B3 Organisation and the digestive system – end of unit Test

1. Use the correct words from the box to complete each sentence.

a cell an organ an organism an organ system a tissue

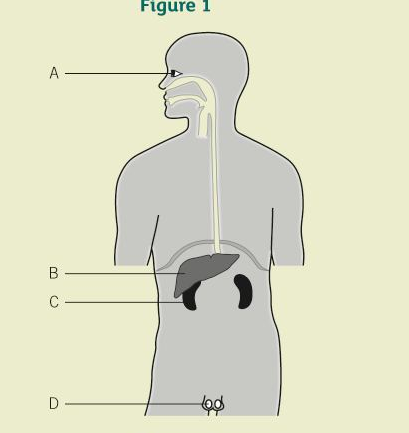
The basic building blocks of living organisms is called …………………………….

A group of cells with similar structure and function is called ……………………………

The brain is an example of …………………………………………..

(3marks)

1. Figure 1 shows some organs of the human body



1. Name organs A,B,C,D (4marks)

A:

B:

C:

D:

1. Which organ is part of the nervous system?

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………(1mark)

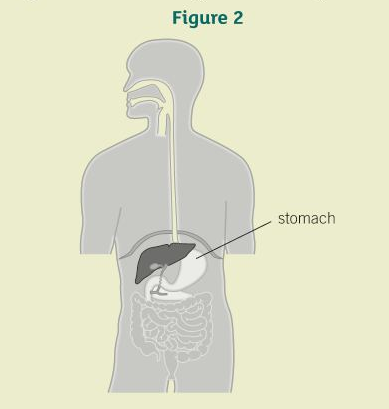
1. The digestive system is an example of an organ system
2. What is an organ system?

…………………………………………………………………………………………………………………………………………………………………

……………………………………………………………………………………………………………………………………………………………………

(1mark)

Figure 2 shows a diagram of the digestive system.



1. Give the two main functions of the digestive system.

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(2marks)

1. Protein digestion begins in the stomach. Explain how the stomach is adapted to digest protein.

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(3marks)

1. Amylase is an enzyme that breaks down starch into sugar molecules. A student investigated the effect of pH on the activity of amylase. The activity of amylase can be measured by how quickly starch is digested. The students used the following method;

* Mix amylase solution with starch suspension in a boiling tube.
* Put the boiling tube in a water bath at 37®c.
* Remove a drop of the mixture from the test tube every 30 seconds and test it for the presence of starch.
* Repeat the investigation at different pH values.

1. One control variable was the temperature. Explain why it was important to use the same temperature for each test.

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(2marks)

1. Describe the test for the presence of starch and state what results you would see if the test is positive

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(2marks)

What is the dependent variable in this investigation?

1. ……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(1mark)

Table 1 shows the results of the investigation

Table 1

|  |  |
| --- | --- |
| pH | Time when no starch was detected in minutes |
| 5.0 | 7.0 |
| 5.5 | 4.5 |
| 6.0 | 3.0 |
| 6.5 | 2.0 |
| 7.0 | 1.5 |
| 7.5 | 1.5 |
| 8.0 | 3.0 |

1. Plot the results on graph paper. Choose suitable scales, label both axes and draw a line of best fit.

(4marks)

1. What is the optimum pH for this enzyme’s activity

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

(1mark)

1. Suggest two reasons why this conclusion may not be valid

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(2marks)