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

Merit Minds
www.merit-minds.com
Exam Preparation and Free Resources

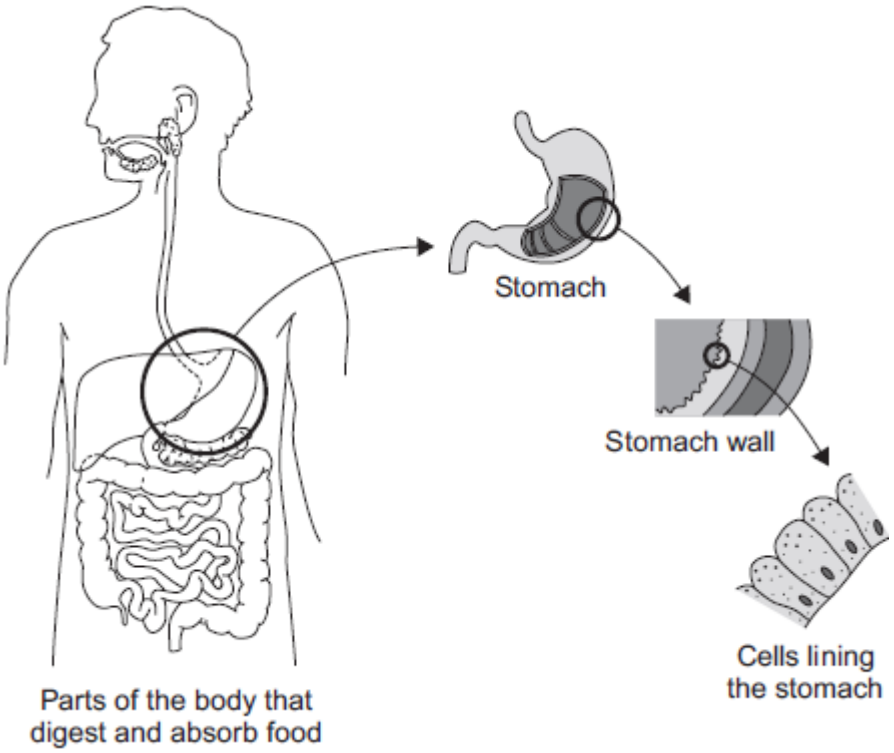
Name of the Student:_____
Max. Marks : 20 Marks **Time : 20 Minutes**

Mark Schemes

Q1.

The diagram below shows the parts of the body that digest and absorb food.

It also shows some details about the structure of the stomach.



(a) Complete the table to show whether each structure is an organ, an organ system or a tissue.

For each structure, tick (✓) **one** box.

Structure	**Organ**	**Organ system**	**Tissue**
Stomach			
Cells lining the stomach			
Mouth, oesophagus, stomach, liver, pancreas, small and large intestine			

(2)

Downloaded from www.merit-minds.com

(b) (i) The blood going to the stomach has a high concentration of oxygen.
The cells lining the stomach have a low concentration of oxygen.

Complete the following sentence.

Oxygen moves from the blood to the cells lining the stomach by

the process of _____ .

(1)

(ii) What other substance must move from the blood to the cells lining the stomach so that respiration can take place?

Draw a ring around the correct answer.

glucose **protein** **starch**

(1)

(iii) In which part of a cell does aerobic respiration take place?

Draw a ring around the correct answer.

cell membrane **mitochondria** **nucleus**

(1)

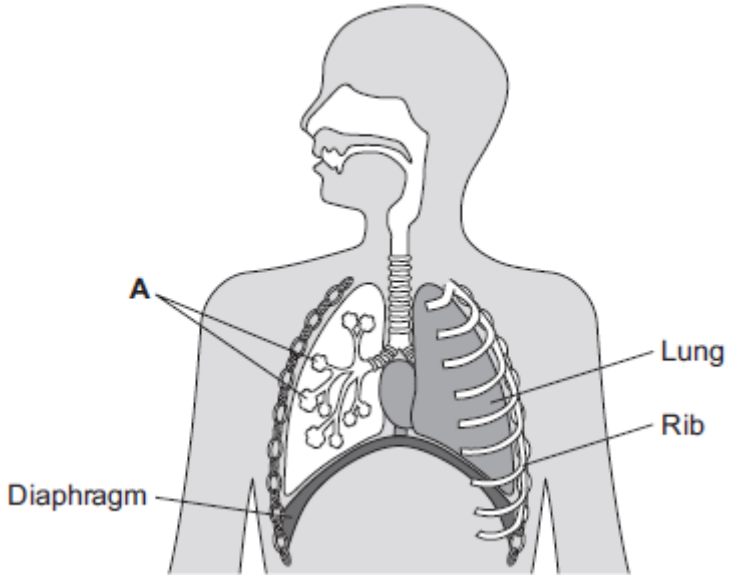
(Total 5 marks)

Downloaded from www.merit-minds.com

Q2.

Our lungs help us to breathe.

The image below shows the human breathing system.



(a) (i) Name part **A**.

_____

(1)

(ii) Give **one** function of the ribs.

