B.Sc. DEGREE EXAMINATION,APRIL 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. Draw the ring structure of glucose.
2. What is mutarotation?
3. What do you mean by a dipeptide?
4. Give two examples for globular proteins.
5. What is AIDS?
6. What are local anesthetics? Give an example
7. Name any two compounds which are purified by sublimation.
8. What do you mean by extraction?
9. What is R_f value?
10. Give any two examples for stationary phases used in column chromatography.
11. Name any two derivatives of cellulose.
12. What is Zwitter ion?

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

Answer any **FIVE** questions

13. How will you convert glucose into fructose?
14. Write an elementary idea about RNA.
15. Give a brief account on the following i)Hypnotics ii) Transquilisers.
16. Discuss the principle of fractional distillation.
17. Write a brief account on the applications of paper chromatography.
18. What will happen when the following compounds are hydrolyzed.
    i)Starch ii)Cellulose
19. How is α - amino acid prepared by Strecker's method?

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

Answer any **THREE** questions

20. a) Establish the open structure of glucose. b) How does fructose reacts with con HNO_3 and Na/C_2H_5OH?
21. a) Discuss the Bergman method of dipeptide synthesis. b) How proteins are classified by its biological functions?
22. Enumerate the causes and treatment for cancer and diabetes.
23. Write a note on the following
    i) Vaccum distillation (3)
    ii) Crystallization (3)
    iii) Steam distillation with diagram (4)
24. Discuss the principle and applications of the following
    i) Column chromatography ii) TLC

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