Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B2 Organisation

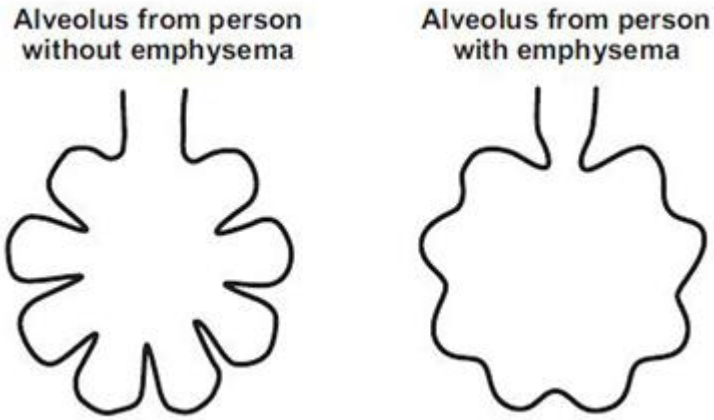
Merit Minds
www.merit-minds.com
Exam Preparation and Free Resources

Name of the Student:_____
Max. Marks : 24 Marks **Time : 24 Minutes**

Q1.

Emphysema is a disease affecting the lungs. People with emphysema are often short of breath and find exercise difficult.

The diagram below shows an alveolus from a person without emphysema and an alveolus from a person with emphysema.



(a) Describe **one** difference between the alveolus from a person without emphysema and the alveolus from a person with emphysema.

_____

_____

(1)

(b) Explain how the difference you described in part (a) causes the person with emphysema to find exercise difficult.

_____

_____

_____

_____

_____

(3)
(Total 4 marks)

Downloaded from www.merit-minds.com

Q2.

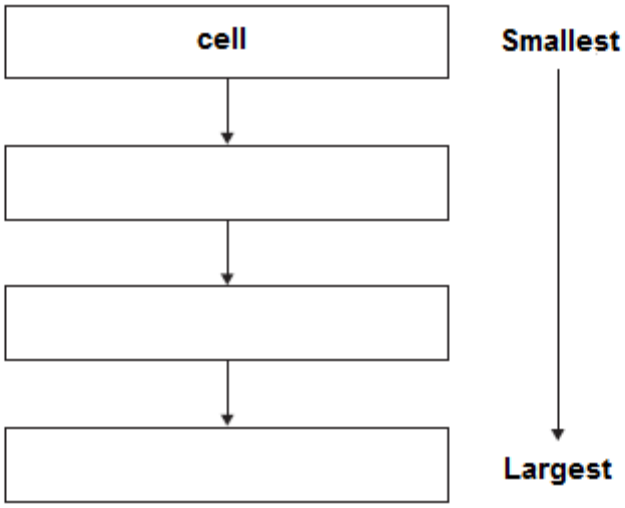
The human body is organised to carry out many different functions.

(a) Use words from the box to complete **Figure 1** by putting the parts of the body in order of size from smallest to largest.

The smallest one has been done for you.

cell	organ system	organ	tissue

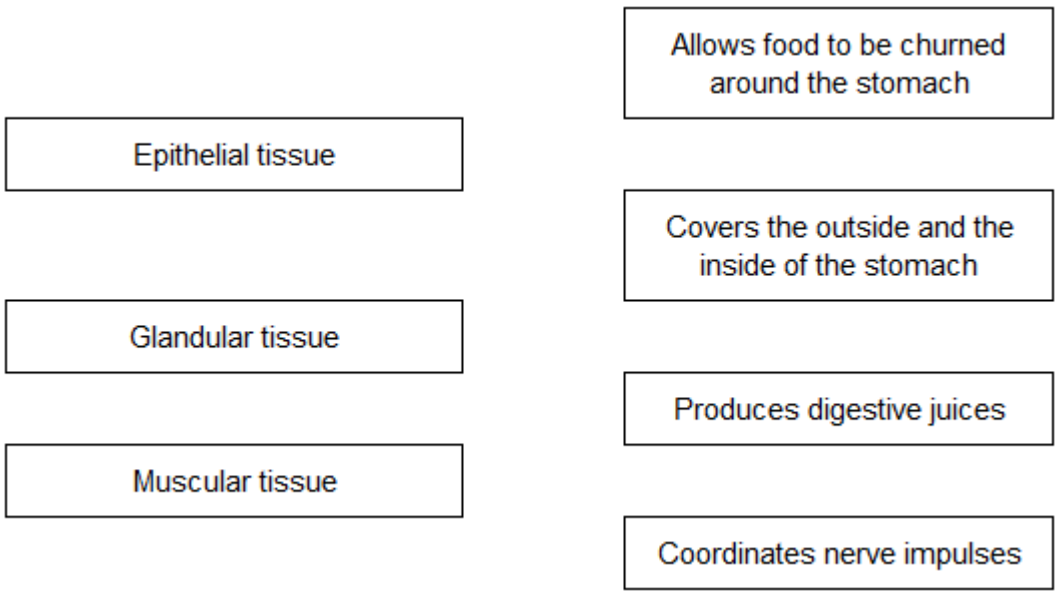
Figure 1



(2)

(b) The stomach is made of different types of tissue.

