		Section A	36
	SEMESTRAL ASSESSMENT (1) 2017	Section B	24
Name :	Index No: Class: P3	Your score out of 60 marks	R.
9 May 2017	SCIENCE Attn: 1h 15min	Parent's signature	

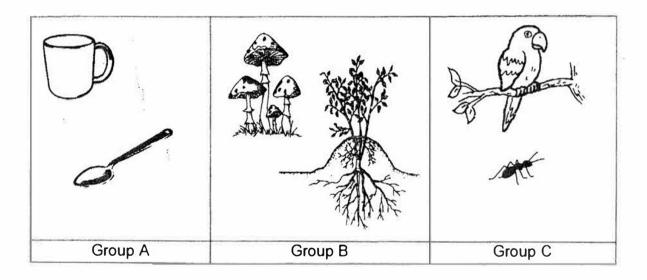
### SECTION A (18 x 2 marks)

For each question from 1 to 18, four options are given.

One of them is the correct answer. Make your choice (1, 2, 3 or 4).

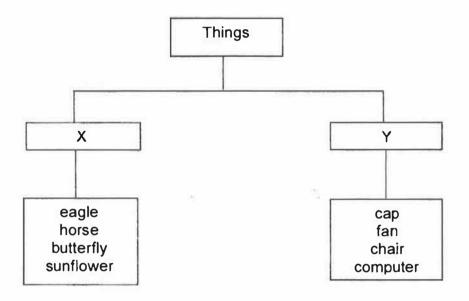
Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS) provided.

1. The following diagrams show different things, not drawn to scale. Which one of the following groups of things can reproduce?



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

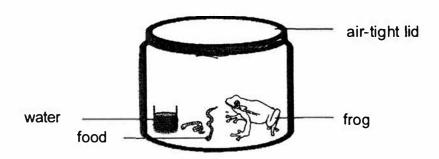
- 2. Which one of the following shows that living things grow?
  - (1) Mrs Tan gave birth to a baby girl.
  - (2) The boy drank a glass of milk this morning.
  - (3) The girl screamed when she saw a cockroach.
  - (4) Peter could not fit into his T-shirt which he wore last year.
- 3. Some things are classified into 2 groups, X and Y, as shown below.



Which one of the following is the correct sub-headings for Group X and Y?

	Group X	Group Y
(1)	Can fly	Cannot fly
(2)	Cannot grow	Can grow
(3)	Cannot reproduce	Can reproduce
(4)	Can respond to changes	Cannot respond to changes

4. Olivia caught a frog and placed it in a jar. She covered the jar with a lid. A few hours later, she found the frog dead.



What could she conclude from her observation above about living things?

- (1) They grow.
- (2) They reproduce.
- (3) They need air to survive.
- (4) They respond to changes around them.
- 5. Florence compared two animals, X and Y, and recorded her observations in the table below.

Animal X	Animal Y
give birth to live young	<ul> <li>lay eggs</li> </ul>
has a pair of wings	<ul> <li>has a pair of wings</li> </ul>
has two legs	<ul> <li>has two legs</li> </ul>
<ul> <li>has hairs on body</li> </ul>	<ul> <li>has feathers on body</li> </ul>

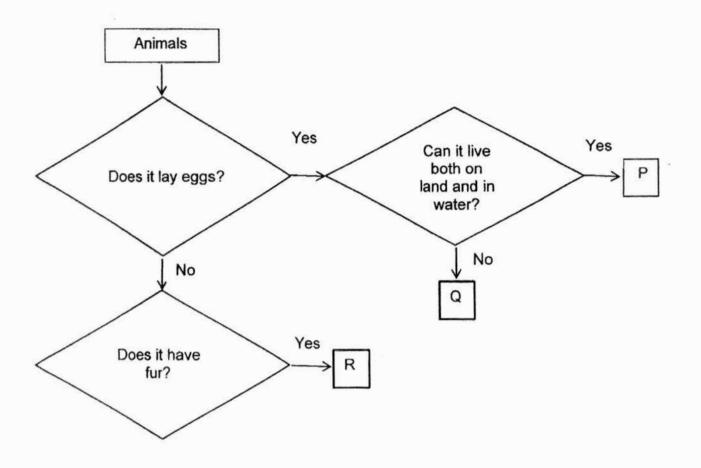
Which animal groups do animals X and Y belong to?

