



THE INTERNATIONAL SCHOOL BANGALORE

ENTRANCE ASSESSMENT

SUBJECT: BIOLOGY

GRADE: 11

TOTAL MARKS: 15 MARKS

TIME ALLOWED: 20 MINUTES

TEST DATE:

APPLICANT'S NAME:

INSTRUCTIONS:

- No Calculators are allowed.
- All questions are compulsory, please use a pen.
- Please circle only one correct answer from the given options.
- Return the question papers and the rough sheets to the invigilator before leaving the hall.

This Question Paper consists of 9 printed pages including this cover page

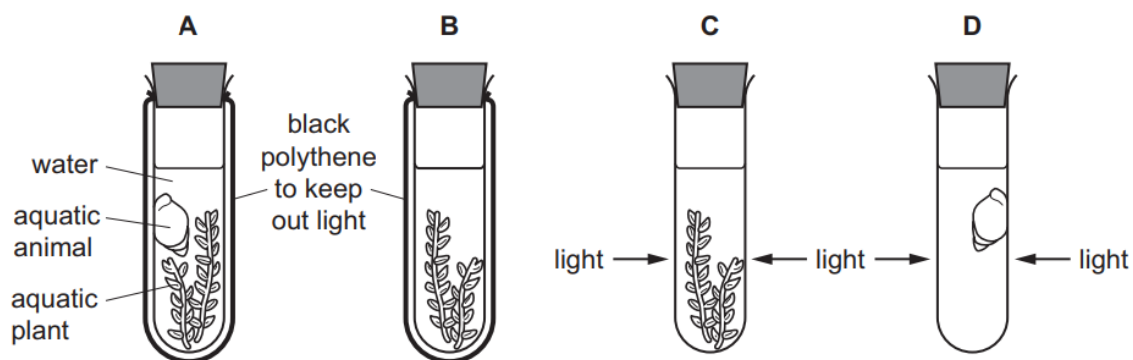
1. Some statements about species are given.

- 1 Members of a species all look identical.
- 2 Members of a species belong to the same genus.
- 3 Members of a species can produce fertile offspring.
- 4 Species are named using an international system.

Which statements are correct?

- A 1, 2, 3 and 4
- B 1, 2 and 3 only
- C 2 and 4 only
- D 2, 3 and 4 only

2. Four test-tubes are set up as shown. Which test-tube contains the least carbon dioxide after one hour?

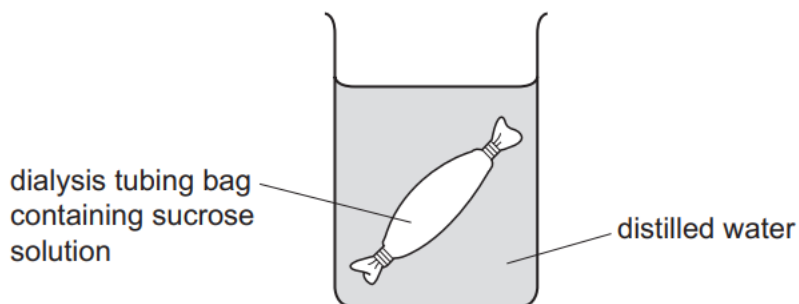


3. Changes in light intensity cause changes in the diameter of the pupil in the eye. Which rows show the pupil reflex?

	light intensity	pupil diameter
1	high	increases
2	high	decreases
3	low	increases
4	low	decreases

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

4. The diagram shows some of the apparatus used in an osmosis investigation.



In this investigation a dialysis tubing bag was filled with sucrose solution, sealed and weighed.

The dialysis tubing bag was then immersed in distilled water for one hour.

After one hour the dialysis tubing bag was removed from the beaker, the surface was dried and the bag was reweighed.

