

Very Short answer type questions (1×6 = 6 marks)

1. What is pH.
2. What are suicidal bags
3. What are transmembrane proteins
4. Mitochondria is absent in
 - a. Yeast
 - b. Bacterium
 - c. Fungal mycelium
 - d. Adipose tissue
5. All greenery on earth is due to
 - a. Leucoplast
 - b. Chloroplast
 - c. Chromoplast
 - d. None of these
6. What is the basic structure of nucleolus
 - a. DNA
 - b. Sugar
 - c. Aminoacids
 - d. Fats

Short answer type questions (2×8 =16 marks)

7. What is difference between weak and strong acid.

Or

What is pH meter.

8. Describe the structure of water
9. Describe the functions of plasma membrane
10. Distinguish between uniport, symport and antiport transport systems
11. What is the dietary requirement of calcium and what is its biochemical role
12. Write a short note on centrifugation
13. Compare the structure of glucose with galactose and lecithins with cephalins
14. Distinguish between nucleosides and nucleotides

Short answer type questions (3×11 =33 marks)

15. Define chloroplast. Discuss its biochemical role

Or

Write down various functions of Golgi apparatus.

16. What are bile salts. Discuss the role of bile salts in lipid absorption
17. What are proteins. Give an account of digestion of proteins
18. What are essential and non essential aminoacids
19. Discuss physiological and biochemical role of proteins.
20. Give sources, requirements and biochemical role of thiamine
21. Write the biological role and deficiency diseases caused by Vitamin C
22. Discuss the role of Vitamin A in vision and mention the deficiency disorders
23. What are the sources, dietary requirements and deficiency symptoms of Vitamin D
24. What are the different biochemical functions of sodium and potassium
25. Define isotopes. Give their applications

Long Answer type questions (5×3 =15 marks)

26. Classify Carbohydrates and give suitable examples for each type.

Describe the role of intestines in the digestion of food stuffs.

27. What are phospholipids. Discuss their types, structure and functions.

OR

What are plastids? Explain in detail how chloroplasts act as mini kitchens in plant cells.

28. Discuss structure of RNA and DNA in detail.

Or

Describe the classification of proteins with suitable examples.