

EXAMINATIONS COUNCIL OF SWAZILAND
Swaziland General Certificate of Secondary Education

CANDIDATE
NAME

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NUMBER

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BIOLOGY

6884/01

Paper 1 Short Answers

October/November 2013

1 hour

Candidates answer on the Question Paper.

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

DO NOT WRITE IN ANY BARCODES.

Answer **all** questions.

Write your answers in the spaces provided on the question paper.

Electronic calculators may be used.

You may lose marks if you do not show your working or if you do not use appropriate units.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

For Examiner's Use

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This document consists of **9** printed pages and **3** blank pages.

- 1 Fig. 1.1 shows the arrangement of blood vessels in the uterus wall and placenta of a pregnant woman.

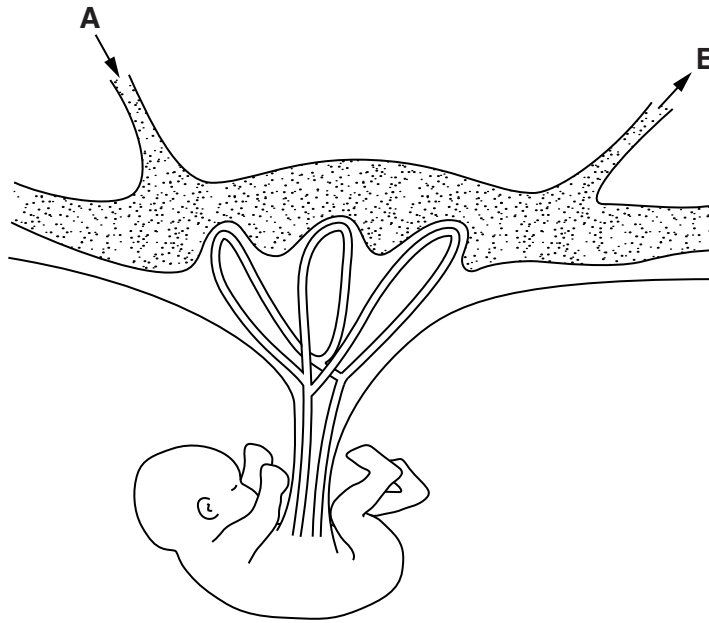


Fig. 1.1

Name two substances that will decrease in concentration as the blood flows from **A** to **B**.

.....
 [2]

- 2 Fig. 2.1 shows a section through a tooth.

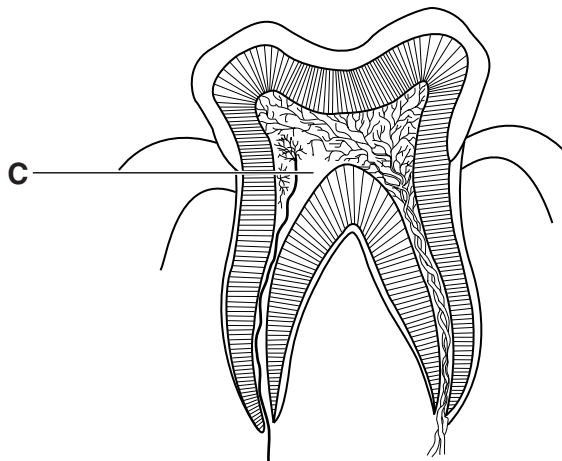


Fig. 2.1

(a) Name part **C**.

..... [1]

(b) State the function of the tooth in Fig. 2.1.

..... [1]