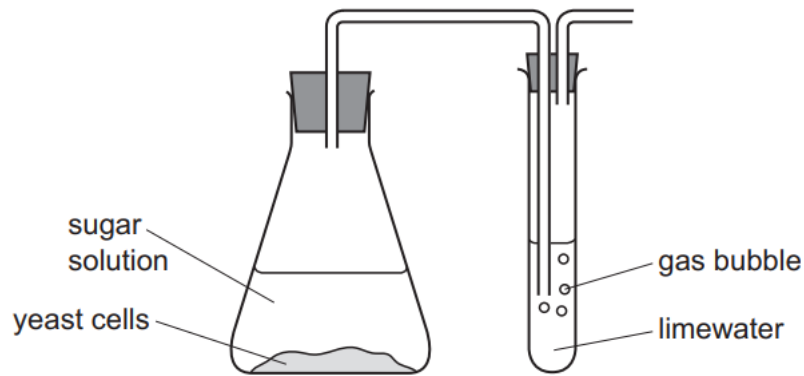
Which row explains what will happen during the investigation?

	mass of the dialysis tubing bag at the end of the investigation	net movement of sucrose molecules	net movement of water molecules
A	decreased	none	out of the bag
B	decreased	into the bag	out of the bag
C	increased	none	into the bag
D	increased	out of the bag	into the bag

5. Which row shows the functions of xylem and phloem?

	transports amino acids	transports mineral ions	transports sucrose
A	phloem	xylem	phloem
B	xylem	xylem	phloem
C	xylem	phloem	xylem
D	phloem	phloem	xylem

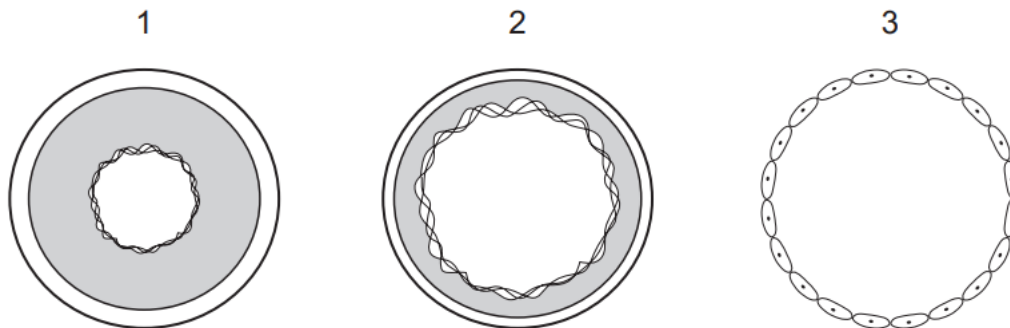
6. The diagram shows the activity of some yeast cells in a sugar solution.



Which statement explains what happens to the limewater?

- A The limewater changes from colourless to cloudy due to the presence of carbon dioxide.
- B The limewater changes from colourless to cloudy due to the presence of oxygen.
- C The limewater changes from cloudy to colourless due to the presence of carbon dioxide.
- D The limewater changes from cloudy to colourless due to the presence of oxygen.

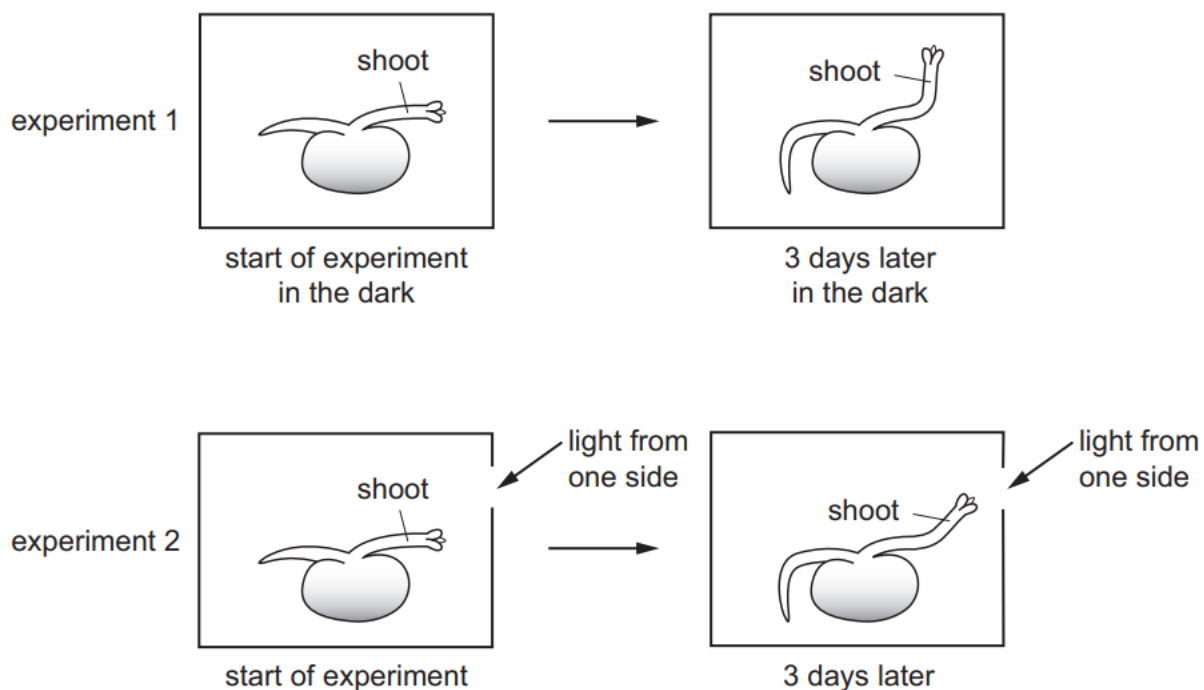
7. The diagrams show sections through three types of blood vessel. They are not drawn to the same scale.



