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CAMBRIDGE
International Education

Cambridge IGCSE™

BIOLOGY **0610/13**

Paper 1 Multiple Choice (Core) **May/June 2026**

45 minutes

You must answer on the multiple choice answer sheet.

You will need: Multiple choice answer sheet
Soft clean eraser
Soft pencil (type B or HB is recommended)

0891252081

INSTRUCTIONS

- There are **forty** questions on this paper. Answer **all** questions.
- For each question there are four possible answers **A**, **B**, **C** and **D**. Choose the **one** you consider correct and record your choice in soft pencil on the multiple choice answer sheet.
- Follow the instructions on the multiple choice answer sheet.
- Write in soft pencil.
- Write your name, centre number and candidate number on the multiple choice answer sheet in the spaces provided unless this has been done for you.
- Do **not** use correction fluid or tape.
- Do **not** write on any bar codes.
- You may use a calculator.

INFORMATION

- The total mark for this paper is 40.
- Each correct answer will score one mark.
- Any rough working should be done on this question paper.

This document has **16** pages.

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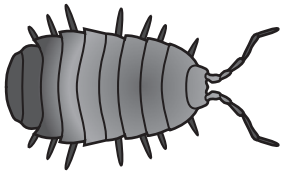
[Turn over

1 The diagram shows a species of arthropod.



Which group does this arthropod belong to?

A arachnid

B crustacean

C insect

D myriapod

2 How many pairs of jointed legs does an insect have?

A two pairs

B three pairs

C four pairs

D more than six pairs

3 Which type of cells are specialised to move mucus?

A ciliated cells

B palisade mesophyll cells

C root hair cells

D white blood cells

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4 Which structures are present in bacterial cells?

key

✓ = present in bacterial cells

✗ = **not** present in bacterial cells

	cell membrane	cell wall	chloroplast
A	✓	✓	✗
B	✓	✗	✗
C	✗	✓	✓
D	✗	✗	✓

5 An image of a spider is 275 mm long.

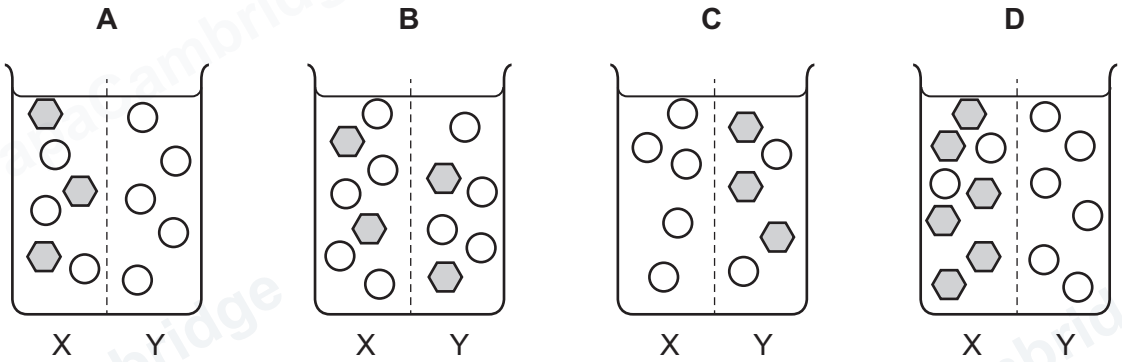
The magnification of the image is ×25.

What is the actual size of the spider?

A 0.09 mm **B** 11.0 mm **C** 300 mm **D** 6875 mm

6 The diagrams show beakers with different concentrations of glucose solution separated by a permeable membrane. The membrane allows both glucose molecules and water molecules to move through.

In which diagram will glucose molecules diffuse from X to Y the fastest?



key

glucose molecules

water molecules

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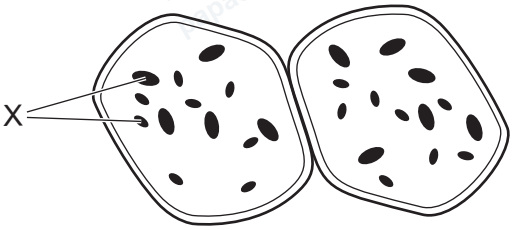
7 The diagram shows cells from a storage organ of a plant.

The structures, X, are stained blue-black by iodine solution.



What do the structures, X, contain?

