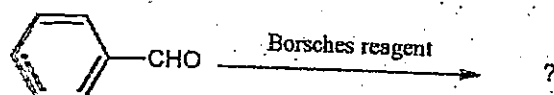
Answer all questions.

1. Predict the products



2. What does numbers indicate in [12]-crown-4?

3. Write the product obtained



P.T.O.

4. Give one example for hydroxy acids.
5. Draw the structure and systematic name for Acrylic acid.
6. Which carbohydrate is sweetest of all sugars?
7. What is the monomer of Cellulose?
8. What are the two purine bases found in nucleotides?
9. Which vitamin is known as retinol?
10. What are alkaloids?

SECTION – B

(10 × 1 = 10 Marks)

Answer any eight questions.

11. Explain the acidic nature of phenols.
12. Draw the structure of Picric acid and Resorcinol.
13. What is Aldol condensation?
14. Give names of any two polyamide polymers.
15. Write about dicarboxylic acids.
16. Give structure of any two unsaturated diacids.
17. Suggest one method of synthesis of phthalic acid.
18. Write a note on cellulose and its derivatives.
19. How will you convert Glucose into Fructose?
20. What is isoelectric point of amino acid?
21. Write a note on the classification of vitamins.
22. What is saponification value?

(8 × 2 = 16 Marks)

SECTION – C

Answer any **six** questions.

23. Suggest reactions showing ascent and descent in alcohol series.
24. Write the mechanism of Reimer-Tieman reaction.
25. Explain Cannizzaro reaction with mechanism.
26. Comment on ascent and descent series in aliphatic acids.
27. Give two methods of synthesis for lactic acid and tartaric acid.
28. Suggest any two-color tests for carbohydrates. Give two tests for reducing sugars.
29. Describe the various stages involved in the biosynthesis of proteins.
30. What are different structure of proteins?
31. Draw the structures of Coniine and nicotine.

SECTION – D

(6 × 4 = 24 Marks)

Answer any **two** questions.

32. Give reactions for showing distinction between 1°, 2° and 3° alcohols. Write synthetic methods to prepare 1°, 2° and 3° alcohols from Grignard reagent.
33. Write the oxidation and reduction reactions of aldehydes and ketones.
34. (a) Explain the classification of Carbohydrates.
(b) Explain the properties and structural elucidation of glucose.
35. (a) What are nucleic acids? Discuss the difference between the two types of nucleic acids.
(b) Explain the term genetic code.

(2 × 15 = 30 Marks)