Animal X	Animal Y
 reptile	bird
 amphibian	insect
 mammal	bird
 mammal	insect

2017 P3 Science SA1

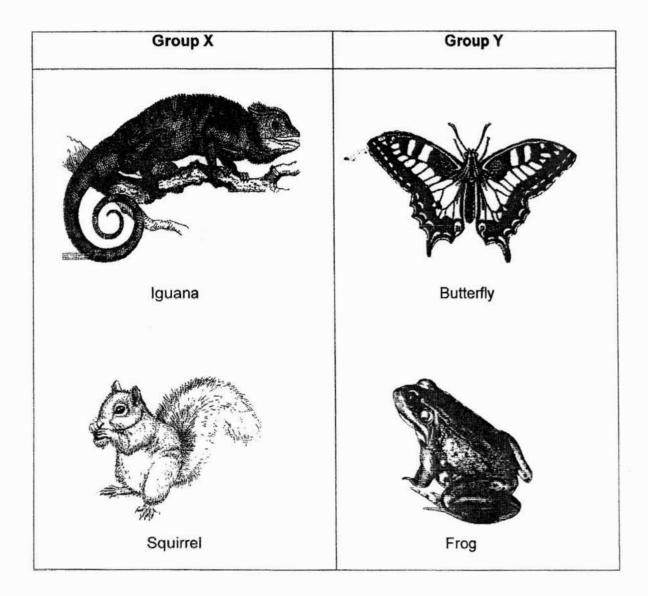
3

6. Animal P, Q and R have the following characteristics listed as shown below.



Which of the following correctly shows the animal groups that animals P, Q and R should be classified in?

ſ	P	Q	R
1)	Fish	Insect	Bird
2)	Amphibian	Reptile	Bird
3)	Amphibian	Insect	Mammal
4)	Fish	Reptile	Mammal



7. Some animals are grouped according to their similarities as shown in the table below. They are not drawn to scale.

Based on your observation only, how are the animals in the above classified?

Group X	Group Y
Has fur	Has no fur
Has tail	Has no tail
Has no wings	Has wings
Has no feelers	Has feelers

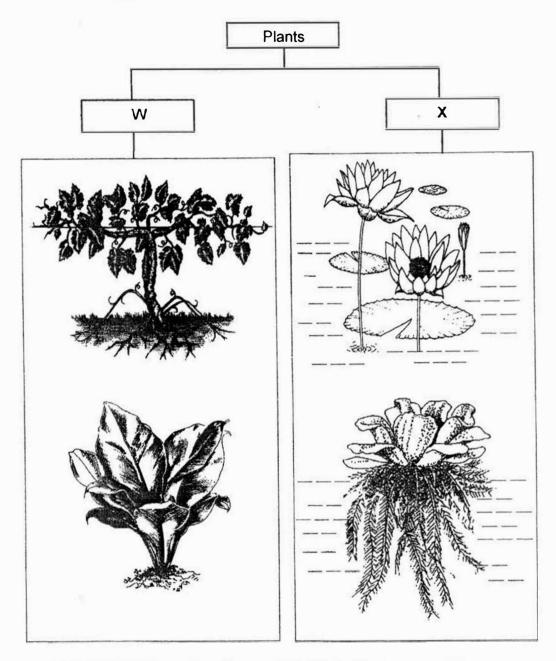
8. The table below shows the characteristics of animals, A, B, C and D. A tick ( $\sqrt{}$ ) shows the presence of the characteristic.

Characteristics	A	В	C	D
Does it live in water?	1			V
Does it have wings?		1		
Does it have feelers?			1	1
Does it has 3 body parts?			1	

Which of the following animal(s) is/ are insect(s)?

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

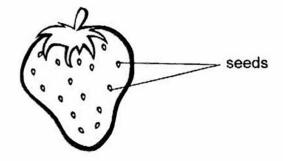
9. Some plants are grouped as shown in the table below. The plants are not drawn to scale.



Based on the information above, how are the plants grouped?

