EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

BIOLOGY **6884/01**

Paper 1 Short Answers **October/November 2024**

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 in the spaces provided.
Write your answers in dark blue or black pen.
You may use an HB pencil for any diagrams, graphs or rough working.
Do **not** use staples, paper clips, glue or correction fluid.
Do **not** write on the bar code.

Answer **all** questions.

You may use an electronic calculator.
You may lose marks if you do not show your working or if you do not use appropriate units.
The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's Use

This document consists of **7** printed pages and **1** blank page.

1 Fig. 1.1 shows an organism.

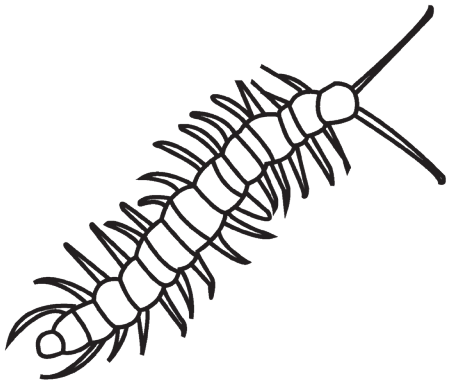

Fig. 1.1

Name the phylum and class to which the organism in Fig. 1.1 belongs.

phylum .....

class ..... [2]

2 Fig. 2.1 shows a fungus called *Rhizopus stolonifer*.

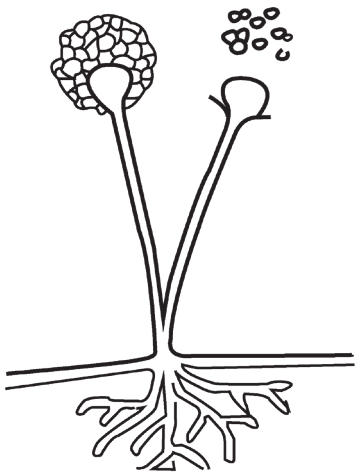

Fig. 2.1

(a) State the species name for the organism shown in Fig. 2.1.

..... [1]

(b) State the type of reproduction shown in Fig. 2.1.

..... [1]

3 **(a)** In the human body, some of the uses of energy from respiration are muscle contraction, growth, cell division and maintenance of a constant body temperature.

Name **one** other use of energy in the human body.

..... [1]

(b) Name the process represented by the following equation and state where it occurs.

$$C_6H_{12}O_6 \longrightarrow 2C_3H_6O_3$$

process .....

where it occurs ..... [2]

4 State what happens to external intercostal muscles and pressure in the lungs when a person breathes in.

external intercostal muscles .....

pressure in the lungs ..... [2]

5 State how stomata enable photosynthesis to take place.

..... [1]

6 Transpiration and translocation are processes by which substances move in plants.

Complete Table 6.1 to compare the two processes.

Table 6.1

process	substance transported	tissue through which movement takes place
translocation	amino acids + ……..…	…….....……...……..
transpiration	water + ……...…	…….....……..

[2]

[Turn over

7 Fig. 7.1 shows the relationship between a blood vessel, some body cells and the lymphatic system.

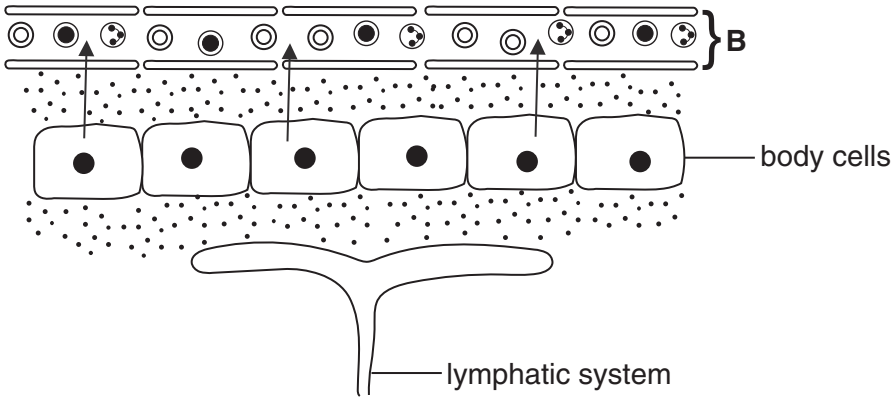

Fig. 7.1

(a) Name the blood vessel labelled **B**.

..... [1]

(b) Name **one** substance that diffuses in the direction shown by the arrows in Fig. 7.1.

..... [1]

(c) State **one** function of the lymphatic system.

..... [1]

8 Fig. 8.1 shows a photograph of a plant found in a certain environment.

Fig. 8.1

State, with a reason, the environment to which the plant in Fig. 8.1 is adapted.

environment .....

reason ..... [2]

9 Describe how blood vessels near the surface of the skin in a human help in regulating the body temperature when it falls below normal.

.....

.....

