RED SWASTIKA SCHOOL

RED SWASTIKA SCHOOL

2022 END OF YEAR EXAMINATION

SCIENCE

Name : _____ ( )

Class : Primary 3 / _____

Date : 1 NOVEMBER 2022

BOOKLET A

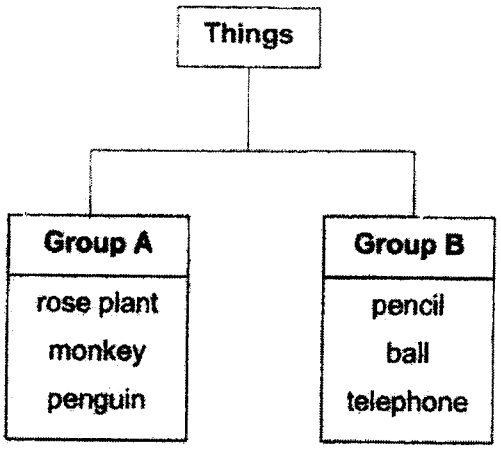
15 Questions
30 Marks
Duration of Paper : 1 hour 30 minutes

Note:

1. Do not open this Booklet until you are told to do so.
2. Read carefully the instructions given at the beginning of each part of the Booklet.
3. Do not waste time. If a question is difficult for you, go on to the next one.
4. Check your answers thoroughly and make sure you attempt every question.
5. In this booklet, you should have the following:
   (a) Page 1 to Page 11
   (b) Questions 1 to 15

For Questions 1 to 15, choose the most suitable answer and shade its number in the OAS provided.

1. Sharon classified some things into two groups as shown below.



Which one of the following can be placed under Group A?

(1) keys
(2) shoes
(3) wallet
(4) cockroach

2. Which one of the following animal groups is correctly matched to its body covering?

	Animal Group	Body Covering
(1)	Birds	Hair
(2)	Reptiles	Dry skin with scales
(3)	Insects	Feathers
(4)	Mammals	Moist Skin

3. Study the table below.

Characteristics	A	B	C
It makes its own food.	yes	no	no
It has flowers.	yes	no	no
It can move from place to place on its own.	no	yes	no

Which group of living things does A, B and C each belong to?

	A	B	C
(1)	plants	fungi	animals
(2)	fungi	animals	plants
(3)	plants	animals	fungi
(4)	animals	plants	fungi

4. Leo wanted to find out if water was necessary for mould to grow on bread. The table below shows the conditions of four different set-ups.

Set-up	A	B	C	D
Temperature (°C)	5	28	5	28
Amount of water on the bread (drops)	7	0	10	7

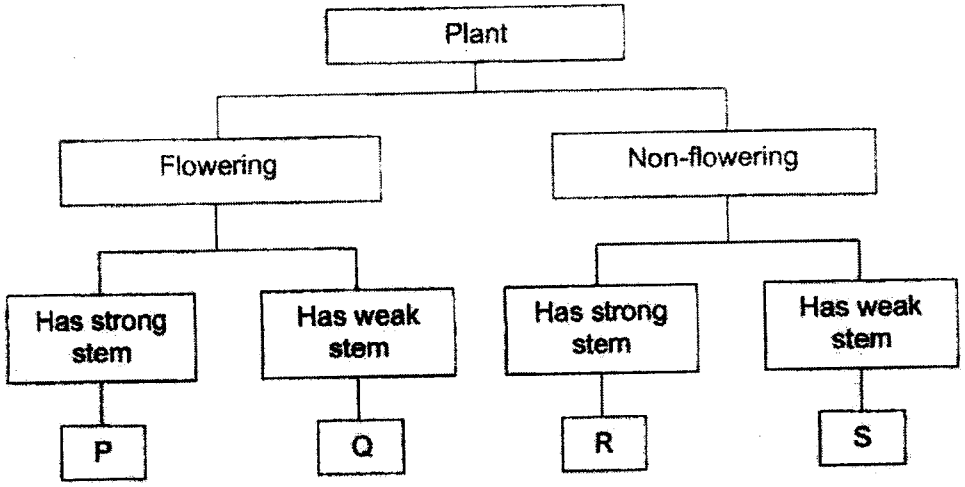
Based on the information given above, which two set-ups should he use for the experiment?

