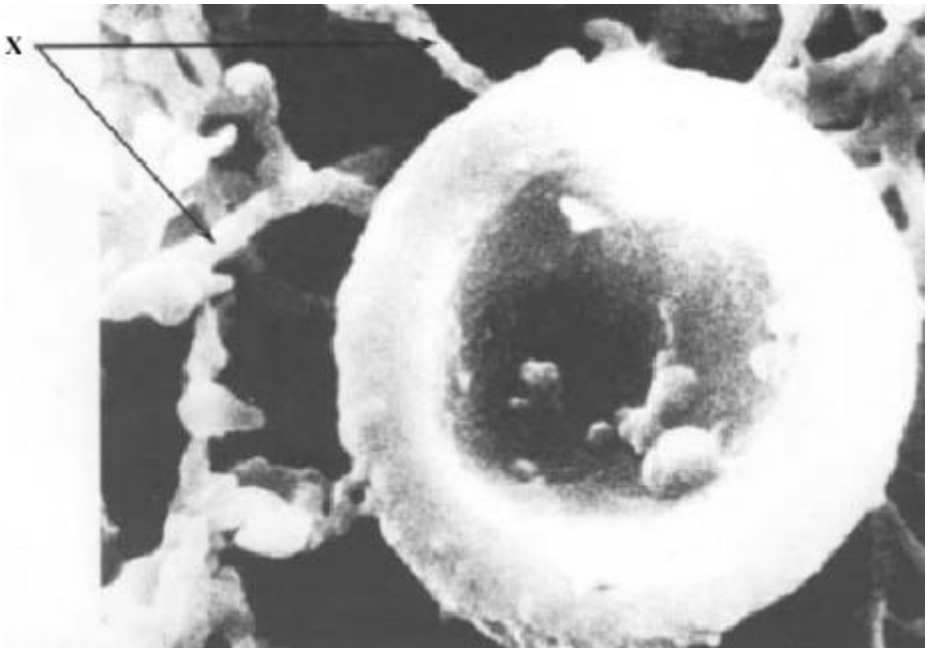
Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B1 Cell Biology

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Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Q1.

The photograph shows a red blood cell in part of a blood clot. The fibres labelled **X** are produced in the early stages of the clotting process.



(a) Suggest how the fibres labelled **X** help in blood clot formation.

_____

(1)

(b) The average diameter of a real red blood cell is 0.008 millimetres.
On the photograph, the diameter of the red blood cell is 100 millimetres.

Use the formula to calculate the magnification of the photograph.

Diameter on photograph = Real diameter × Magnification

_____

_____

_____

Magnification = _____

(2)

(c) Some blood capillaries have an internal diameter of approximately 0.01 millimetres.

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(i) Use information given in part (b) to explain why only one red blood cell at a time can pass through a capillary.

_____

(1)

(ii) Explain the advantages of red blood cells passing through a capillary one at a time.

_____

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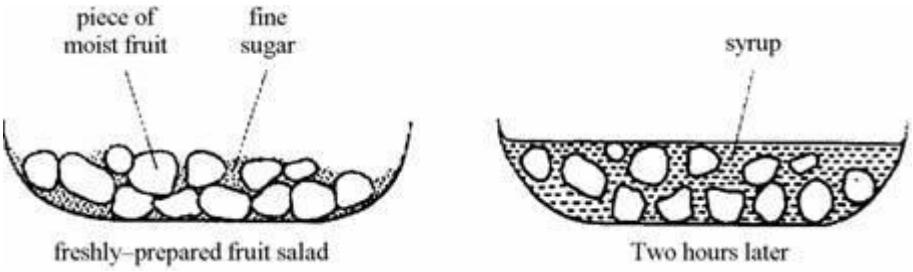
(3)

(Total 7 marks)

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Q2.

A cook prepares a fresh fruit salad by cutting up a variety of fruits and placing them in a bowl with layers of sugar in between. After two hours the fruit is surrounded by syrup (concentrated sugar solution).



Explain, as fully as you can, why syrup (concentrated sugar solution) was produced after two hours.

_____

_____

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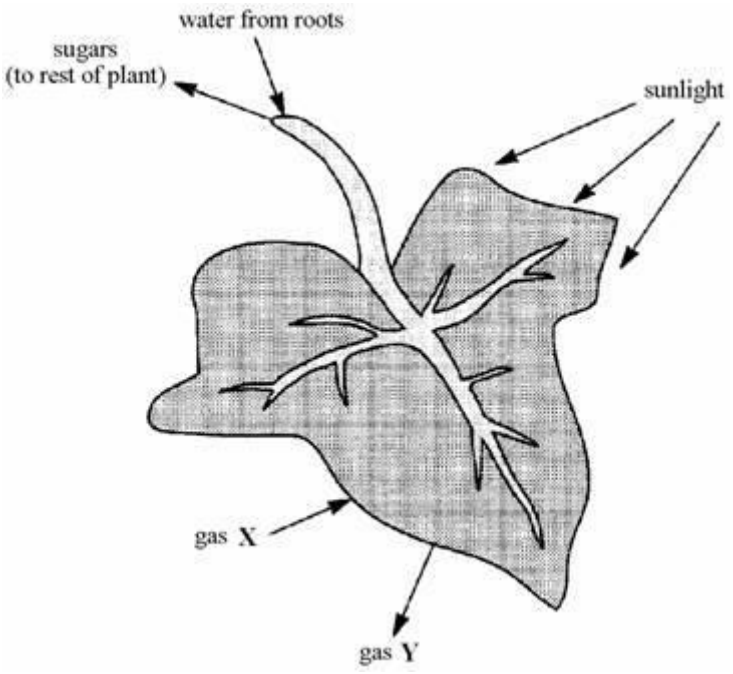
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(Total 4 marks)

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Q3.

The diagram shows a plant leaf during photosynthesis.



(a) Name:

(i) gas **X**; _____

(ii) gas **Y**. _____

(2)

(b) Why is sunlight necessary for photosynthesis?

_____

_____

(1)

(c) Some of the sugars produced by photosynthesis are stored as starch in the roots.
Explain, as fully as you can, why it is an advantage to the plant to store carbohydrate as starch rather than as sugar.

_____

_____

_____

_____

_____

_____

(3)

(Total 6 marks)

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