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NANYANG PRIMARY SCHOOL
Term 1 Weighted Assessment
Science
Primary 5

20

Name: _____( ) Date: _____

Class: 5____ Parent's signature: _____

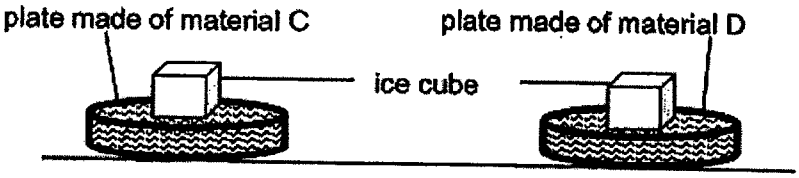
Dear Parent/Guardian,

Please sign the Weighted Assessment paper and have your child/ward return it the next day. Any query should be raised at the same time when returning the paper.

Section A: Multiple Choice Questions (12 marks)

For each question from 1 to 6, four options (1, 2, 3 and 4) are given. One of them is the correct answer. ***Indicate your choice in the brackets provided.***

1. Maslinda conducted an experiment as shown below. The plates are identical but made of different materials, C and D. She placed an identical ice cube on the top of each plate.



She observed that the ice cube on material C melted first and made the statements below.

A Material D gained heat from the ice cube.

B Both ice cubes lost heat to the surrounding air.

C Material C is a better conductor of heat than material D.

Which of the following statement(s) above is/are wrong?

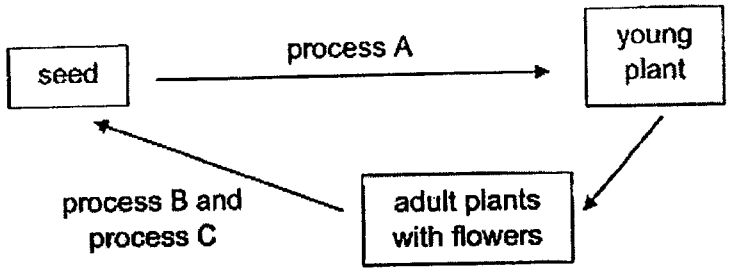
(1) A only (2) C only

(3) A and B only (4) B and C only

( )

2

2. A flowering plant goes through processes A, B and C in its life cycle as shown in the diagram below.



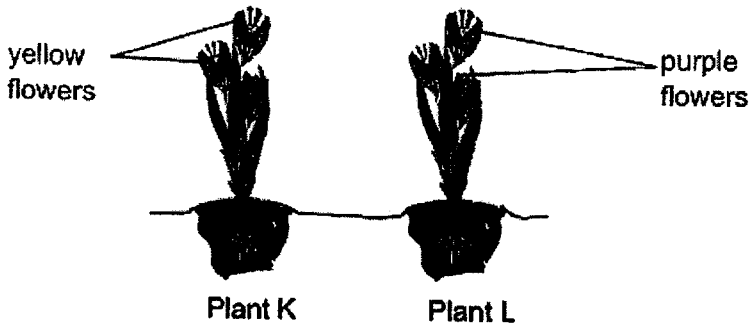
Process B takes place before process C.
Which of the following correctly represents processes A, B and C?

	Process A	Process B	Process C
(1)	fertilisation	pollination	germination
(2)	pollination	germination	fertilisation
(3)	germination	fertilisation	pollination
(4)	germination	pollination	fertilisation

( )

2

3. The diagram below shows two similar plants, K and L, of the same kind.



A farmer planted the seeds of plant K only on a new plot of land. After a few weeks, the planted seeds grew into new plants and produced yellow flowers only.

Based on the observation, the famer made the following statements:

A The new plants inherited the characteristics from plant K only.

B The new plants inherited the characteristics from plant L only.

C The new plants did not inherit the characteristics from both plants K and L.

Which of the following statement(s) above best explains the colour of the flowers produced?

(1) A only
(2) C only
(3) A and C only
(4) B and C only

( )

2

4. The table below shows the characteristics of Louis and his parents.

Characteristics	Louis' father	Louis' mother	Louis
Type of hair	straight	curly	curly
Eyelid	double	single	double
Lips	thin	thick	thin
Earlobe	attached	detached	attached

How many characteristic(s) did Louis inherit from his mother?

(1) 1
(2) 2
(3) 3
(4) 4

( )

5. Which of the following statement(s) regarding the sexual reproduction in humans is/are true?

A The sperm cell is produced by the testes.

B The unfertilised egg will develop in the womb.

C The ovary produces and fertilises the eggs on its own.