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

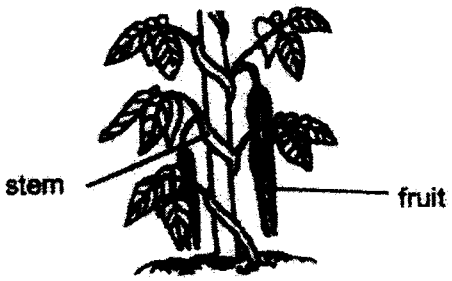
5. Which of the following organs is not part of the human digestive system?

(1) lungs
(2) mouth
(3) stomach
(4) small intestine

6. Study the classification chart below.

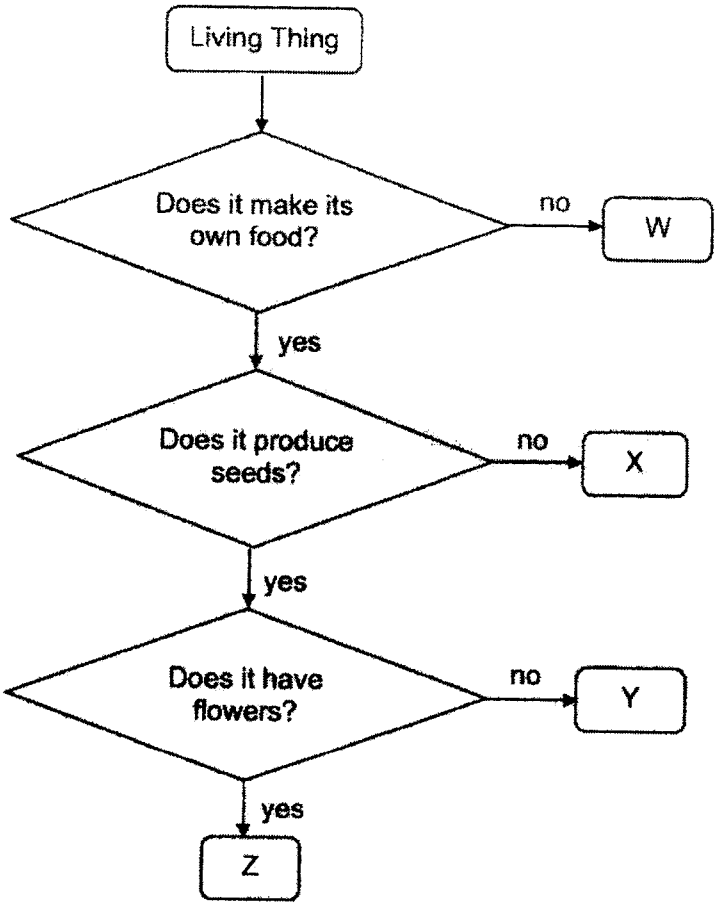


Based on the classification chart, which group does the plant shown below belong to?



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

7. Study the flowchart below.



Which letter (W, X, Y or Z) best represents a fern?

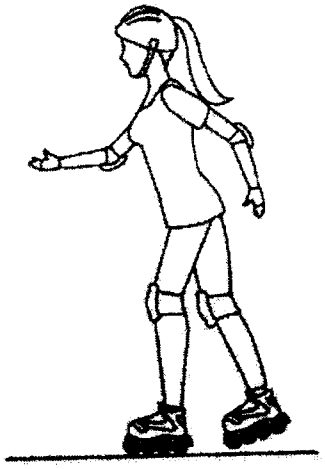
(1) W

(2) X

(3) Y

(4) Z

8. Debbie was roller-blading in a park.



Which body system(s) worked together during the roller-blading session?