	Group W	Group X	
(1)	Land plants	Water plants	
(2)	Bears fruits	Does not bear fruits	
(3)	Flowering plants	Non-flowering plants	
(4)	Reproduce by seeds	Reproduce by spores	

10. This plant part was found from Plant A.

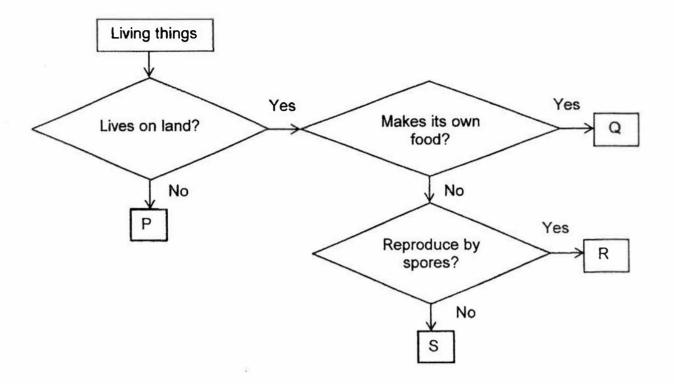


Based on the information above, which one of the following is most likely to be correct?

- (1) It grows in water.
- (2) It has a large trunk.
- (3) It is a flowering plant.
- (4) It is a non-flowering plant.

## 11. Study the flow chart below.

.



Which one of the following best represents P, Q, R and S?

	P	Q	R	S
(1)	Hibiscus	Toadstool	Cat	Watermelon
(2)	Orchid	Toadstool	Horse	Pineapple
(3)	Water lily	Rose	Bird's nest fern	Toadstool
(4)	Water hyacinth	Rose	Toadstool	Cat

9

- 12. Tina recorded the following observations that she made on a living thing, W.
  - It reproduces •
  - It can only be seen under a microscope •
  - It comes in different shapes and sizes

Based on the information, which of the following best represents W?

- (1) Fungi
- (2) Bacteria
- (3) Flowering plant
- (4) Non-flowering plant
- A pupil wrote down the similarities between fungi and bacteria. 13. Which of the following statement(s) is/are correct?

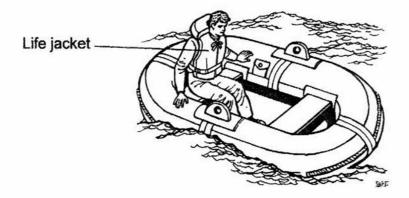
Similarities
They are micro-organisms.
They reproduce by seeds.
They feed on living things, dead or alive.

(1) A only

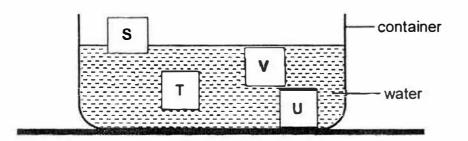
- C only (2)
- A and B only (3)
- A, B and C (4)

### For questions 14 and 15, refer to the diagram given below.

Tom has 4 cubes, S, T, U and V, made of different materials. He wanted to find out which material is more suitable for making a life jacket as shown in the diagram below.



He set up an experiment using the cubes as shown below.



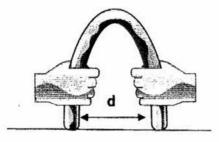
14. Based on the observation above, what property of the materials was Tom trying to find out?

- (1) Strength
- (2) Flexibility
- (3) Degree of transparency
- (4) Ability to float or sink

## Continue on next page

### Continued from previous page

- 15. Based on the results shown on the previous page, material of which cube, S, T, U or V, is most suitable for making the life jacket?
  - (1) S
  - (2) T
  - (3) U
  - (4) V
- 16. Pauline conducted an experiment as shown below.



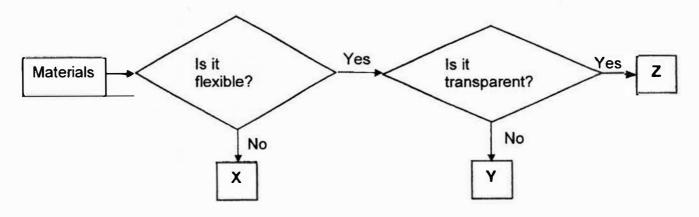
She bent bars made of different materials, P, Q, R and S, and measured the maximum distance, d, each material bent before it broke. She recorded the results as shown in the table below.

Material	Distance d (cm)	
Р	7	
Q	2	
R	5	
S	9	

Which of the following statements is correct?

- (1) Material S is the most flexible.
- (2) Material Q is the most flexible.
- (3) Material R is less flexible than material P.
- (4) Material P is more flexible than material Q.

17. Study the flow chart below.

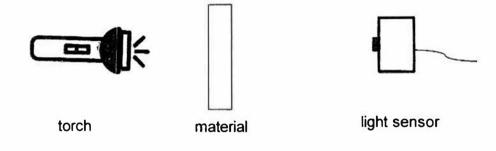


Which of the following best represents objects made by materials X, Y and Z?