A chlorophyll

B fat

C starch

D sugar

8 Which statements describe a catalyst?

1 a substance that decreases the rate of a chemical reaction

2 a substance that increases the rate of a chemical reaction

3 a substance that is changed by the chemical reaction

4 a substance that is **not** changed by the chemical reaction

A 1 and 3 **B** 1 and 4 **C** 2 and 3 **D** 2 and 4

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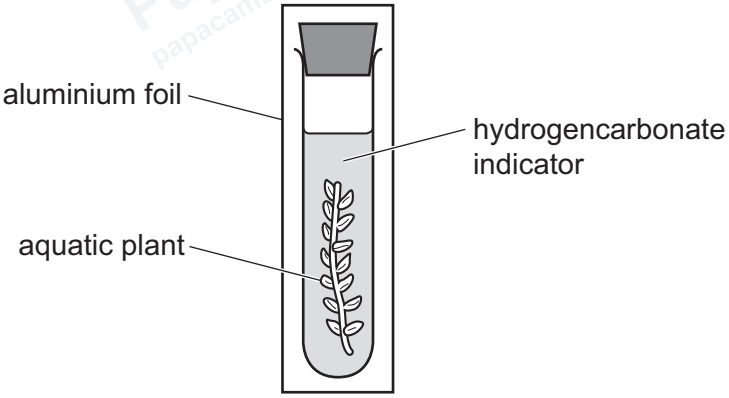
9 The diagram shows apparatus used to investigate gas exchange in an aquatic plant.



Which colour would the hydrogencarbonate indicator be after several hours?

A blue

B purple

C red

D yellow

10 Which carbohydrate is used to build plant cell walls?

A cellulose

B glycogen

C starch

D sucrose

11 Which structure in a leaf is adapted for photosynthesis by being near the upper surface and containing a large number of chloroplasts?

A epidermis cell

B guard cell

C palisade mesophyll cell

D xylem vessel

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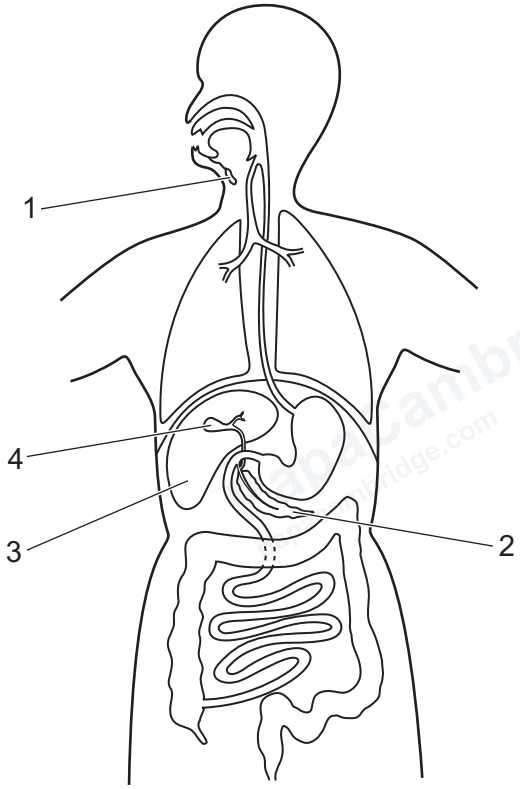
12 The diagram shows the human digestive system.



Which row identifies the organs labelled 1–4?

	1	2	3	4
A	gall bladder	liver	pancreas	salivary glands
B	gall bladder	liver	salivary glands	pancreas
C	salivary glands	pancreas	gall bladder	liver
D	salivary glands	pancreas	liver	gall bladder

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13 Which enzymes can digest oily fish?

key

✓ = yes

✗ = no

	amylase	lipase	protease
A	✓	✓	✗
B	✓	✗	✓
C	✗	✓	✓
D	✗	✗	✓

14 Which part of the alimentary canal is where most water is absorbed into the blood?

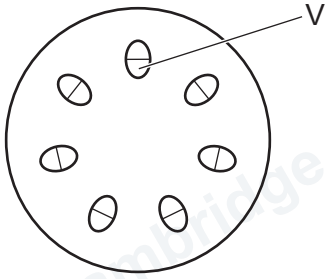
A oesophagus

B colon

C stomach

D small intestine

15 The diagram shows a cross-section of a plant stem.



What is the function of the tissue labelled V?