A: Skeletal System

B: Muscular System

C: Circulatory System

D: Respiratory System

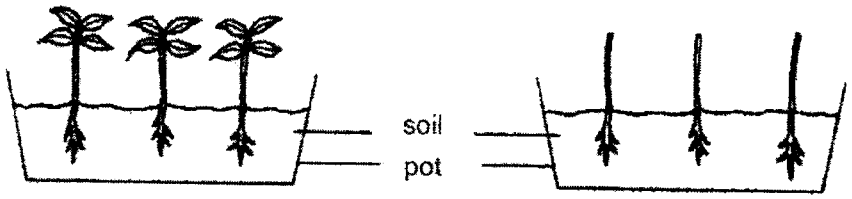
(1) A only

(2) A and B only

(3) B and C only

(4) A, B, C and D

9. Jenny has two identical pots of plant, A and B. She cut away the leaves of the plants in Pot B. She placed both pots in the garden and continued watering the plants every day.

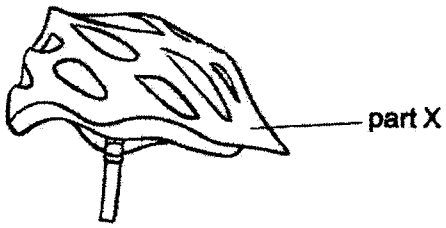


Pot A Pot B

After some time, the plants in Pot B died. Which one of the following statements explains why the plants in this pot died?

(1) The plants could not make food.
(2) The soil did not have enough water.
(3) There was too much sunlight in the garden.
(4) The stem was too weak to support the plant.

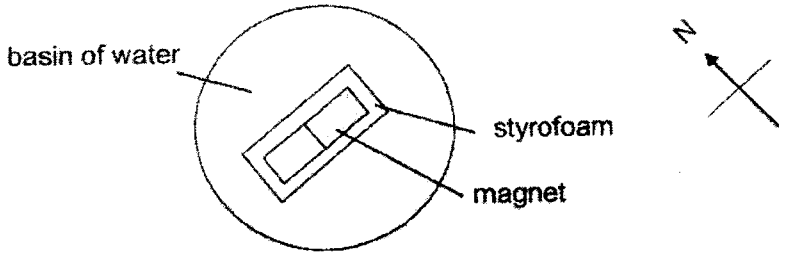
10. Mrs Tan wanted to get a cycling helmet for her son.



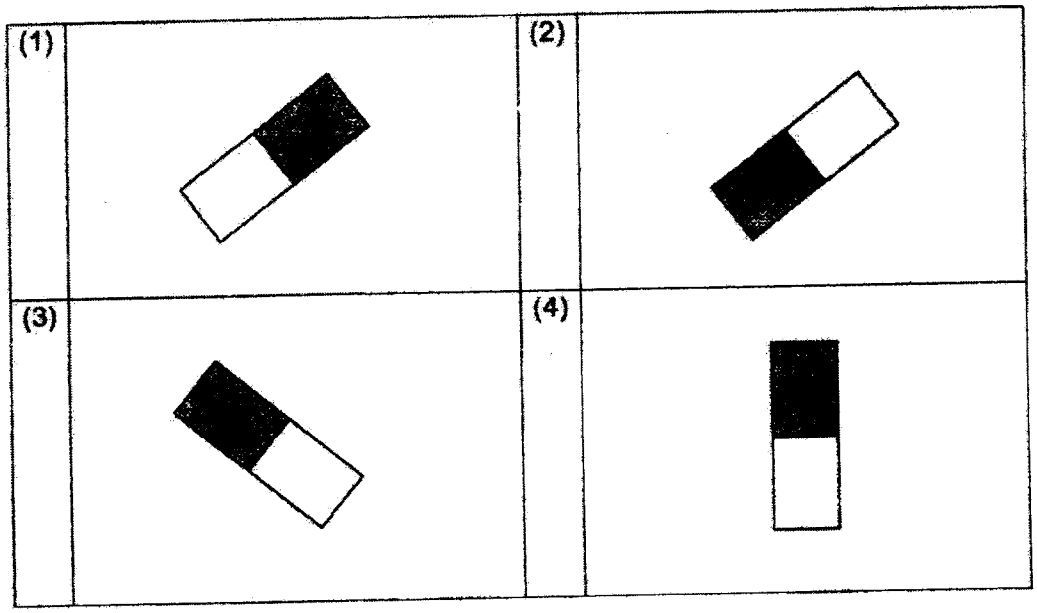
Based on the properties of the materials shown below, which material is most suitable for making part X of the cycling helmet?