	X	Y	Z
(1)	leather jacket	metal cup	clear plastic sheet
(2)	metal cup	wooden pole	leather jacket
(3)	wooden pole	leather jacket	clear plastic sheet
(4)	clear plastic sheet	metal cup	wooden pole

12.04

18. Annie conducted an experiment to find out the amount of light (measured in Lux) that passed through four different materials using a light sensor. Her results are shown in the table below.



Material	Amount of light that passed through it (Lux)			
A	10			
В	280			
С	620			
D	0			

Annie wanted to block out all the light in her bedroom.

Which one of the following materials, A, B, C or D, is most suitable to make into curtains for Annie's bedroom?

- (1) A
- (2) B
- (3) C
- (4) D

Name;		(	)	
Class: P 3 (	)	·	,	24

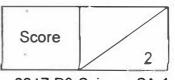
# SECTION B (24 marks)

For questions 19 to 30, write your answers clearly in the spaces provided. The number of marks available is shown in brackets [] at the end of each question or part question.

- 19. Susan observed an object, A, for some time and recorded its characteristics below.
  - can sing
  - can walk on its own
  - does not need air, food and water
  - cannot reproduce.

Susan concluded that object A is a living thing. Do you agree with her? Give 2 reasons for your answer.

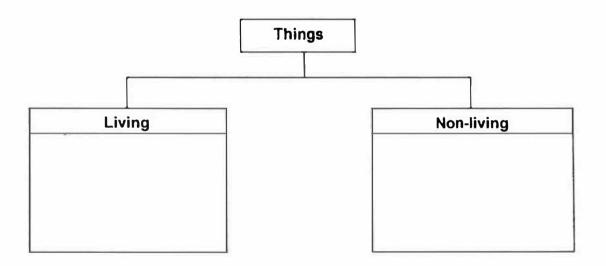
[2]

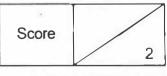


20. Lily labelled some living and non-living things as A, B, C and D as shown in the diagram below.

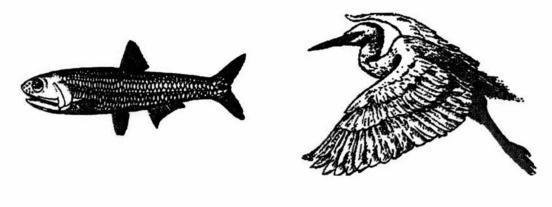


In the classification table below, group the things by writing A, B, C and D in the correct box. [2]





21. Study Animals X and Y as shown in the diagrams below.



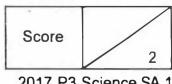


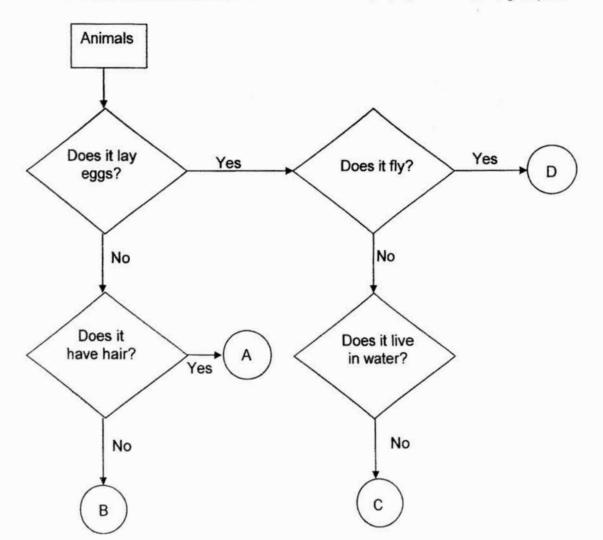
Animal Y

Based on your observations, state two different observable physical characteristics between Animal X and Animal Y.

(Do not compare	sizes, colours	, body shapes and	patterns)	[2]
-----------------	----------------	-------------------	-----------	-----

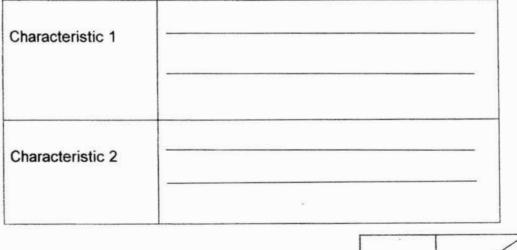
Difference 1	
Difference 2	

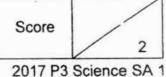




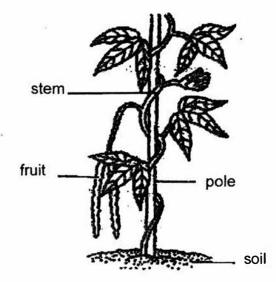
22. The flow chart below shows how four animals, A, B, C and D, are grouped.

