

Science
Sixth Primary
Second Term

Unit **FOUR**

EXAM

1 - Write the definition of each of the following :

(4 marks)

- 1 - Selective permeability :.....
.....
- 2 - Transpiration process :.....
.....
- 3 - Osmosis feature :.....
.....
- 4 - Stomata :.....
.....

2 - Complete the following statements :

(13 marks)

- 1 - Water and mineral salts are absorbed through.....in the.....of the root
- 2 - The.....in plant is surrounded by two guard cells
- 3 - The membrane of the root hairs has.....which allows some salts to pass through
- 4 - The.....process in the plant creates pressure that raises water upwards
- 5 - Root hairs have a big.....that contains.....
- 6 - In plant root, the cortex layer is followed by.....layer, then.....layer
- 7 - The root hair is lined from.....with a thin layer of.....
- 8 -The root is extended and divided through the soil.....to.....the plant in the soil
- 9 - The root hairs secrete.....to help the root to penetrate the soil particles
- 10 - The transmission of water from the soil to the vacuole of the root hairs occurs by.....
- 11 -Xylem tissue rises water to.....and.....as.....and.....
- 12 - The high concentration of salt solution means that it contains.....amount of water, so the solution has.....of water
- 13 - Mineral salts are transmitted from the soil to the root hairs by.....

3 - Give reason for each of the following :

(8 marks)

1 - Green plants need some raw materials in the presence of light ?.....

2 - The plant root is extended through the soil particles ?.....

3 - The age of root hairs doesn't exceed few days ?.....

4 - Root hairs secrete a sticky substance ?.....

5 - Root hairs have selective permeability ?.....

6 - Root hairs can absorb water from the soil ?.....

7 - Presence of holes (stomata) on the lower surface of the plant leaves ?.....

8 - The concentration of the salt solution inside the root hair vacuole is higher than the concentration of soil solution?.....

4 - What happens when :

(7 marks)

1 - The two guard cell of the stoma can't change their shape ?.....

2 - There is no osmosis feature in the plant ?.....

3 - The plant carries out transpiration process in a bell jar ?.....

4 - The root hairs don't secrete sticky substances ?.....

5 - The wood tissue disappears from a plant ?.....
.....

6 - The concentration of salt solution of the soil is higher than the concentration of salt solution inside the root hairs?.....
.....

7 - A plant kept in dark for a long time ?.....
.....

5 - What is the function of: (5 marks)

1 - Root hairs :.....
.....

2 - Endodermis layer :.....
.....

3 - Two guard cells surrounding the stoma :.....
.....

4 - Xylem (wood tissue) :.....
.....

5 - Transpiration process :.....
.....

6 - Put (✓) or (x) then correct the false statement : (5 marks)

1 - The root hairs have thick walls (.....)
.....

2 - Epidermis layer regulates the passing of water to the xylem (.....)
.....

3 - Stomata are widely spread on the upper surface of the plant leaves (.....)
.....

4 - Stomata are surrounded by two woody cells (.....)

5 - Calcium, potassium and zinc are necessary for the plant's life (.....)

7 - Choose the correct answer : (5 marks)

1 - Plant absorbs water by.....

- A. flowers
- B. root hairs
- C. stem
- D. leaves

2 - Water rises from root to stem through.....layer

- A. epidermis
- B. endodermis
- C. cortex
- D. wood

3 - The energy needed for absorption of mineral salts comes from the.....process

- A. transpiration
- B. photosynthesis
- C. osmosis
- D. respiration

4 - Transpiration is a bio-process, where the plant is.....water

- A. absorbing
- B. gaining
- C. losing
- D. (A) ,(B) and (C)

5 - The root hairs form.....membrane that facilitating the absorption process

- A. sticky
- B. watery
- C. thin
- D. (A) and (C) are correct answers

THANK YOU