

TEST PAPER NO. 14

TOPIC : BIOMOLECULES

M.M. 50

TIME: 3 HRS.

Name of Student _____ Roll No. _____

Q.NO. 1-10 carries 1 mark, 11-20 2 marks, 21-25 carries 3 marks, 26 carries 5 marks.

1. What are reducing sugars?
2. Write down the hydrolysis product of : i. Sucrose ii. Lactose
3. What is meant by Denaturation of Protein.
4. What are the different type of RNA found in the cell?
5. What are zwitter ions?
6. Why cannot vitamin C be stored in our body?
7. The melting points and solubility in water of amino acids are generally higher than that of the corresponding halo acids. Why?
8. Where does the water present in the egg go after boiling the egg?
9. What is glycogen. How it is different from starch?
10. What is the difference b/w nucleoside and nucleotide?
11. Write difference b/w DNA and RNA?
12. Explain the primary, secondary and tertiary structure of Protein?
13. What are nucleic acids? Mention their two important functions?
14. What are essential and non essential amino acids with example?
15. Write short notes on: Globular and Fibrous Protein
16. Write short notes on: α helical and β pleated sheet structure.
17. Write the structures of : Purine and Pyrimidine bases.
18. What is DNA finger printing? Give its two application?
19. How are vitamin classified? Name the vitamin responsible for the coagulation of blood?
20. Explain the :
 - a. Two DNA strands are not identical but complementary
 - b. DNA with excess GC unit in comparision to AT have higer value of T_m temperature.
21. Write the chemical reaction of Glucose with following agent:
 - a. HNO_3
 - b. Br_2 water
 - c. Hydroxyl amineOr//
22. Define the following terms:
 - a. Mutarotation
 - b. Epimer
 - c. Anomers
23. Write down 2 functions of : Carbohydrate, Protien and Enzymes.
24. What are enzymes. Explain its action with example.
25. What are : Glycosidic and peptide linkages. Explain with example.
26. Write essay on Vitamin. Explain the following Vitamin with example, source and defficiency disease: Vitamin A, B, C, D, E and K