

1. Casparian strips are present in the _____ of the root.

2. Oxygen is produced at what point during photosynthesis?

3. The endarch condition is the characteristic feature of

4. The xylem and phloem arranged side by side on the same radius is called

5. Which is formed during anaerobic respiration.

6. Which is formed during anaerobic respiration

7. Kreb's cycle takes place in

- a) chloroplast b) mitochondrial matrix
c) stomata d) inner mitochondrial membrane

II. Fill in the blanks.

3x1 = 3

1. Cortex lies between_____.
2. Xylem and phloem occurring on the same radius constitute a vascular bundle called_____
3. _____ is ATP factory of the cells

III. State whether the statements are true or false. Correct the false statement.

2 x 1 = 2

1. The waxy protective covering of a plant is called as cuticle.
2. Palisade parenchyma cells occur below upper epidermis in dicot root.

IV. Match the following

(2)

1. Amphicribal - Dracaena
2. Cambium - Translocation of food
3. Amphivasal - ferm
4. Xylem - Secondary growth
5. Phloem - Conduction of water

V. Short answer questions

8 x 2 = 16

1. Draw and label the structure of oxysomes.
2. Write a short note on mesophyll.
3. What is collateral vascular bundle?
4. Where does the carbon that is used in photosynthesis come from?
5. Name the phenomenon by which carbohydrates are oxidized to release ethyl alcohol.
6. Write the reaction for photosynthesis?
7. Where do the light dependent reaction and the Calvin cycle occur in the chloroplast.
8. Name the three tissues system in flowering plants.

VI. Long answer questions

4x5 = 20

1. The reactions of photosynthesis make up a biochemical pathway.

A) What are the reactants and products for both light and dark reactions.

B) Explain how the biochemical pathway of photosynthesis recycles many of its own reactions and identify the recycled reactants.

2. Describe and name three stages of cellular respiration that aerobic organisms use to obtain energy from glucose.

3. Plant Anatomy and Plant Physiology

4. Differentiate the following

a) Monocot root and Dicot root

b) Aerobic and Anaerobic respiration.