Draw **one** line from each type of stomach tissue to the correct description.



(3)

(c) Animals can react to their surroundings because they have nervous systems.

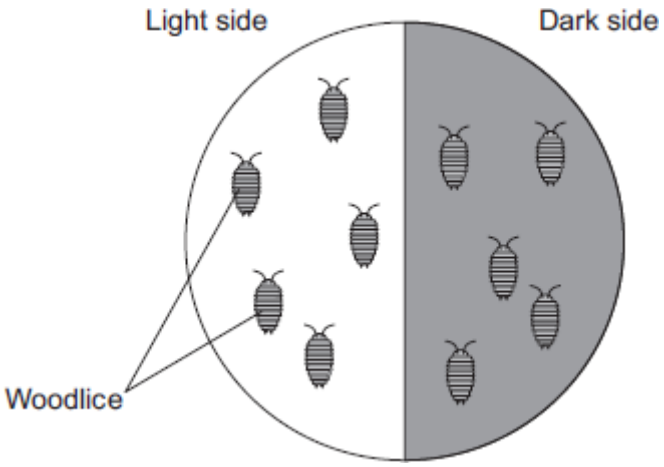
A student investigated the behaviour of small animals called woodlice.

Downloaded from www.merit-minds.com

The student set up the investigation as shown in **Figure 2.**

- The student covered one half of a Petri dish with black paper to make that side of the Petri dish dark.
- The other side had no cover.
- The student put five woodlice into each side of the dish and then put the clear Petri dish lid back on the dish.

Figure 2



After 30 minutes, all the woodlice had moved to the dark side of the Petri dish.

(i) In this investigation, what is the **stimulus** that the woodlice responded to?

_____

(1)

(ii) In this investigation, what is the **response** that the woodlice made?

_____

(1)

(iii) The student concluded that woodlice prefer dark conditions.

Give **two** ways in which the student could improve the investigation to be sure that his conclusion was correct.

1. _____

_____

2. _____

_____

(2)

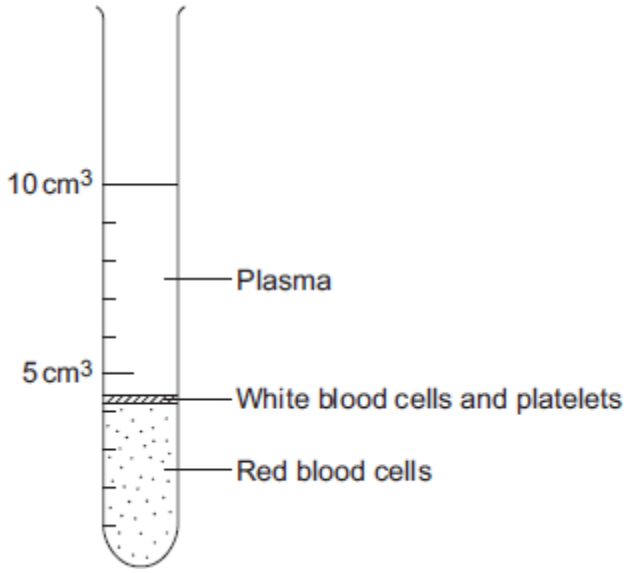
(Total 9 marks)

Downloaded from www.merit-minds.com

Q3.

The parts of the blood can be separated from each other by spinning the blood in a centrifuge.

The image below shows the separated parts of a 10 cm^3 blood sample.



(a) Calculate the percentage of the blood that is made up of plasma.

_____

_____

Answer = _____ %

(2)

(b) Name **three** chemical substances transported by the plasma.

1. _____

2. _____

3. _____

(3)

(c) **In this question you will be assessed on using good English, organising information clearly and using specialist terms where appropriate.**

White blood cells are part of the immune system. White blood cells help the body to defend itself against pathogens.

Describe how pathogens cause infections **and** describe how the immune system defends the body against these pathogens.

_____

_____

_____

_____

_____

Downloaded from www.merit-minds.com

_____

_____

_____

_____

_____

(6)

(Total 11 marks)

Downloaded from www.merit-minds.com