A transporting dissolved nutrients and mineral ions

B transporting dissolved nutrients only

C transporting water and mineral ions

D transporting water only

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16 Which conditions will increase the rate of transpiration in a well-watered plant the most?

A high temperature and high wind speed

B high temperature and low wind speed

C low temperature and high wind speed

D low temperature and low wind speed

17 Which structure in the human heart separates the left and right ventricles?

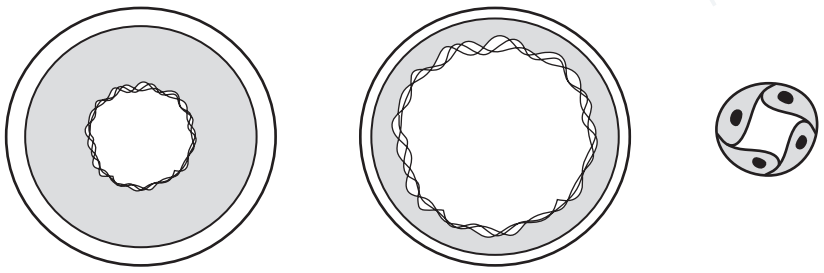
A atria

B coronary artery

C one-way valve

D septum

18 The diagram shows cross-sections through three types of blood vessel, **not** drawn to the same scale.



V W X

Which section is from a vein and which section is from a capillary?

	vein	**capillary**
A	V	W
B	W	V
C	W	X
D	X	W

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19 Which row shows how the concentrations of carbon dioxide and oxygen change in the blood as it passes through the lungs?

	carbon dioxide	oxygen
A	increase	decrease
B	increase	increase
C	decrease	decrease
D	decrease	increase

20 What are ways in which energy from respiration is used in living organisms?

key

✓ = energy is used for this

✗ = energy is **not** used for this

	active transport	diffusion	osmosis	protein synthesis
A	✓	✓	✓	✗
B	✓	✗	✗	✓
C	✓	✗	✓	✓
D	✗	✓	✗	✓

21 Which cells produce carbon dioxide during anaerobic respiration?

	muscle cells	yeast cells
A	no	no
B	no	yes
C	yes	no
D	yes	yes

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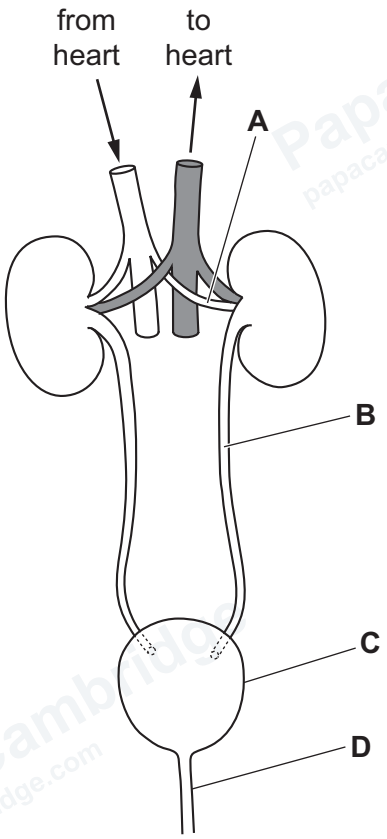
22 The diagram shows structures associated with the human urinary system.

Which structure is the urethra?



23 Which statements about the mammalian nervous system are correct?

1 A synapse is a junction between two neurones.

2 Relay neurones pass electrical impulses to receptors.

3 The central nervous system (CNS) consists of the brain only.

4 The peripheral nervous system (PNS) consists of nerves outside the brain and spinal cord.

A 1 and 2 **B** 1 and 4 **C** 2 and 4 **D** 3 and 4

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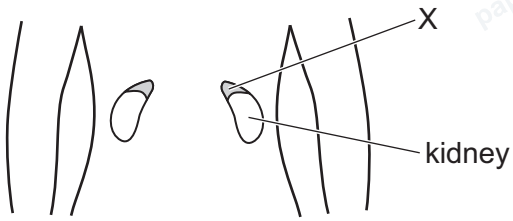
24 The diagram shows the position of the kidneys in the body.



Which hormone is produced by the gland labelled X?

A adrenaline

B insulin

C oestrogen

D testosterone

25 A seed is planted under the soil and the shoot grows upwards.

What is the name of this response when the shoot is growing under the soil?