Based on the information above, state two characteristics of animal D. [2]





23. Study the diagram below carefully.



Read the following statements about the plant above.

Put a tick ( $\sqrt{}$ ) against each statement in the boxes below to show if it is true or false.

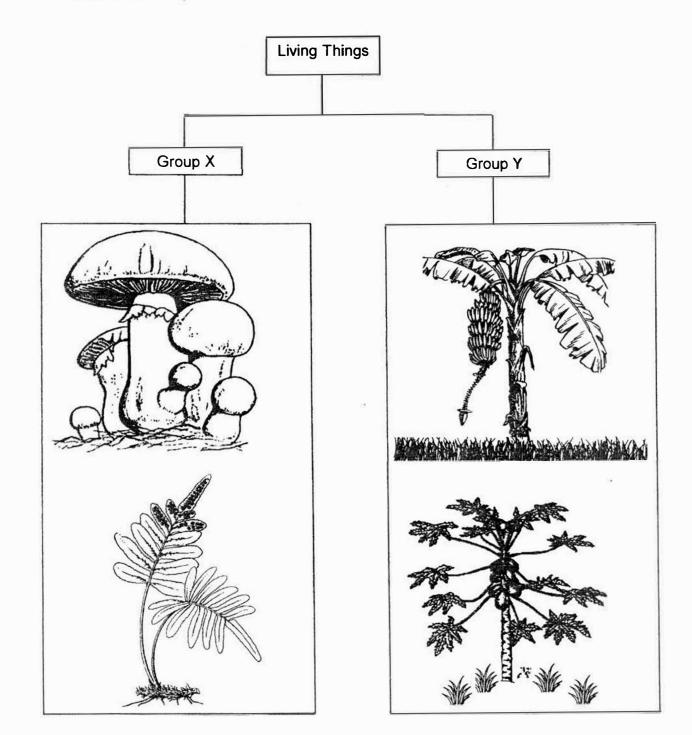
[2]

	Statements	True	False
(a)	This plant is a water plant.		
(b)	This plant has a weak stem.		-
(c)	This plant reproduces by seeds.		
(d)	This plant is a non-flowering plant.		

×	
Score	2

## For questions 24(a) and 24(b), refer to the diagrams below.

24. Study the living things that have been classified under Group X and Y as shown in the diagrams below.

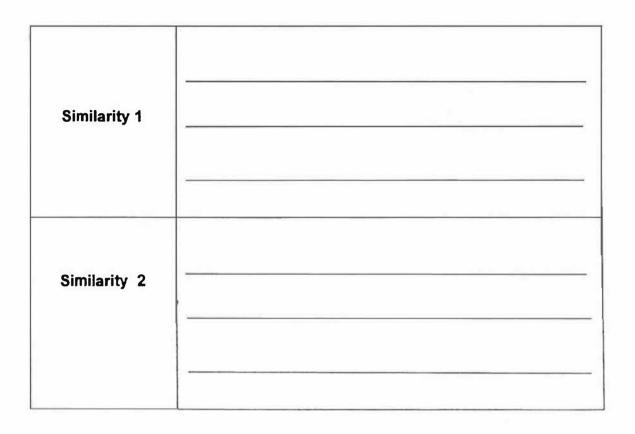


## Continue on next page

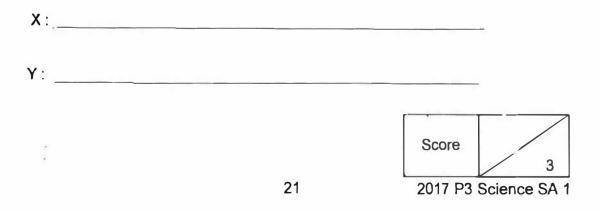
### Continued from previous page

(a) Based on your observations on the living things in the classification table, state two similar observable physical characteristics between the living things in Group Y.

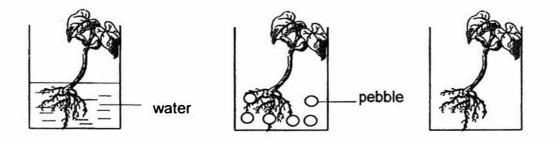
[2]



(b) Write a suitable sub-heading each for X and Y. [1]

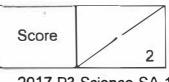


25. Jenny conducted an experiment as set up below. She placed three identical plants in beakers near an open window as shown below.



