MONTHLY TEST NOVEMBER-2023

CLASS : 12TH **TIME : 1.30HRS**

SUBJECT : CHEMISTRY **LESSON-10,14** **MARKS : 50**

PART-A

Choose the correct answer **10 X1=10**

1. Which of the following amino acids are achiral
   a) Alanine b) leucine c) proline d) glycine
2. On which of the following properties does the coagulation power of anion Depend ?
   a) Both magnitude and sign of the charge on the ion
   b) Size of the ion alone
   c) The magnitude of the charge on the ion alone
   d) the sign of charge on the ion alone
3. match the following

1) sorbitol,mannitol	I) glycogen
2) α D and β D glucose	ii) fructose
3) animalstarch	iii) epimer
4) fruitsugar	iv) anomer

   a) 1-I, 2-iii, 3-I,4-iv b)1-iii,2-iv,3-i,4-ii
   c)1-iv, 2-iii,3-I, 4-ii d)1-I,2-ii, 3-iii,4-iv
4. If one strand of the DNA has the sequence 'ATGCTTGA', then the sequence of complementary strand would be
   a) TACGAACT b) TCCGAACT c) TACGTACT d) TACGRAGT
5. Glucose is not oxidised to gluconic acid by
   a) Br_2/H_2O b) Fehing solution c) Tollen's reagent d) Conc.HNO_3
6. Fog is colloidal solution of
   a) solid in gas b) gas in gas c) liquid in gas d) gas in liquid
7. The phenomenon observed when a beam of light is passed through a colloidal solution is
   a) Cataphoresis b) Electrophoresis c) Coagulation d) Tyndall effect
8. Which one of the following is an example for homogeneous catalysis?
   a) manufacture of ammonia by Haber's process
   b) manufacture of sulphuric acid by contact process
   c) hydrogenation of oil
   d) Hydrolysis of sucrose in presence of dil HCl
9. The migration of colloidal particles under the influence of an electric field is known as
   a) electroosmosis b) cataphoresis c) electrodialysis d) electrophoresis
10. The platinum catalyst used in the oxidation of SO_3 by contact process is poisoned
    a) AS_3O_3 b) V_2O_5 c) Fe_2O_3 d) $CuCl_2$

PART-B

Answer the following any five questions **5 X2=10**

Question number: 17 compulsory

11.Write a short note on peptide bond?
12.What are reducing and non-reducing sugars?
13. What are epimers ? give example
14. How can you confirm the presence of aldehyde and hydroxyl group present in glucose ?
15. Write short note on i) promoters ii) autocatalyst
16. What are active center ?
17. Write about lyophilic and lyophobic colloids. Give any one example for each colloid ?

PART-C

Answer the following any five questions **5X3=15**

Question number : 24 compulsory

18.Write any three difference between DNA and RNA?
19.Distinguish nucleosides from nucleotides?
20. Write a note on denaturation of proteins?
21.i) What is homogeneous catalysis ? Give example
ii) What is heterogeneous catalysis ? give example
22. Mention the medicinal uses of colloids
23. What do you mean by helmholtz electrical double layer?
24. Write any three method the preparation of colloids by condensation methods

PART-D

Answer the all questions **3X5=15**

25.a) Elucidate the Structure of glucose

(OR)

b) Elucidate the Structure of fructose

26. a) i) give any three difference between chemisorption and physisorption
ii) Write any two characters of catalysts

(OR)

b) Mention the biological importance of lipids

27. a) describe adsorption theory of catalysis

(OR)

b) Explain intermediate compound formation theory of catalysis with an example

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