FORM 2 MID TERM 2 2020

BIOLOGY

Answer all the questions in the spaces provided.

1. What is the role played by the following parts during digestion? (3mks)

    i) Pancrease

    ii) Liver

    iii) Oesophagus

2. Explain the following;
i) When transplanting seedling its advisable to remove some of the leaves. (1mk)
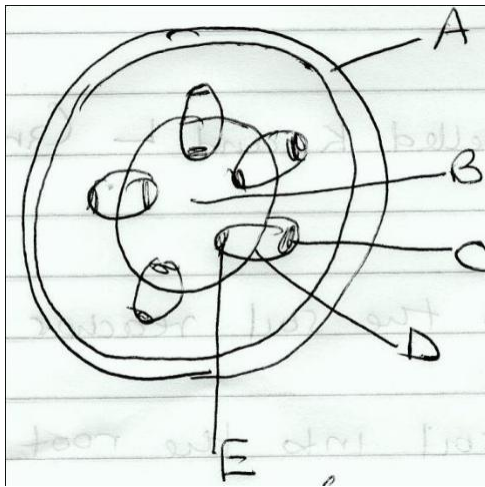
ii) Leaves are darker on the upper side than the lower side   (1mk)

3. Distinguish between cohesion and adhesion force in the movement of water up the xylem vessels. (2mks)

4. Give three adaptation of root hair cell to its function. (3mks)

5. Highlight three roles played by the stem in a plant. (3mks)

6. The diagram below represents a transverse section of a young plant.
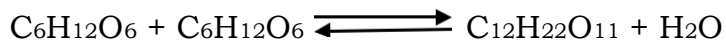

    a) From which plant organ was the plant obtained. (1mk)

    b) Name the parts labeled A and B. (2mks)

7. Name two structures where water loss from plants occurs. (2mks)

8. a) Define translocation. (1mk)

   b) Name the vessel in which translocation occurs in plants. (1mk)

9. State two significance of transpiration. (3mks)

10. Highlight four structural factors that affect transpiration rate. (4mks)

11. Name any four forces that are involved in transpiration of water and mineral salts. (4mks)

12. Study the equation below and answer the question that follows.

$$\text{C}_6\text{H}_{12}\text{O}_6 + \text{C}_6\text{H}_{12}\text{O}_6 \underset{Y}{\overset{X}{\rightleftharpoons}} \text{C}_{12}\text{H}_{22}\text{O}_{11} + \text{H}_2\text{O}$$
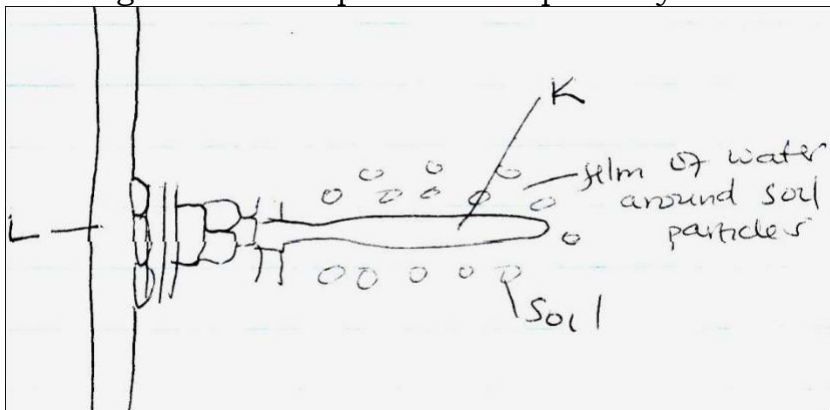
i) Identify processes x and y. (2mks)

ii) Why are monosaccharide referred to as reducing sugars? (1mk)

iii) Give two other properties of monosaccharide. (2mks)

13. The diagram below represents the pathways of water from the soil into the plant.

a) Name the structures labeled K and L. (2mks)

b) Explain how water from the soil reaches the structure labeled L. (5mks)

c) Name the process by which mineral salts enter into the plant. (1mk)

14. Give the role of the following vascular bundles. (2mks)

i) xylem -

ii) phloem -

15. Define the following terms as used in Biology Transpiration   (1mk)

16. Highlight any three factors that affect energy requirements in man.   (3 mks)