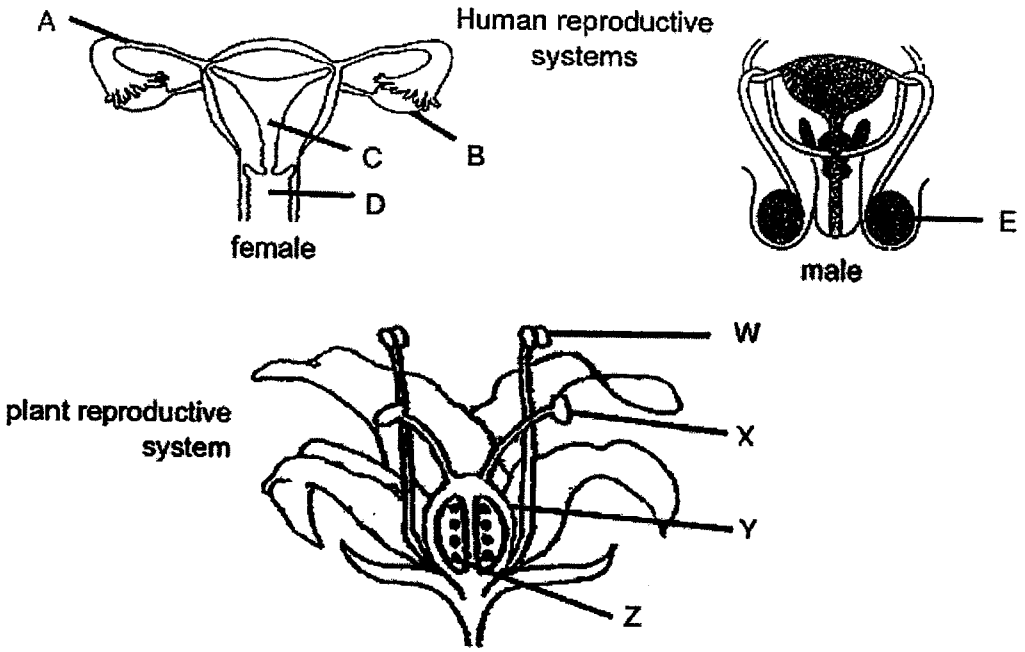
D The developing baby will obtain digested food from the mother.

(1) A and B only
(2) A and D only
(3) B and C only
(4) A, B, C and D

( )

4

6. The reproductive systems of humans and a flowering plant are shown in the diagram below.



Which one of the following correctly shows the function of the parts of the human and plant reproductive systems?

	Function	Human reproductive system	Plant reproductive system
(1)	produces ovule	A	W
(2)	produces female reproductive cells	E	Z
(3)	produces male reproductive cells	B	X
(4)	place where fertilized eggs develop	C	Y

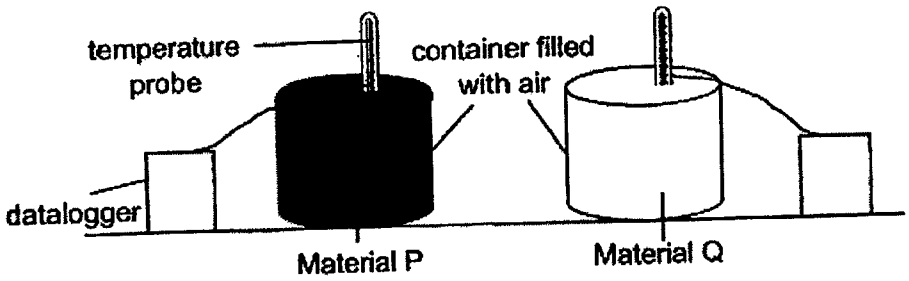
( )

2

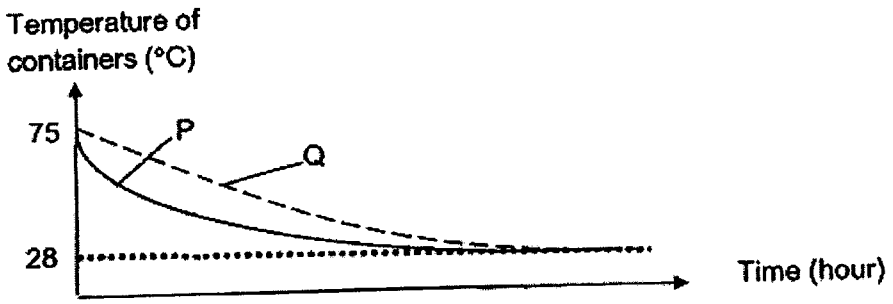
Section B: Open-Ended Questions (8 marks)

For questions 7 and 8, fill in your answers in the spaces provided.

7. Junxiong conducted an experiment using two identical containers filled with hot air as shown below. Both containers are covered with two different materials, P and Q. The temperatures in both containers were the same at the start of the experiment. The experiment was conducted in a room at 28°C.



Junxiong recorded the temperatures as shown in the graph below.



(a) What can be observed about the temperatures of the containers over time? [1]

_____

_____

Turn over to continue Q7

1

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(b) Based on the results of the experiment, which material, P or Q, has a similar property to wood and steel? Use each letter only once. [1]

(i) Wood: Material _____

(ii) Steel: Material _____

Junxiong wanted to use one of the materials to wrap his food and heat it in an electric oven in the shortest time possible.

