

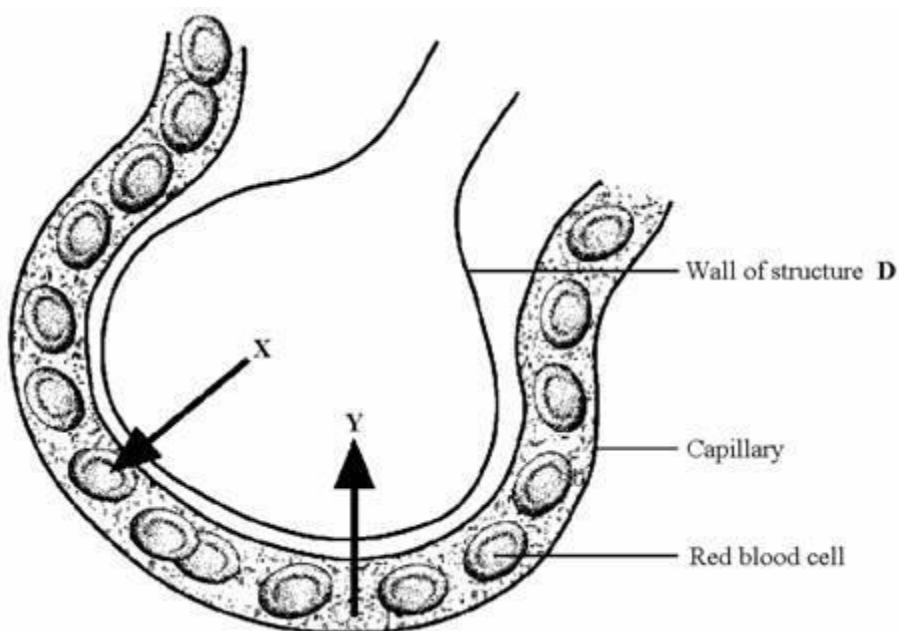
**Name of the Student:** \_\_\_\_\_

**Max. Marks : 22 Marks**

**Time : 22 Minutes**

**Q1.**

The diagram shows an enlargement of structure **D**.



The arrows show the direction of the gases exchanged in this structure. Name gas **X** and gas **Y**.

