



PART – B

Answer **any nine** of the following questions. **Each** question carries **6** marks : **(9×6=54)**

13. a) Explain the structural elucidation of open chain structure of glucose.
b) Write the structure of glucose-6-phosphate. Give its biological importance. **(4+2)**
14. a) Name any two heteropolysaccharides. Mention their biological importance.
b) Name the storage polysaccharides in plants and animals. **(4+2)**
15. a) Why ATP is energy currency of cell ? Explain.
b) Give the biological importance of cholic acid. **(4+2)**
16. a) How are lipids classified ? Give an example for each class.
b) What are glycoproteins ? Mention its function. **(4+2)**
17. a) Explain the singer and Nicolson model of biological membrane.
b) What is meant by rancidity ? **(4+2)**
18. a) What are phosphoglycerides ? Explain their importance in biological systems.
b) Write the structure of T_{XA4} and mention any one biological function. **(4+2)**
19. a) How does an amino acid reacts with
i) Ninhydrin
ii) Edman's reagent ?
b) What is peptide bond ? How is it formed ? **(4+2)**
20. a) Mention the factors needed for stabilising the tertiary structure of protein.
b) What are essential amino acids ? Give an example. **(4+2)**
21. a) Write a note on classification of protein based on composition with an example.
b) Explain Sakaguchi's test. **(4+2)**
22. a) Mention the types of secondary structure of proteins and describe any one of them.
b) What are exergonic reactions ? Give an example. **(4+2)**