

**B.Sc. DEGREE EXAMINATION, APRIL 2020**  
**I Year II Semester**  
**Allied Chemistry - II**

**Time : 3 Hours**

**Max.marks :60**

**Section A** ( $10 \times 1 = 10$ ) Marks

Answer any **TEN** questions

1. Define mutarotation.
2. Classify the following as mono-, oligo- and polysaccharides.  
(a) starch (b) maltose (c) cellulose (d) galactose
3. Mention any one property of sucrose.
4. List the purine bases present in nucleic acids.
5. Write the Zwitter ionic form of any one amino acid.
6. What are antipyretics?
7. Mention any two treatments for cancer.
8. Write the expansion of AIDS.
9. Mention the significance of sublimation in the separation of organic compounds.
10. Name the technique used for the purification of liquid that decomposes at its boiling point.
11. Define R<sub>f</sub> value.
12. List the advantages of TLC.

**Section B** ( $5 \times 4 = 20$ ) Marks

Answer any **FIVE** questions

13. How is glucose converted to fructose?
14. List the properties of starch.
15. What are essential and non-essential amino acids? Cite examples.
16. Write the method of preparation of dipeptides by Bergmann method.
17. Distinguish between local and general anaesthetics with relevant examples.
18. Explain the crystallisation technique for the purification of organic compounds.
19. Write the principle and advantages of paper chromatography.

**Section C** ( $3 \times 10 = 30$ ) Marks

Answer any **THREE** questions

20. Discuss the open and ring structures of glucose.
21. Explain the classification of proteins with suitable examples.
22. (a) Mention the causes and treatment of diabetes.  
(b) Compare sedatives and hypnotics.
23. Explain the following distillation techniques with a neat diagram.  
(a) Steam (b) Fractional.
24. Explain column chromatographic technique for the separation of mixtures.

**B.Sc. DEGREE EXAMINATION, APRIL 2020**  
**I Year II Semester**  
**Allied Chemistry - II**

**Time : 3 Hours**

**Max.marks :60**

**Section A** ( $10 \times 1 = 10$ ) Marks

Answer any **TEN** questions

1. Define mutarotation.
2. Classify the following as mono-, oligo- and polysaccharides.  
(a) starch (b) maltose (c) cellulose (d) galactose
3. Mention any one property of sucrose.
4. List the purine bases present in nucleic acids.
5. Write the Zwitter ionic form of any one amino acid.
6. What are antipyretics?
7. Mention any two treatments for cancer.
8. Write the expansion of AIDS.
9. Mention the significance of sublimation in the separation of organic compounds.
10. Name the technique used for the purification of liquid that decomposes at its boiling point.
11. Define R<sub>f</sub> value.
12. List the advantages of TLC.

**Section B** ( $5 \times 4 = 20$ ) Marks

Answer any **FIVE** questions

13. How is glucose converted to fructose?
14. List the properties of starch.
15. What are essential and non-essential amino acids? Cite examples.
16. Write the method of preparation of dipeptides by Bergmann method.
17. Distinguish between local and general anaesthetics with relevant examples.
18. Explain the crystallisation technique for the purification of organic compounds.
19. Write the principle and advantages of paper chromatography.

**Section C** ( $3 \times 10 = 30$ ) Marks

Answer any **THREE** questions

20. Discuss the open and ring structures of glucose.
21. Explain the classification of proteins with suitable examples.
22. (a) Mention the causes and treatment of diabetes.  
(b) Compare sedatives and hypnotics.
23. Explain the following distillation techniques with a neat diagram.  
(a) Steam (b) Fractional.
24. Explain column chromatographic technique for the separation of mixtures.