3 Fig. 3.1 shows part of the carbon cycle.

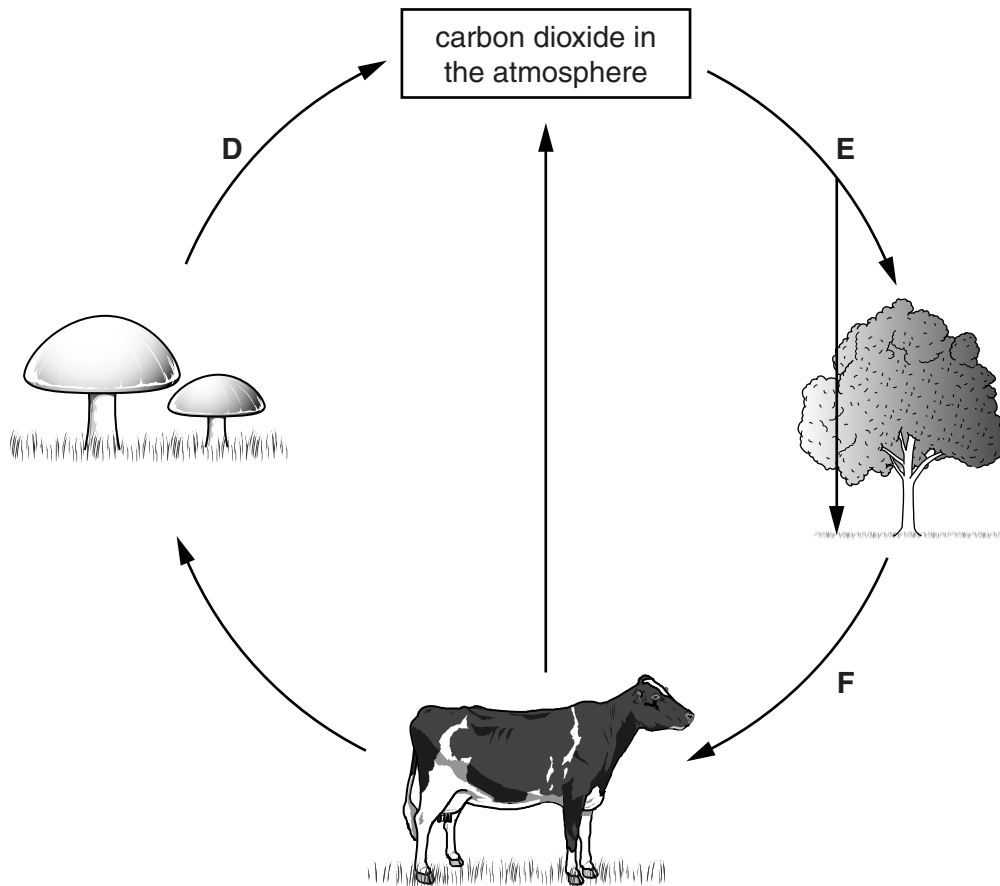


Fig. 3.1

Name processes **D**, **E** and **F**.

D

E

F

[3]

4 Choose one of the following parts of a cell to match each of the descriptions in (a), (b) and (c).

cell membrane, cell wall, chloroplast, cytoplasm, nucleus, vacuole

(a) contains genetic material [1]

(b) site of photosynthesis [1]

(c) rigid exterior of plant cell [1]

5 Name two mineral ions that could be deficient in a stunted plant with yellow leaves.

1

2

[2]

6 Describe one harmful effect on the human body of the carbon monoxide found in tobacco smoke.

.....[1]

7 Fig. 7.1 shows a diagram that illustrates one alveolus from the lungs.

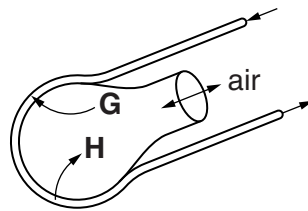


Fig. 7.1

(a) Describe one structural feature of the alveolus that makes it efficient in its function.

.....
.....[1]

(b) Name the gas that:

(i) leaves the alveolus at G.

.....[1]

(ii) enters the alveolus at H.

.....[1]

8 List the following parts of an organism in decreasing order of complexity, starting with the most complex.

cell organ tissue organ system

.....
.....[1]

9 State the word equation for anaerobic respiration in yeast.

.....[2]

10 Fig. 10.1 shows a cross section of a leaf.

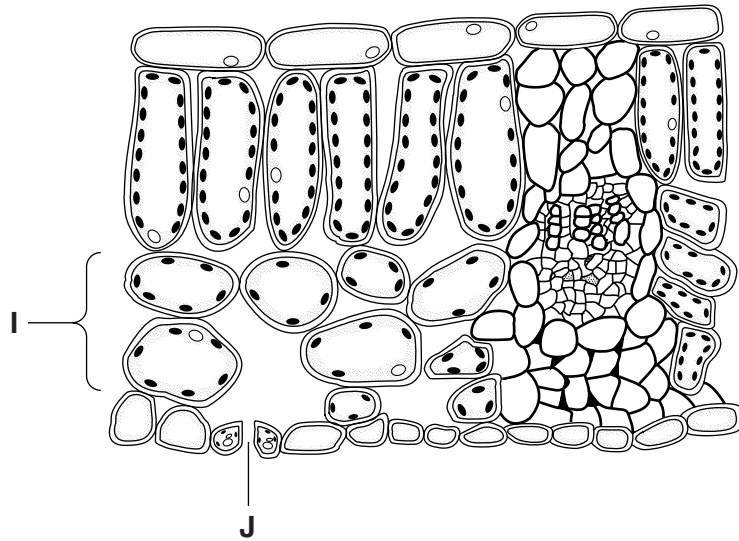


Fig. 10.1

Name the parts labelled I and J.