(c) **Which material, P or Q, should he use so that the food will be heated in the shortest time? Explain your answer.** **[2]**

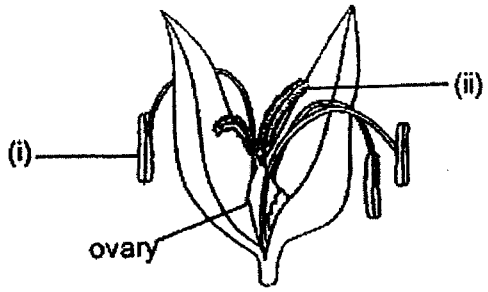
_____

_____

_____

3

8. The diagram below shows a wind-pollinated flower X with both male and female parts. Part (ii) has a feathery structure.



wind-pollinated flower

(a) Identify the male and female parts of flower X labelled (i) and (ii). [1]

(i) _____

(ii) _____

When the male parts of flower X are removed, flower X could still grow into a fruit.

(b) Explain why this happened. [2]

_____

_____

_____

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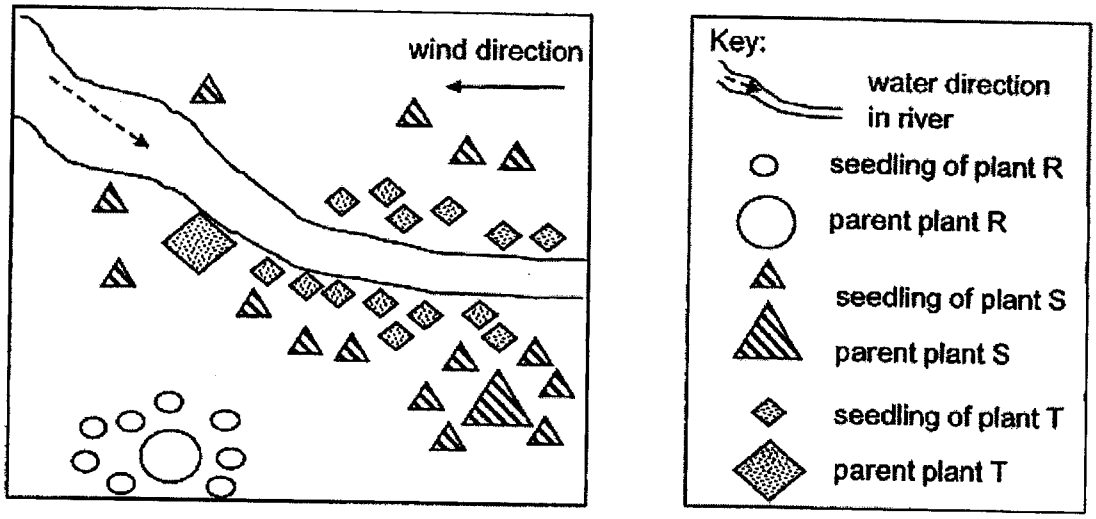
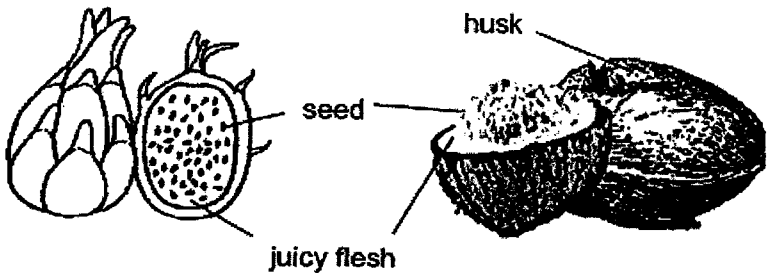
The diagram below shows the growth of the seedlings of plants R, S and T found at distances away from the parent plants.



(c) Based on the diagram above, which of the following will most likely be the fruits of Plants R, S or T? Fill in the boxes with letters R, S or T correctly. [1]



Fruit 1 ☐ Fruit 2 ☐

- End of Paper -

1

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P5 SCIENCE WA1 2023
Suggested Answer Key

Section A

1	3
2	4
3	1 and 3
4	1
5	2
6	2

Qn No	Suggested Answers
7.	
(a)	The temperature of the containers decreases until they reach a constant temperature of 28°C.
(bi) (bii)	Wood: Material Q Steel: Material P
(c)	Choice: Material P Data: The temperature of the container covered with P decreases faster than Q. Explanation: Material P is a better conductor of heat than Material Q. Heat will be transferred from the oven to the food faster.
8.	
(ai) (aii)	Anther Stigma
(b)	The pollen grain was transferred from the anther to the stigma before it was removed. The flower will then undergo fertilisation. The ovary will develop into the fruit.
(c)	Fruit 1: S Fruit 2: T or S