In which order will red blood cells flow through these vessels in the human body when travelling from the aorta to the right atrium of the heart?

- A 1 → 2 → 3
- B 1 → 3 → 2
- C 2 → 3 → 1
- D 3 → 1 → 2

8. The diagram shows seedlings in two experiments on the tropic response of seedlings to gravity and light.

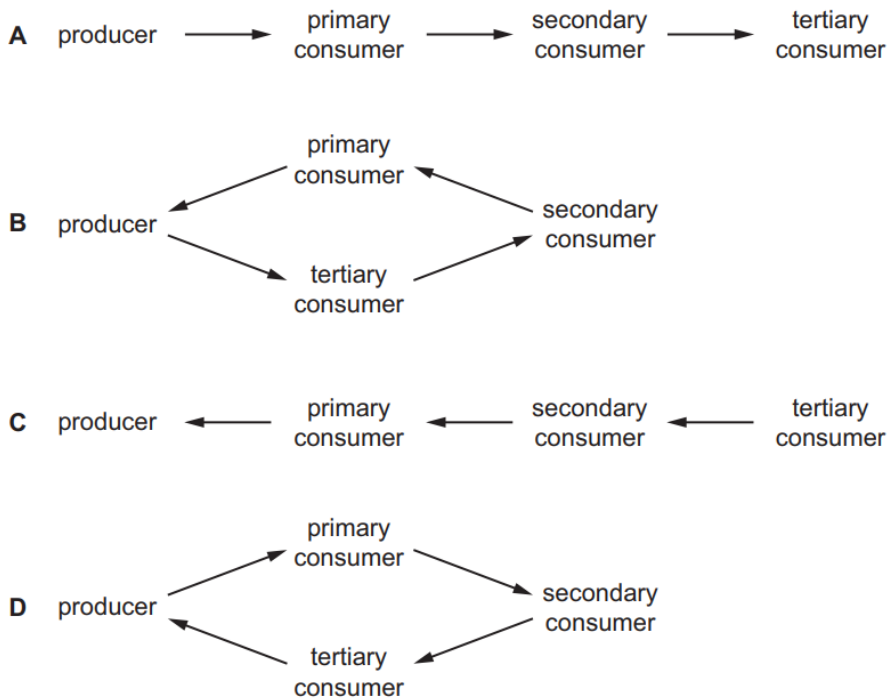


Which stimuli have the seedlings responded to?

