B.Sc. DEGREE EXAMINATION,NOVEMBER 2019
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. What are reducing and non-reducing sugars?
2. How does fructose reacts with con.HNO_3?
3. Give an example for basic and acidic amino acids.
4. What are the bases present in DNA and RNA?
5. Give one example each for tranquiliser, sedatives and hypnotics.
6. What is the difference between Diabetes insipidus and mellitus?
7. Write the principle of solvent extraction.
8. List out the factors on which efficiency of crystallization depends.
9. Define R_f value.
10. Write the applications of chromatography.
11. What do you mean by inversion of sucrose?
12. Write the causes of cancer.

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

Answer any **FIVE** questions

13. Discuss the applications of cellulose.
14. Explain the preparation of polypeptide by Bergmann method.
15. Define and give example for (i) analgesic , (ii) antipyretic (iii) anaesthetics.
16. How is purification carried out by sublimation technique?
17. Explain the working of column chromatographic technique.
18. How will you prove that keto group is present at C_2 of fructose?
19. Write the action of heat on amino acids.

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

Answer any **THREE** questions

20. Explain the interconversion of glucose to fructose and vice versa.
21. (a) Write a detailed account on the classification of protein based on composition and shape.
    (b) Explain the colour reactions exhibited by proteins. (7+3)
22. Give a detailed account on the cause and treatment of AIDS.
23. Explain in detail about the working of fractional and steam distillation technique.
24. How thin layer chromatography is used in separation technique. Why it is more advantageous than paper chromatography?

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