A gravitropism

B phototropism

C photosynthesis

D transpiration

26 What is defined as a substance that is taken into the body and modifies or affects chemical reactions in the body?

A antibody

B drug

C hormone

D pathogen

27 What is fertilisation?

A a sperm entering an egg cell

B a sperm nucleus fusing with an egg cell nucleus

C the division of a zygote

D the movement of a sperm towards an egg cell

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28 Which structure produces pollen grains?

A anther

B filament

C stigma

D style

29 Methods of disease transmission are listed.

1 blood transferred from an infected person

2 holding hands with an infected person

3 sharing a drinking cup with an infected person

4 unprotected sexual intercourse with an infected person

By which methods of disease transmission can the human immunodeficiency virus (HIV) be transmitted between people?

A 1 and 2 **B** 1 and 4 **C** 2 and 3 **D** 3 and 4

30 What is defined as a length of DNA that codes for a protein?

A amino acid

B chromosome

C gene

D nucleus

31 A female fruit fly with short wings mates with a male fruit fly with long wings. All the offspring are long-winged.

Two of these offspring mate with each other.

Which percentage of their offspring will have long wings?

A 25% **B** 50% **C** 75% **D** 100%

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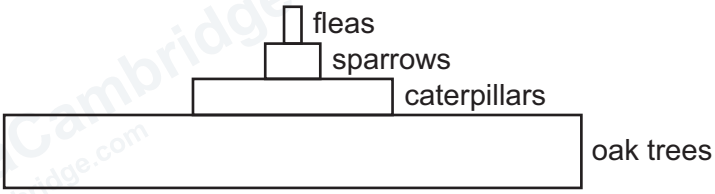
32 Four characteristics are listed.

- ABO blood group in humans
- body mass in humans
- seed shape in peas
- seed colour in peas

How many of these characteristics show continuous variation?

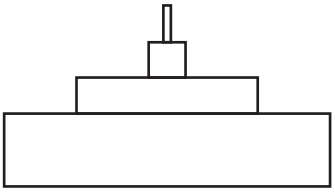
A one **B** two **C** three **D** four

33 The diagram shows a pyramid of biomass for a food chain in a woodland ecosystem.

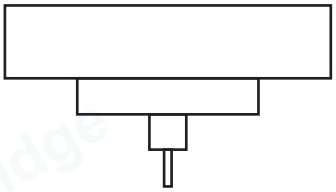


What is the pyramid of numbers for this food chain?

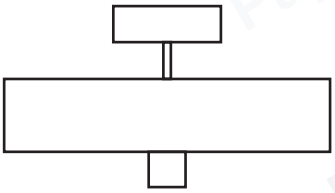
A



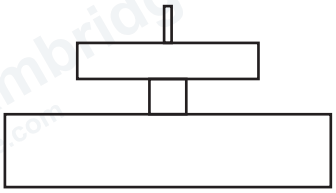
B



C



D



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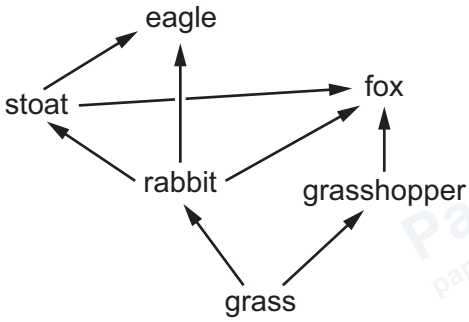
34 The diagram shows a food web.



Which statement about this food web is correct?

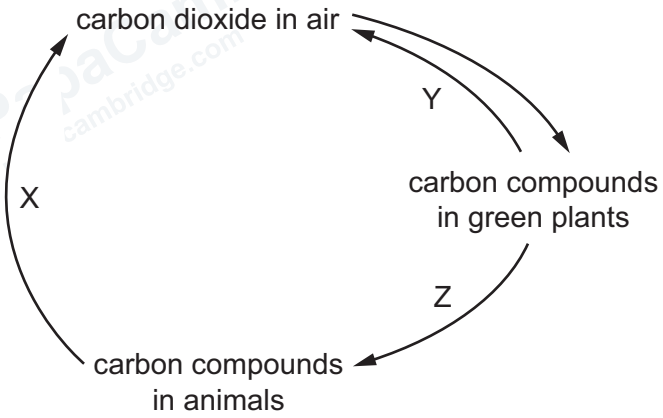
A It has five carnivores.