_____

(1)

(b) (i) Use the correct answer from the box to complete the sentence.

active transport	**diffusion**	**osmosis**

Oxygen moves from the air inside the lungs into the blood by the process of _____ .

(1)

(ii) Use the correct answer from the box to complete the sentence.

arteries	**capillaries**	**veins**

Oxygen moves from the lungs into the blood through the walls of the _____ .

(1)

(iii) Inside the lungs, oxygen is absorbed from the air into the blood.

Give **two** adaptations of the lungs that help the rapid absorption of oxygen into the blood.

1. _____

Downloaded from www.merit-minds.com

_____

2. _____

_____

(2)

(Total 6 marks)

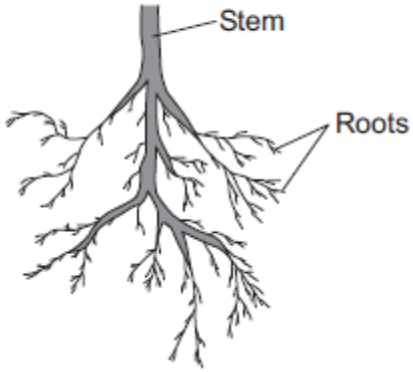
Downloaded from www.merit-minds.com

Q3.

Plants need different substances to survive.

Figure 1 shows the roots of a plant.

Figure 1



(a) (i) Mineral ions are absorbed through the roots.

Name **one** other substance absorbed through the roots.

_____

(1)

(ii) The plant in **Figure 1** has a higher concentration of mineral ions in the cells of its roots than the concentration of mineral ions in the soil.

Which **two** statements correctly describe the absorption of mineral ions into the plant's roots?

Tick (✓) **two** boxes.

The mineral ions are absorbed by active transport. ☐

The mineral ions are absorbed by diffusion. ☐

The mineral ions are absorbed down the concentration gradient. ☐

The absorption of mineral ions needs energy. ☐

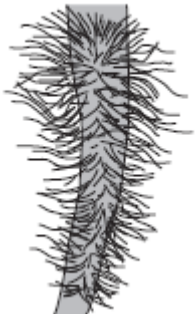
(2)

(iii) The plant in **Figure 1** has roots adapted for absorption.

Figure 2 shows a magnified part of a root from **Figure 1.**

Downloaded from www.merit-minds.com

Figure 2



Describe how the root in **Figure 2** is adapted for absorption.

_____

_____

_____

_____

(2)

(b) The leaves of plants have stomata.

What is the function of the stomata?

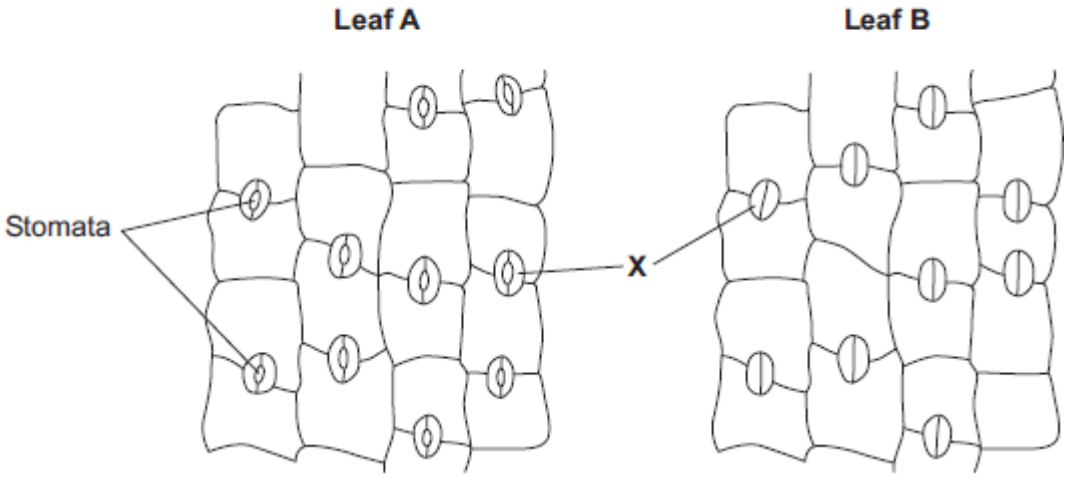
_____

_____

(1)

(c) **Figure 3** shows the underside of two leaves, **A** and **B**, taken from a plant in a man's house.

Figure 3



(i) In **Figure 3**, the cells labelled **X** control the size of the stomata.

What is the name of the cells labelled **X**?

Tick (✓) **one** box.

Downloaded from www.merit-minds.com

Guard cells ☐

Phloem cells ☐

Xylem cells ☐

(1)

(ii) Describe how the appearance of the stomata in leaf **B** is different from the appearance of the stomata in leaf **A**.

_____

_____

(1)

(iii) The man forgets to water the plant.

What might happen to the plant in the next few days if the stomata stay the same as shown in leaf **A** in **Figure 3**?

_____

_____

(1)

(Total 9 marks)

Downloaded from www.merit-minds.com