**BIOLOGY FORM 2**

**MID-TERM EXAM**

**TERM 1, 2024**

 **MARKING SCHEME**

1. **From which plant organ**
* **Dicotyledonous root. (1mk)**
1. **Give two reasons (2mks)**
* **Presence of root hairs.**
* **Presence of endodermis**
* **Xylem is star shaped at the centre while the phloem is in between the arms of the xylem.**
1. **Name the parts labeled J K and L. (3mks)**

 **J - epidermis**

 **K- phloem**

 **L- Xylem**

1. **State two functions of the part labeled M. (2mks)**

 **Absorpation of water**

 **Absorption of mineral salts.**

1. **Name the tissues in plants responsible for: (2mks)**
2. **Transport of water and mineral salts**

**xylem**

1. **Transport of manufactured carbohydrates**

**Phloem**

1. **State one adaptation of xylem vessels to their functions . (1mk)**
* **Lignified**
* **Has dead cells**
1. **Absence of cuticle to allow diffusion of water.**

 **- Thin walled to reduce distance of diffusion.**

**- Elongated to increase surface area for absorption of water and mineral salts.**

 **- Presence of large vacuole to increase concentration gradient between cell sap and soil water.**

1. **-To support and expose the leaves to the environment**
* **To conduct water and mineral salts from the roots to the rest of the plant**
* **To conduct manufactured food from the leaves to the other parts**
1. **Microbiology**

**Taxonomy**

 **7.- Temperature - Light intensity**

**- Wind - Atmospheric pressure**

**- Relative Humidity**

**8.**

* **Stomatal**
* **Cuticular**
* **Lenticular**

**9.**

* **Transpiration pull**
* **Cohesion and adhesion**
* **Capillary**
* **Root pressure**

**10.**

* **To replace lost water**
* **To transport water and mineral salts**
* **Cools the plant**
* **Remove excess water**
* **Responsible for turgor pressure**

**11. Active transport**

**12. a) Collenchyma**

**b)**

* **Sclerenchyma**
* **Xylem**

**13. Cell wall**

**14. Mark correct drawing and any three parts correctly labelled**

**15. Reduces the surface area for water loss**

**16. Diffusion**

**17.**

* **Anchorage**
* **Absorption of water and mineral salts**

**18.**

* **Storage of water and food**
* **Some plants phosynthesis**
* **Offer support to herbaceous plants when turgid**

**19.**

**a) Diffussion**

**b)Temperatures at mid day are higher; increases the rate of diffussion**