B It has five consumers.

C It has one herbivore.

D It has two producers.

35 The diagram represents part of the carbon cycle.



Which processes are represented by X, Y and Z?

	X	Y	Z
A	photosynthesis	feeding	combustion
B	respiration	respiration	feeding
C	combustion	feeding	photosynthesis
D	feeding	respiration	combustion

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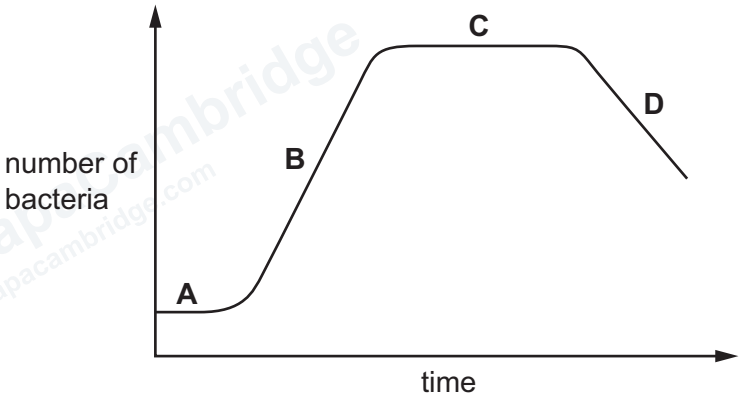
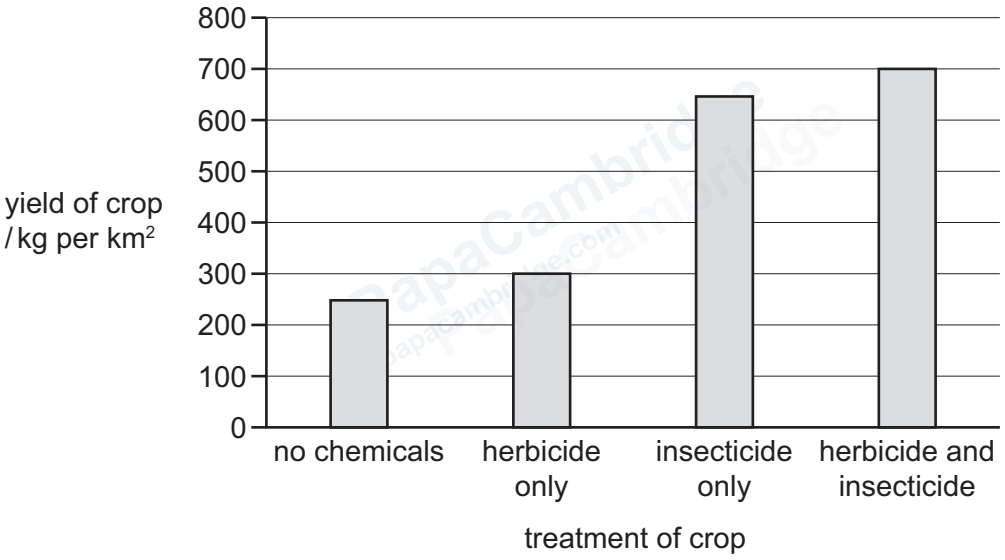
36 The graph shows a population growth curve for bacteria.

Which letter identifies the lag phase on the graph?



37 The graph shows the yields of a crop when treated with different combinations of a herbicide and an insecticide.



Which conclusions can be made about the treatment of the crop with the herbicide and the insecticide?

1 Adding the herbicide and the insecticide together increases the crop yield the most.

2 Adding the insecticide only has a bigger effect on crop yield than adding the herbicide only.

3 Adding the insecticide must kill all insect pests that consume the crop.

A 1, 2 and 3 **B** 1 and 2 only **C** 1 and 3 only **D** 2 and 3 only

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38 What is **least** likely to result from deforestation?

A increase in flooding

B increase in species

C loss of habitats

D loss of soil

39 Which row correctly shows if each gas is responsible for the enhanced greenhouse effect?

	carbon dioxide	methane
A	no	no
B	no	yes
C	yes	no
D	yes	yes

40 What is an example of genetic modification?

A inserting a gene for human insulin production into bacteria

B selective breeding to produce cattle with high milk yields

C using herbicides to kill unwanted plants

D using insecticides to kill insect pests

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