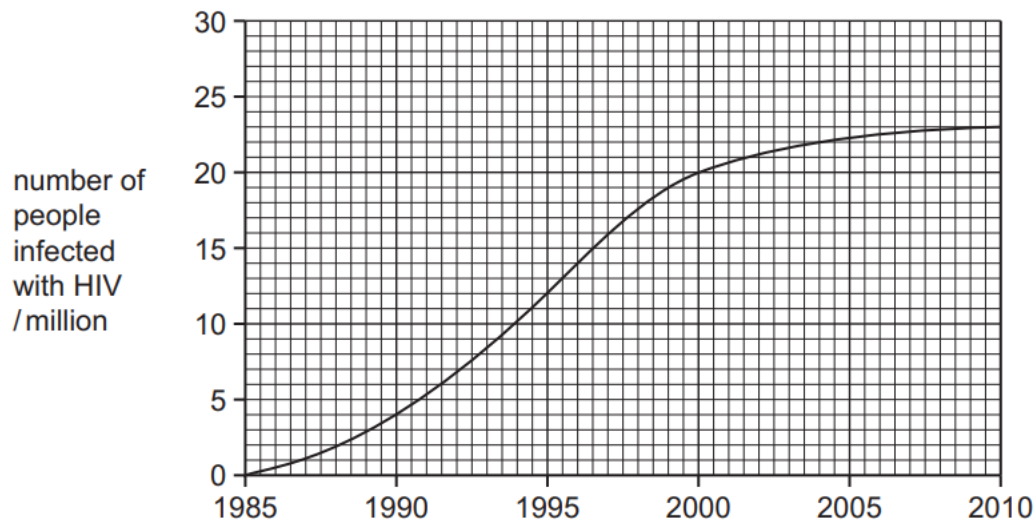
	experiment 1	experiment 2
A	gravity and light	light only
B	gravity only	gravity and light
C	gravity and light	light only
D	light only	gravity and light

Turn Over

9. Which diagram shows energy passing along a food chain?



10. The graph shows the number of people infected with HIV, in one part of the world, between 1985 and 2010.



Using data from the graph, which statement is correct?

- A Between 1995 and 2000 the number of people infected with HIV increased by 67%.
- B Between 1995 and 2000 the number of people infected with HIV increased by 20%.
- C Between 1990 and 1995 the number of people infected with HIV doubled.
- D Between 1995 and 2000 the number of people infected with HIV doubled.

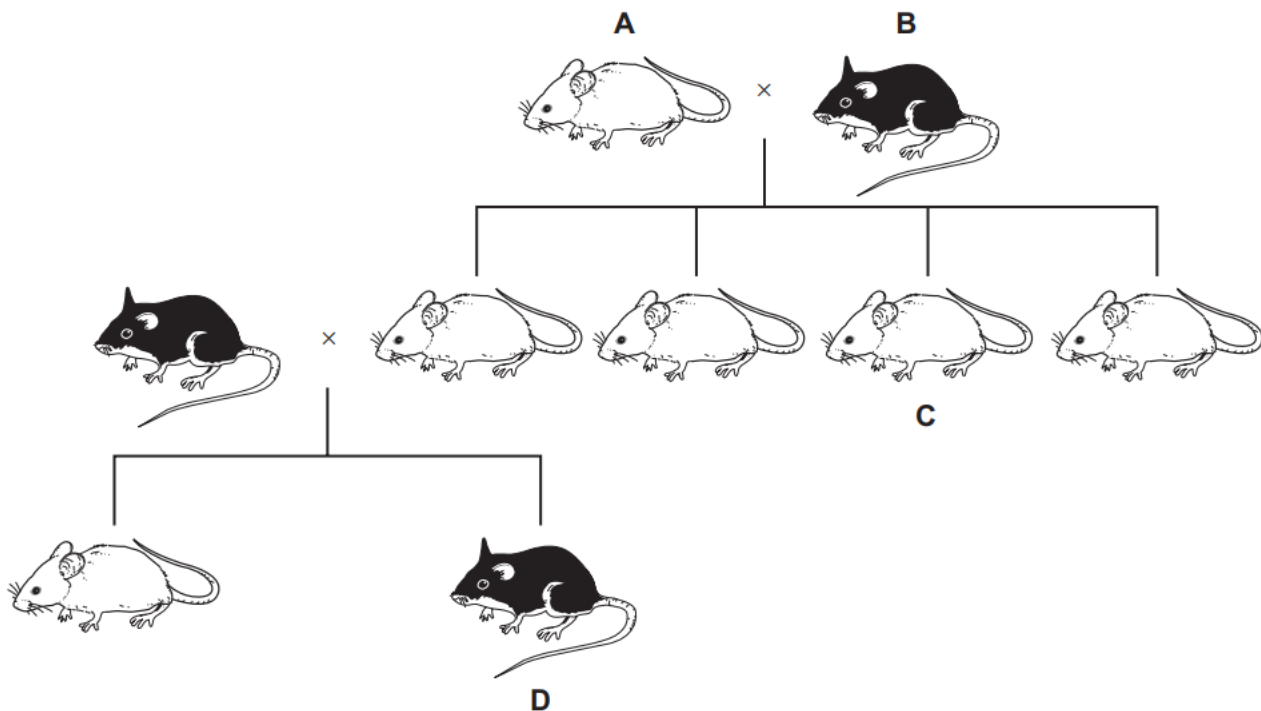
11. The following statements give information about the reproduction of different organisms

- 1 Daffodil plants produce genetically identical bulbs that grow into a new plant the following year.
- 2 In summer, female aphids produce genetically identical offspring without fertilisation by a male.
- 3 Most banana plants are genetically identical because they were produced from one parent plant.

