

FORM 1 BIOLOGY
APRIL HOLIDAY ASSIGNMENT 2024

INSTRUCTIONS

1. All the work should be done in your Biology Summary books
2. Read and make notes as you answer the following questions

THE CELL

1. Give eight differences between plant and animal cell
2. Define cell specialization
3. Name, draw and describe all the specialized cells in plants and animals, giving their functions
4. Define the term tissue
5. Describe, draw and give functions of various tissues found in both plants and animals
6. Define the term organs and give examples of organs found in both plants and animals
7. Define the terms organ system and give examples of organ system
8. Answer revision questions on the topic of the cell

CELL PHYSIOLOGY

1. Define the term cell physiology
2. Describe the structure, properties and functions of the cell membrane
3. Give the three physiological processes
4. Define the term diffusion
5. Describe factors that affect diffusion
6. Explain the role of diffusion in living organisms
7. Define the term osmosis
8. Describe the movement of water if a visking tubing with sugar solution is placed in distilled water
9. Define the following terms isotonic, hypotonic and hypertonic
10. Define the following terms osmotic pressure and osmotic potential
11. What is an osmometer
12. Describe water in relations in animals
13. Define the following terms – haemolysis and crenation
14. Describe water in relations in plants
15. Define the following terms – turgor pressure, wall pressure, plasmolysed cell, plasmolysis, flaccid and deplasmolysis
16. Define the term wilting and describe wilting
17. State factors affecting osmosis
18. Describe the role of osmosis in organisms
19. Define the term active transport
20. State factors affecting transport
21. State factors affecting active transport and role of active transport
22. Answer revision questions on cell physiology