**NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ADM NO: \_\_\_\_\_\_\_\_\_\_\_\_CLASS:\_\_\_\_\_\_\_\_\_\_**

**DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ SIGN: \_\_\_\_\_\_\_\_\_\_\_\_\_TARGET\_\_\_\_\_\_\_\_\_\_**

**BIOLOGY**

**FORM 2**

**MID-TERM EXAM**

**TERM 1, 2024**

**INSTRUCTIONS: Answer all questions in the spaces provided (50 marks) TIME: 1 1/2 HOURS**

1. The diagram below represents a transverse section through a plant organ.



1. From which plant organ was the section obtained. (1mark)
2. Give two reasons for your answer in (a) above (2marks)
3. Name the parts labeled J, K and L. (3marks)
4. State two functions of the part labeled M. (2marks)
5. Name the tissues in plants responsible for: (2marks)
6. Transport of water and mineral salts
7. Transport of manufactured carbohydrates
8. State one adaptation of xylem vessels to their functions (1mark)
9. State two ways in which the root hairs are adapted to their function. (2marks)

1. State two primary roles of the stem (2marks)
2. State the name given to the study of (2 marks)

(a) Micro-organisms ………………………………………………………………………………

(b) Classification …………………………………………………………………………...........

1. State factors that affect the rate of transpiration in terrestrial plants.

 (4 marks)

1. Name three types of transpiration (3marks)
2. State four forces that are involved in the transportation of water and mineral salts (4marks)
3. Give three reasons why transpiration is significant in plants (3marks)
4. Name the physiological process that requires energy and aids in absorption of mineral salts to the root cells (1mark)
5. Name one tissue that is strengthened by : (2marks)
6. Lignin
7. Cellulose
8. Name the organelle in plants that supports plant cells and is strengthened by cellulose (1mark)
9. Draw and label a cross section of a dicotyledonous stem (5mks)
10. How does leaf fall help to lower the rate of transpiration (2 marks)
11. Name the process by which transport of substances take place in unicellular organisms (1mark)
12. Name the two main functions of the root (2marks)
13. What is the function of parenchyma tissue in plants (2mks)
14. Form two students from Hightower Boys observed that the smell from a decomposing animal carcass was stronger at mid-day than early in the morning.
15. Name the physiological process by which the smell reached the students (1mark)
16. Give a reason for their observation (2marks)