..... [2]

10 Fig. 10.1 shows the structure of a kidney tubule and its associated blood vessels.

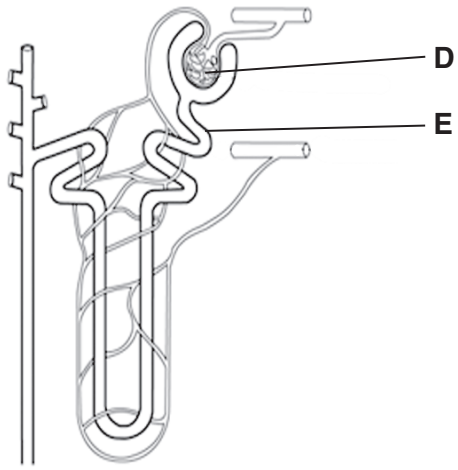

Fig. 10.1

(a) Name the process that occurs at **D**.

..... [1]

(b) Name **one** substance reabsorbed into the blood at **E**.

..... [1]

11 State the role of luteinising hormone in the menstrual cycle.

..... [1]

12 State **one** treatment that may be given to those suffering from cervical cancer.

..... [1]

[Turn over

13 Fig. 13.1 shows a food web in a given ecosystem.

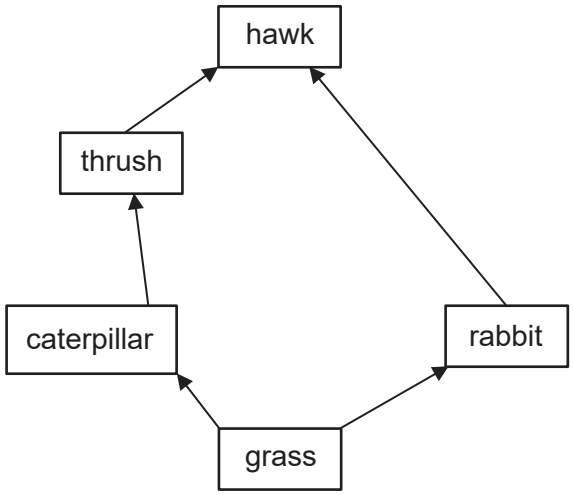

Fig. 13.1

(a) Name the trophic level of the thrush.

..... [1]

(b) State the advantage to the hawk of feeding on the rabbit rather than on the thrush.

.....

.....

..... [2]

14 State **one** undesirable effect on animal cells of nuclear fall–out.

..... [1]

15 The following stages in reproductive cloning are not listed in the order in which they occur.

1 a somatic cell is taken from an animal

2 clone

3 remove nucleus from a somatic cell and discard the rest

4 nucleus of somatic cell put into empty egg cell

List the numbers of the stages in the correct order from the beginning to the end of the process.

..... [2]

16 Alien plants such as water hyacinths are a threat to biodiversity.

Name **one** other threat to biodiversity.

..... [1]

17 State **two** features of a wind-pollinated flower.

1 .....

2 ..... [2]

18 Describe the surface of a human molar tooth and explain how it is related to its function.

.....

.....

..... [2]

19 Fig. 19.1 is a diagram showing a pathway followed by an impulse during a reflex action.

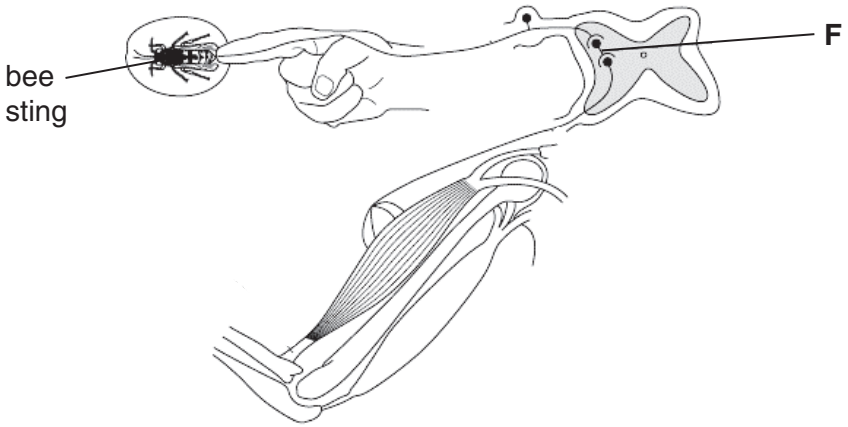

Fig. 19.1

(a) Name the structure labelled **F** in Fig.19.1.

..... [1]

(b) Draw a line labelled **G** to identify an effector. [1]

20 State **two** reasons why bacteria are useful organisms in genetic engineering.

1 .....

2 ..... [2]

21 Excessive consumption of alcohol leads to social problems.

State **one** social problem arising from excessive consumption of alcohol.

..... [1]

22 State what happens to the ciliary muscle in the eye when the eye focuses on a nearby object.

..... [1]

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