PAYA LEBAR METHODIST GIRLS' SCHOOL (PRIMARY)
WEIGHTED ASSESSMENT 1 2024
PRIMARY 5 SCIENCE

Section A	/14
Section B	/16
Total	/30

Name: _____ ( )

Class: Primary 5 _____

Date: _____ Parent's Signature: _____

Section A: Multiple Choice Questions (14 marks)

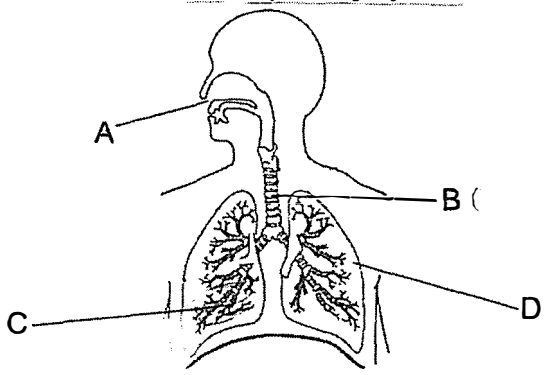
For each question from 1 to 7, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write your answer in the brackets provided.

1. Which of the following is a basic unit of life?

   (1) cell
   (2) organ
   (3) tissue
   (4) nucleus

( )

2. The diagram below shows the human respiratory system.



Which of the following statements about organ A, B, C and D is true?

	Organ	Function
(1)	A	Takes in only oxygen into the system
(2)	B	Allows food to enter into the system
(3)	C	Absorbs oxygen into the bloodstream
(4)	D	Allows air to enter into the circulatory system

( )

3. Darren wrote some statements about humans, fish and plants.

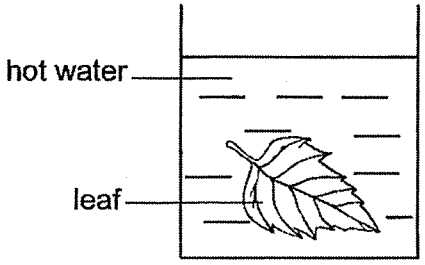
A The lungs and gills are part of the circulatory system.
B Oxygen and carbon dioxide are carried by the blood in humans and fish.
C Gaseous exchange takes place at the lungs, gills and stomata (tiny openings in leaves).

Which of his statement(s) is/are correct?

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

( )

4. Eunice removed a leaf from a plant and placed it in a beaker of hot water.



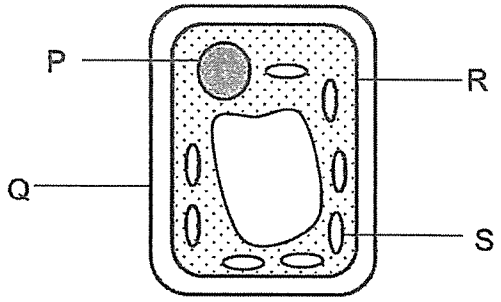
Eunice observed that bubbles formed only on the upper surface of the leaf.

Which of the following conclusions is correct?

(1) Air escapes through openings found on both surfaces of the leaf.
(2) Bubbles form in the water and land on the upper surface of the leaf.
(3) The leaf has openings on the upper surface but not its lower surface.
(4) Air enters the lower surface of the leaf and escapes through its upper surface.

( )

5. The diagram below shows a plant cell.



Which parts are also found in an animal cell?

(1) P and Q
(2) P and R
(3) Q and S
(4) R and S

( )

6. The table below shows John's breathing rate at different times of the day.

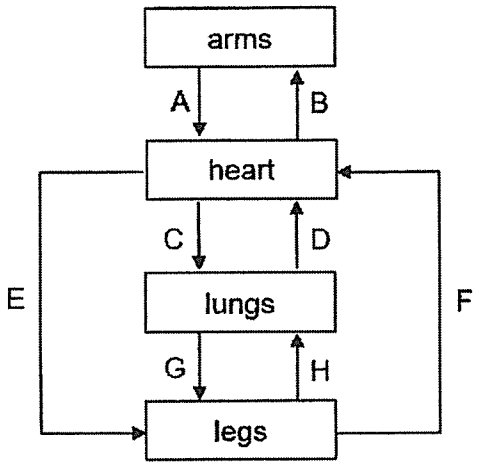
Time	Breathing rate per minute
11am	30
12pm	60
1pm	40

Which of the statements explains why John's breathing rate increased between 11am and 12pm?