**X** \_\_\_\_\_

**Y** \_\_\_\_\_

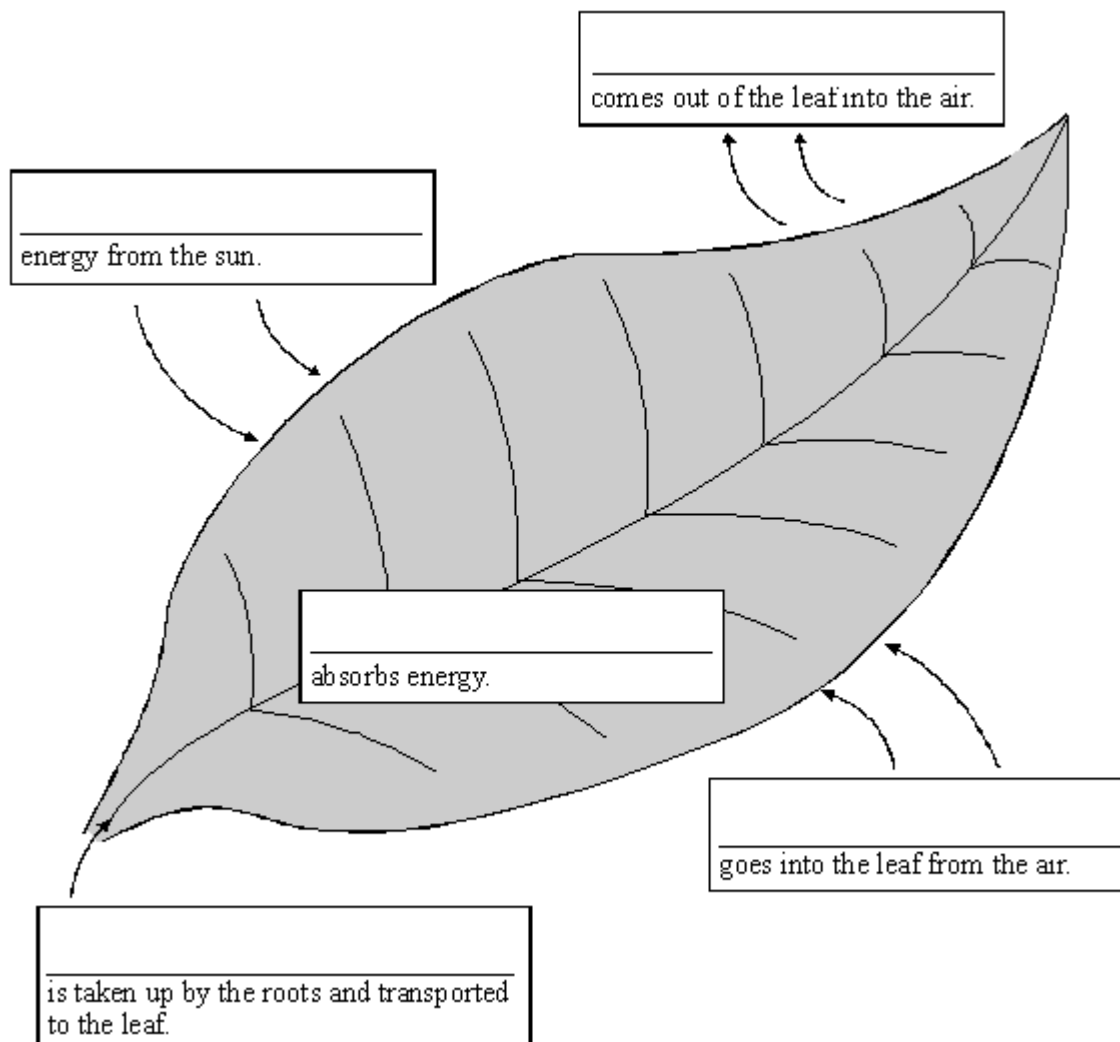
**(Total 2 marks)**

Q2.

The diagram shows how a leaf of a green plant makes glucose.

- (a) Use words from the box to complete the labels on the diagram. You may use each word once or not at all.

|                |             |         |      |
|----------------|-------------|---------|------|
| carbon dioxide | chlorophyll | glucose | heat |
| light          | oxygen      | water   |      |



(5)

- (b) (i) Complete the following sentence.

Glucose in food is a type of \_\_\_\_\_. When we eat it, it gives us energy.

(1)

- (ii) The plant turns some of the glucose into starch. Why is starch useful to the plant?

\_\_\_\_\_  
\_\_\_\_\_

(1)

- (iii) What does the plant do with the rest of the glucose?

\_\_\_\_\_

(1)

- (c) (i) What is the name of the process outlined in the diagram?

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(1)

- (ii) Give **one** way that leaves are adapted to do this process.

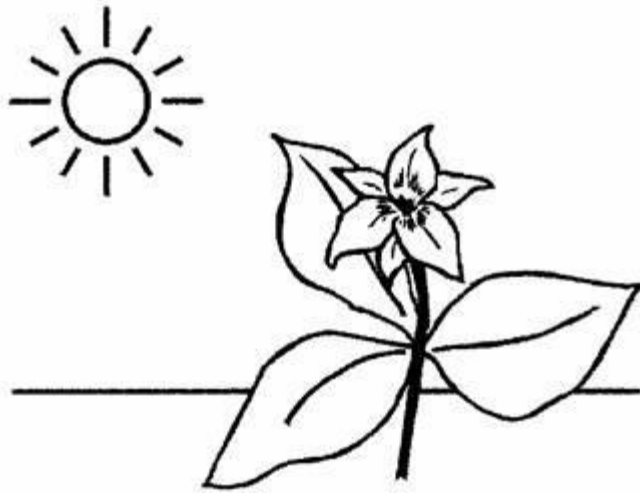
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(1)

(Total 10 marks)

Q3.

- (a) Plants make their own food by photosynthesis.



Use the following words to fill in the gaps. You can use each word once or not at all.

|        |             |           |       |          |
|--------|-------------|-----------|-------|----------|
| carbon | chlorophyll | cytoplasm | light | nitrogen |
| oxygen | sound       | starch    | water |          |

During photosynthesis \_\_\_\_\_ dioxide and \_\_\_\_\_ are converted into glucose and \_\_\_\_\_. The energy needed to do this is \_\_\_\_\_ energy which is trapped by a green pigment called \_\_\_\_\_.

The plant can change the glucose into \_\_\_\_\_ which is insoluble so it can be stored.

(6)

- (b) Which part of a plant is adapted for photosynthesis?

\_\_\_\_\_

(1)

- (c) How do the **two** raw materials for photosynthesis get into the plant?

1. \_\_\_\_\_

\_\_\_\_\_

2. \_\_\_\_\_

\_\_\_\_\_

(2)

(d) Describe **one** way you could speed up photosynthesis.

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(1)

(Total 10 marks)