I

J

[2]

11 Define natural selection.

.....

.....[2]

12 Fig. 12.1 shows a method of birth control.

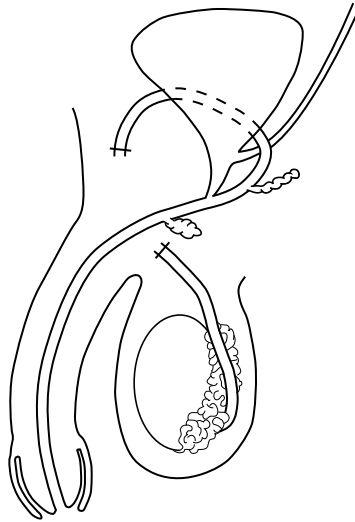


Fig. 12.1

(a) Name the method of birth control shown in Fig. 12.1.

.....[1]

(b) State one disadvantage of the method of birth control shown in Fig. 12.1.

.....
.....[1]

13 State the type of microorganism that causes the following diseases.

(a) AIDS[1]

(b) syphilis[1]

- 14 Fig. 14.1 shows an organism scientifically known as *Gallus domesticus*.

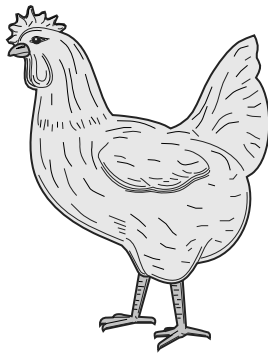


Fig. 14.1

- (a) State the term used to describe the system of naming organisms using two names.

.....[1]

- (b) State the part of the name which indicates the species to which the organism in Fig. 14.1 belongs.

.....[1]

- 15 In plants, food is made in the leaves and is translocated to the various regions of the plant.

Name two substances that are translocated from the leaves to the rest of the plant.

1

2

[2]

16 Fig. 16.1 shows a potato plant and its tuber.



Fig. 16.1

State the type of reproduction shown in Fig. 16.1.

.....[1]

17 Explain how the use of herbicides helps to increase food production.

.....
.....[2]

18 A pulp-manufacturing company cuts down 7500 hectares of pine forests per year.

State two ways in which this activity may affect the composition of the air if the trees are not replaced.

1
2
[2]

19 Excess amino acids are not stored in the human body but are broken down.

Name the organ that breaks down the excess amino acids and the end-product that is excreted.

organ

end-product

[2]

20 Fig. 20.1 shows an official Swaziland government envelope with a soil conservation theme.

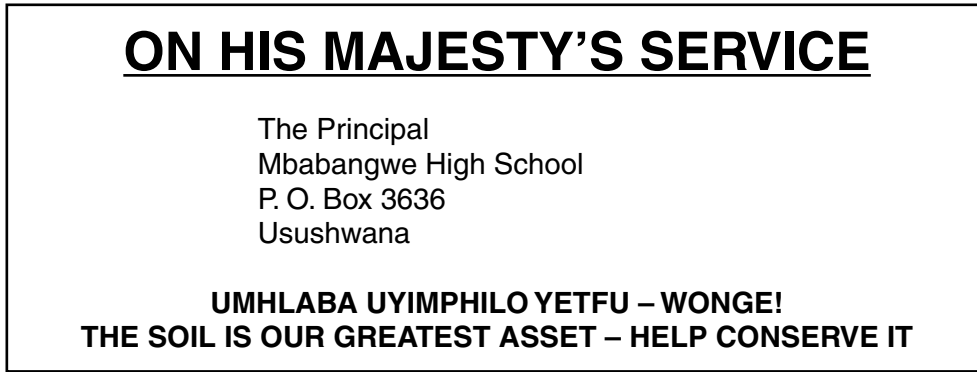


Fig. 20.1

State two ways in which soil conservation contributes to conservation of species.

- 1
-
- 2
-

[2]

[Total: 40]