(1) He needed to take in more carbon dioxide as he could be sleeping.
(2) He needed to take in more oxygen as he could be running in a race.
(3) He needed to take in more oxygen as he could be resting after a run.
(4) He needed to take in less oxygen as he could be cooling down after a run.

( )

7. Alice drew the diagram below to show the direction of blood flow in the human circulatory system.



Which two arrows were incorrectly drawn?

(1) A and B only

(2) C and D only

(3) E and F only

(4) G and H only

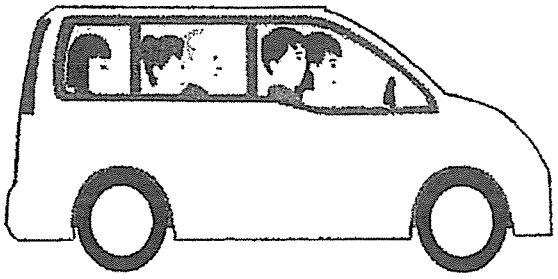
( )

END OF SECTION A

Section B: 16 marks

For questions 8 to 12, write your answers in the spaces provided.
The number of marks available is shown in brackets [ ] at the end of each question or part question.

8. Due to a spoilt lock, a family of five was stuck in a car with no air-conditioner and fan. No fresh air could enter the car, and no air could escape as well.

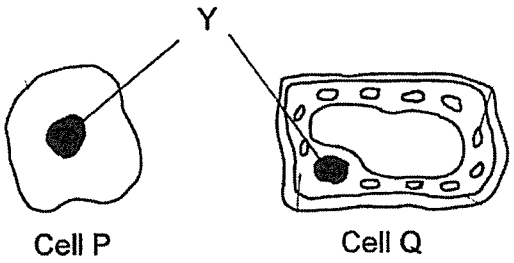


How would the composition of air in the car change after half an hour? [2]

		Tick (✓) to indicate the change in the composition of air after half an hour		
	Gas	**Increase**	**Decrease**	**Remains the same**
(i)	oxygen			
(ii)	nitrogen			
(iii)	water vapour			
(iv)	carbon dioxide			

2/2

9. The diagrams below show cells P and Q.



(a) Name Part Y. [1]

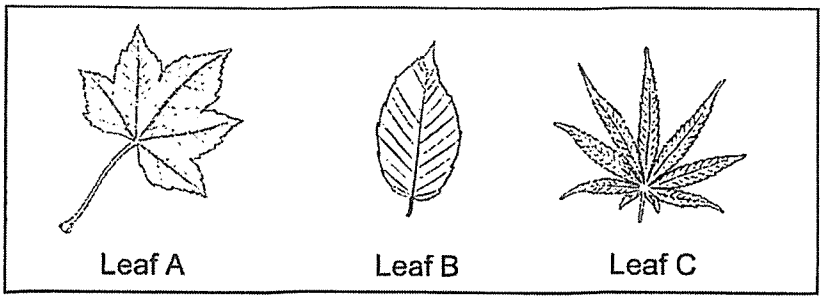
(b) State the function of Part Y. [1]

(c) Which part of a plant can Cell Q be found? Explain your answer. [1]

3

10. Suzy wanted to find out if the size of the leaves would affect the number of stomata in the leaves.

The diagram below shows the sample of the leaves Suzy collected.

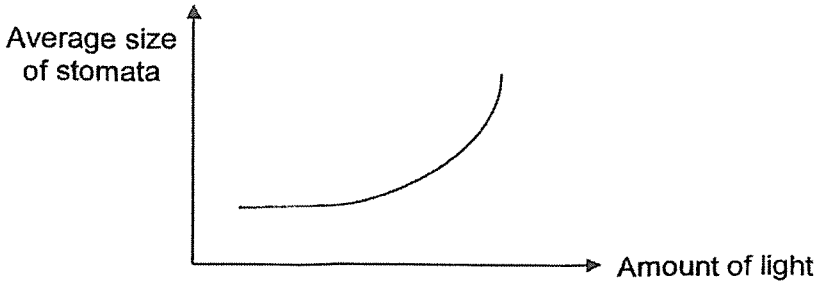


Suzy's teacher told her that the sample of leaves collected was wrong and it would not be a fair test.

(a) Give a reason why the sample of leaves collected would not make it a fair test. [1]

_____

The graph below shows how the amount of light affects the average size of stomata.



