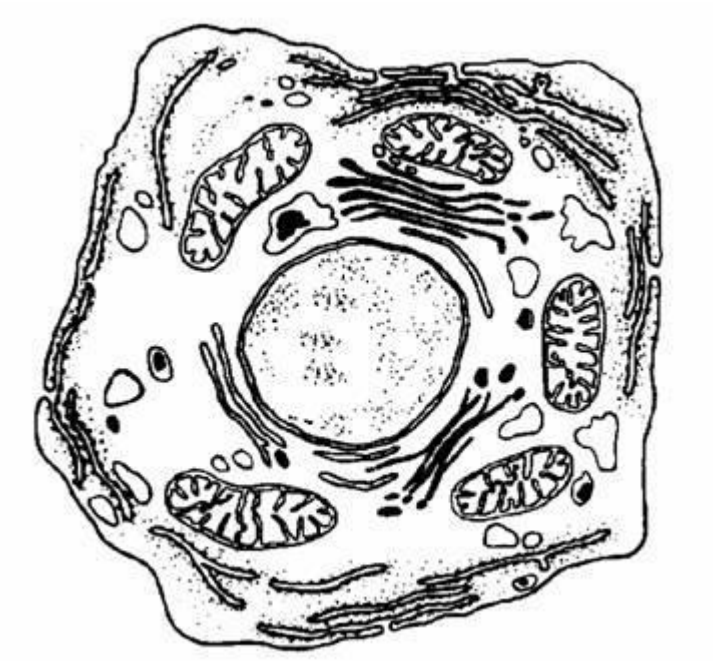
Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B1 Cell Biology

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Name of the Student:_____
Max. Marks : 21 Marks **Time : 21 Minutes**

Q1.

The drawing shows an animal cell, seen at a very high magnification using an electron microscope.



(a) (i) Label a mitochondrion [plural = mitochondria].

(1)

(ii) What happens in the mitochondria?

_____

(1)

(b) (i) Name and label the structure where you would find chromosomes.

(1)

(ii) What are chromosomes made of?

_____

(1)

(c) What controls the rate of chemical reactions in the cytoplasm?

_____

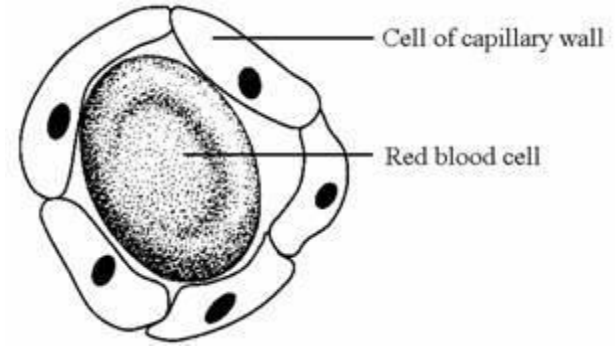
(1)

(Total 5 marks)

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Q2.

Capillaries are blood vessels in the body which join the arteries to the veins. They have walls which are one cell thick and so are able to exchange substances with the body cells.



(i) Name **two** substances that travel from the muscle cells to the blood in the capillaries.

1. _____

2. _____

(2)

(ii) Glucose is one substance that travels from the blood in the capillaries to the body cells. Explain how this happens.

_____

_____

_____

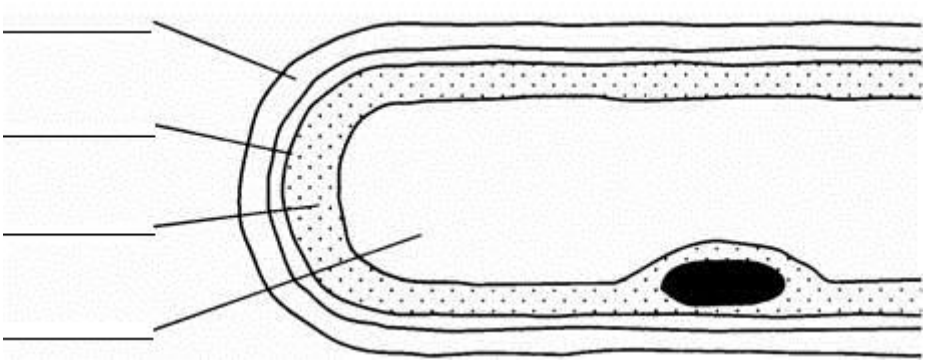
(2)

(Total 4 marks)

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Q3.

The drawing shows part of a root hair cell.

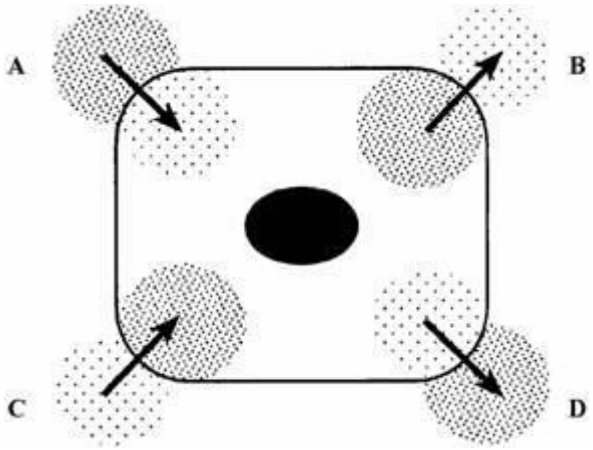


(a) Use words from the list to label the parts of the root hair cell.

cell membrane **cell wall** **cytoplasm** **nucleus** **vacuole**

(4)

(b) The diagram shows four ways in which molecules may move into and out of a cell. The dots show the concentration of molecules.



The cell is respiring aerobically.
Which arrow, **A**, **B**, **C** or **D** represents:

(i) movement of oxygen molecules; _____

(ii) movement of carbon dioxide molecules? _____

(2)

(c) Name the process by which these gases move into and out of the cell.

_____

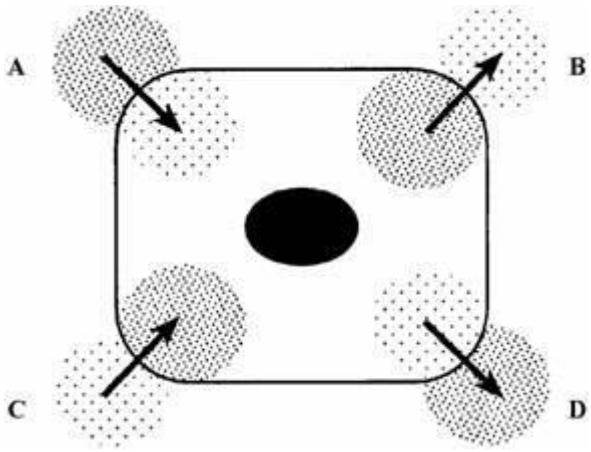
(1)

(Total 7 marks)

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Q4.

(a) The diagram shows four ways in which molecules may move into and out of a cell. The dots show the concentration of molecules.



The cell is respiring aerobically.
Which arrow, **A**, **B**, **C** or **D**, represents:

(i) movement of oxygen molecules; _____

(ii) movement of carbon dioxide molecules? _____

(2)

(b) Name the process by which these gases move into and out of the cell.

_____

(1)

(c) Which arrow, **A**, **B**, **C** or **D**, represents the active uptake of sugar molecules by the cell?

_____

Explain the reason for your answer.

_____

_____

_____

(2)

(Total 5 marks)

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