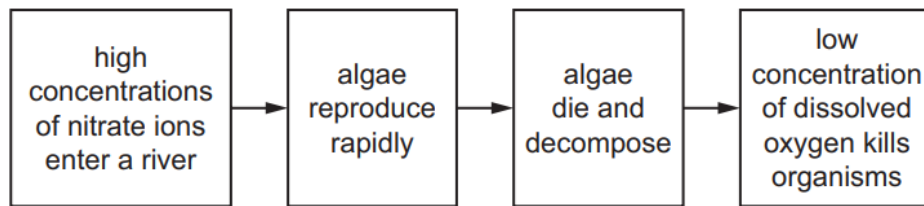
Which statements are examples of asexual reproduction?

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

12. The chart shows the inheritance of fur colour in a small mammal. If the allele for white fur is dominant, which animal must be heterozygous for the gene controlling fur colour?



13. The flow diagram shows a process that can occur as a result of pollution in a river.

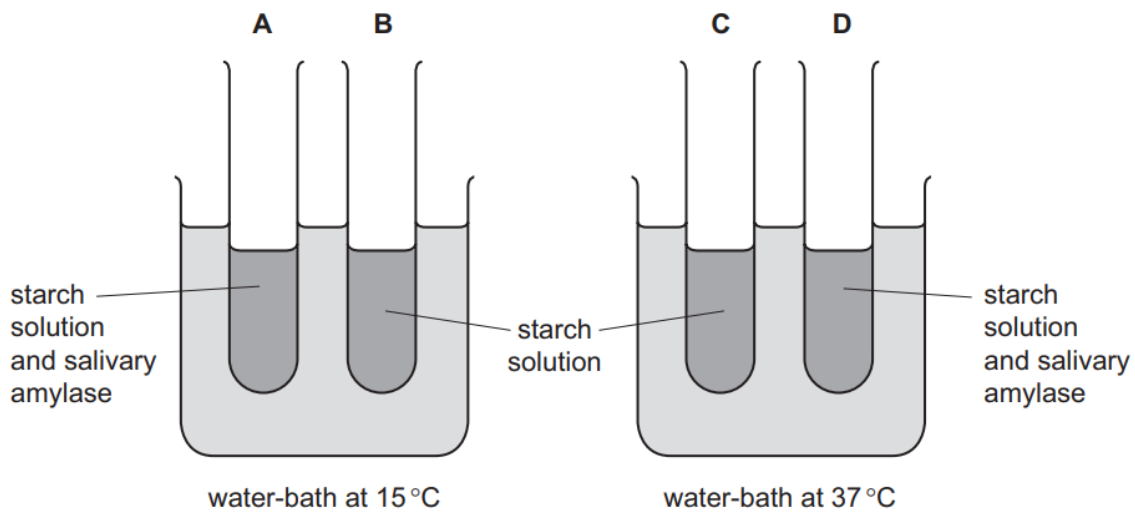


Which term describes the process shown in the flow diagram?

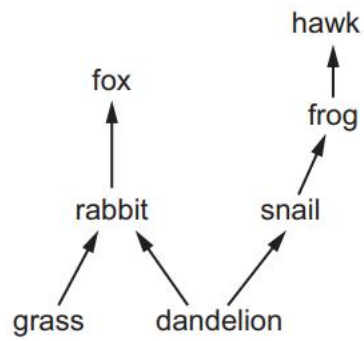
- A aerobic respiration
- B eutrophication
- C nitrogen cycle
- D photosynthesis

14. The apparatus shown is used for an experiment on starch digestion.

Which test-tube contains the most sugar after 20 minutes?



15. The diagram shows a woodland food web.



Which statement is correct?

- A Dandelions and grass are both primary consumers.
- B The fox and the hawk are both secondary consumers.
- C The frog is a tertiary consumer.
- D The rabbit and the snail are both primary consumers

*** THE END ***