(b) Based on the graph, what is the relationship between the amount of light and the size of stomata? [1]

_____

_____

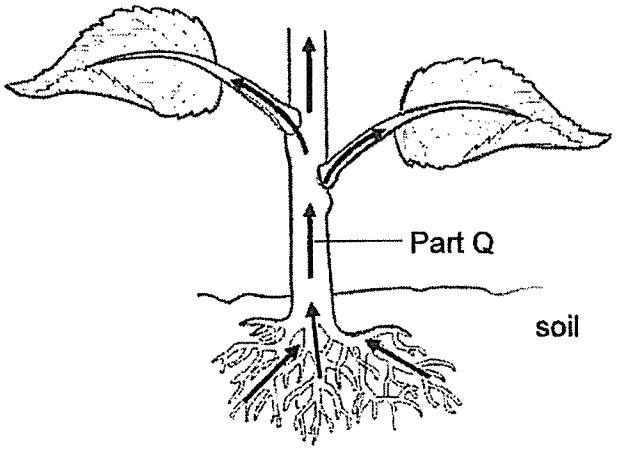
(c) Based on the graph, how does the size of stomata help in gaseous exchange? [1]

_____

_____

3

11. The diagram below shows the path taken by the substances in a plant by Part Q.

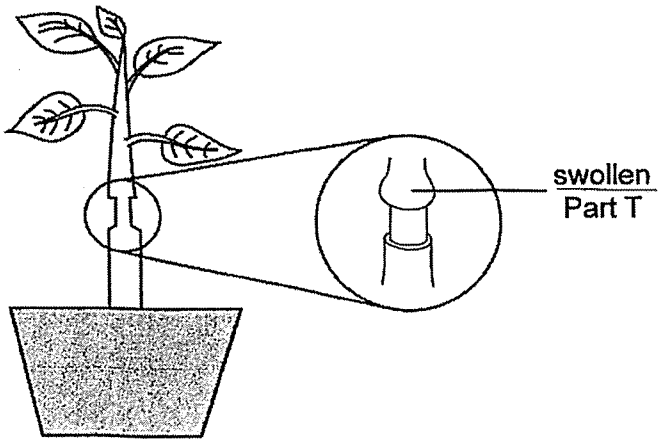


(a) State what Part Q is and its function. [2]

Part Q: _____

Function: _____

The outer tube of the plant has been cut off as shown below. The plant was placed under the sun and watered regularly.



After a few days, it was observed that Part T became swollen.

(b) Explain why Part T became swollen. [2]

_____

_____

4

12. Alicia and Jasmine recorded their heart rate after finishing their 1.6km run. After two minutes of resting, they measured their heart rate and recorded them in the table below.

	Heart rate (beats per minute)		
	Before running	**Immediately after running**	**After 2 minutes of resting**
Alicia	79	120	(a) _____
Jasmine	75	140	115

(a) In the table above, state what will Alicia's heart rate be after 2 minutes of rest? [1]

(b) Explain why there was an increase in heart rate when they were running. [2]

_____

_____

_____

(c) What will happen to their heart rate if they continue to rest further after the 2 minutes of rest? [1]

_____

4

END OF SECTION B

SCHOOL : PAYA LEBAR MGS PRIMARY
LEVEL : SCHOOL PRIMARY 5
SUBJECT : SCIENCE
TERM : 2024 WA1

Q1	Q2	Q3	Q4	Q5	Q6	Q7
1	3	3	3	2	2	4

Q8)	i)Decrease ii)Remains the same iii)increase iv)increase
Q9)	a) Nucleus b) Controls all activities in the cell. c) On the leaves. Cell Q has chloroplast that contain chlorophyll to trap light to make food, and the leaves trap light to make food. Thus, Cell Q can be found from the leaves.
Q10)	a) The types of leaves is different. b) The more amount of light there is the size of stomata increases. c) When the stomata is bigger, it allows faster gaseous exchange.
Q11)	a) Part Q: Water-carrying tubes Function: Transport water and mineral salt from roots to all parts of the plant. b) When the outer tube of the plant is cut off the food-carrying tubes were removed. Food cannot be transported below Part T and food will be stored and accumulated at Part T.
Q12)	a)95 b)The heart pumps blood faster to transport more oxygen and more digested food to all parts of the body to release more energy. Thus, there was an increase in heart rate when Alicia and Jasmine were running. c)Their heart rate will decrease.