(a) What would happen to Plant B and C after one week? [1]
(b) Give a reason for your answer in (a). [1]

14



.

26. During a Science lesson, 3 students made the following statements about fungi.

Peter: All fungi are harmful.

.

Tom : Fungi are non-living things.

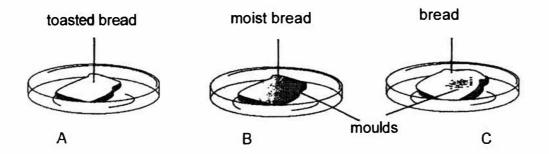
John : Fungi can reproduce by spores.

Who made the correct statement about fungi?

[1]

Score	
00010	1

27. Mimi placed three identical slices of bread, A, B, and C under different conditions and recorded her observations after a week as shown below.



(a) Arrange the breads A, B and C in order, starting with the one that has moulds appearing first. [1]



(b) Based on her observations, state **ONE** condition present that encourages the growth of bread moulds. [1]

Score 2

28. The table below shows the properties of materials A, B and C. A tick  $(\sqrt{)}$  shows that the property is present.

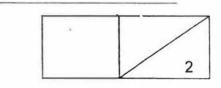
Property Material	Flexibility	Absorbs water	Allows light to pass through
A	$\overline{\mathbf{v}}$	V	
В		$\overline{\mathbf{v}}$	1
C	7		√

(a) Based on the information above, state the properties of Material  $B_{1}$  [1]

The diagram below shows a camping tent.

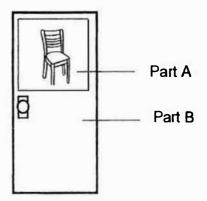


(b) John chose material A to make into a camping tent to ensure he could be protected from wet weather during an outdoor camp. Do you agree with his choice? Explain your answer. [1]



29. A chair was placed behind the door. Jennifer could see the chair clearly when she looked through Part A of the door.

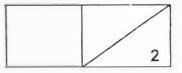
#### Front view



(a) Name a suitable material which Part A is made of. Explain your answer.

[1]

(b) Jenny could not see the chair at all when she tried to look through Part B of the door. Name a suitable material which Part B is made of.
 Explain your answer. [1]



:30. John had three bags made of different materials.

He added 1-kg objects, one at a time, into Bag A until it started to break. He repeated the experiment with Bags B and C and recorded the results in the table below.

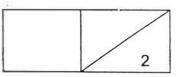
Bag	Greatest number of weights the bag can hold without breaking			
Α	3			
В	1			
С	5			

- (a) Name the property of material that John is testing in his experiment. [1]
- (b) John chose Bag A to carry an object weighing 4kg.Did he make the right choice? Give a reason for your answer.

2

[1]

The End of Paper



# **ANSWER KEY**

YEAR : 2017 LEVEL : PRIMARY 3 SCHOOL : RAFFLES GIRLS` PRIMARY SCHOOL SUBJECT : SCIENCE TERM : SA1

#### SECTION A (18 x2marks)

Q1	Q 2	Q3	Q4	Q5	Q6	Q7	Q8	Q 9	Q 10
3	4	4	3	3	3	2	1	1	3
Q11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18		
4	2	2	4	1	2	3	4		

## **SECTION B (24 marks)**

Q19. I do not agree with her because it does not need air, food and water and cannot reproduce.

- Q20. Living things: B, D Non-living things: A, C
- Q21. Difference 1 : Animal X has scales but Animal Y has feathers. Difference 2: Animal Y has wings but Animal X does not.
- Q22. Characteristic 1: It lays eggs. Characteristic 2: It flies.
- Q23.a) False b) True c) True d) False
- Q24.a) Similarity 1: They both have a strong stem Similarity 2: They both bear fruits
- b) X: Reproduces by seed Y: Reproduces by spores
- Q25.a) They will die.
- b) They did not have any water.
- Q26. John

Q27.a) B, C, A

b)Water

Q28.a) It absorbs water and allows light to pass through.

b) I do not agree with his choice as the material used will absorb water.

Q29.a) Glass . It is transparent

b)Metal. It is opaque

Q30.a) Strength

٠

b) No . The bag will tear as it can only hold a maximum of 3 kg objects.

THE END