	Material	Property	
		strong	flexible
(1)	A	No	No
(2)	B	No	Yes
(3)	C	Yes	No
(4)	D	Yes	Yes

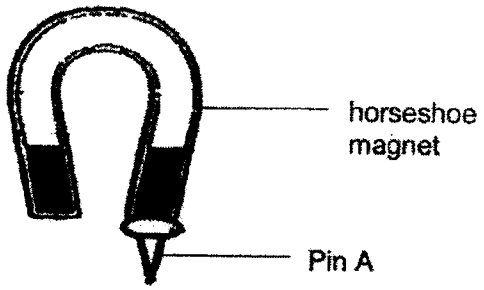
11. A magnet was taped onto a piece of styrofoam and placed into a basin of water as shown below. The magnet was then spun until it came to rest.



Which of the following shows the correct direction of the magnet at rest?



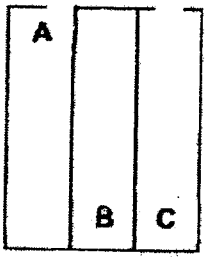
12. A horseshoe magnet is held over some pins. The diagram shows the interaction between the horseshoe magnet and Pin A.



What material could Pin A be made of?

(1) Steel
(2) Glass
(3) Plastic
(4) Copper

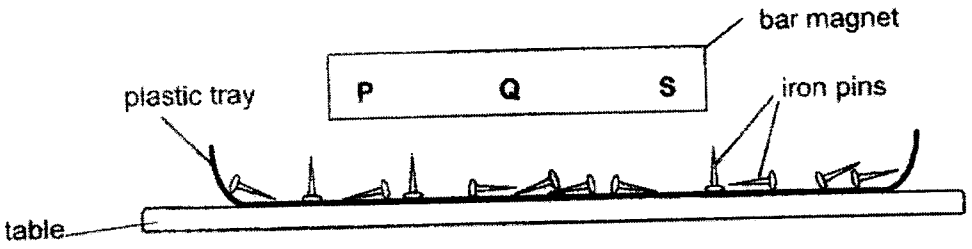
13. Three bar magnets were arranged side by side. All the magnets attracted each other as shown in the diagram below.



Which of the following are the possible poles for the magnets at A, B and C?

	A	B	C
(1)	North	South	North
(2)	North	North	South
(3)	South	North	North
(4)	South	North	South

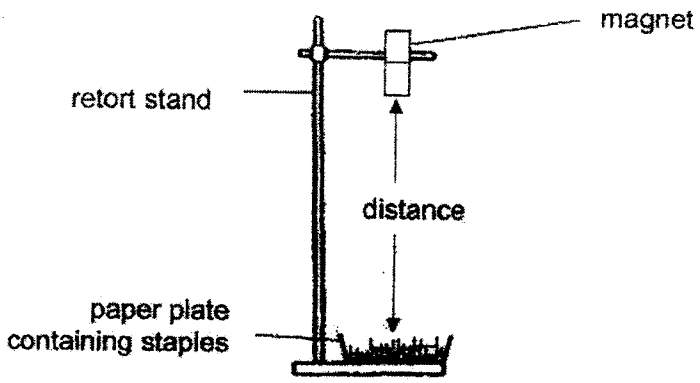
14. Ivan placed a bar magnet above a plastic tray filled with iron pins.



Which of the following shows the possible number of pins attracted at points P, Q and S respectively?

	P	Q	S
(1)	2	5	5
(2)	2	2	5
(3)	2	5	2
(4)	5	2	5

15. Aaron wanted to find out if the distance between the magnet and the staples would affect the number of staples attracted by a magnet. He set up the experiment as shown below.



He recorded his results in the table below.

Distance (cm)	10	7	4	1
No. of staples attracted	0	1	3	6

What can he conclude from his experiment?

(1) The distance of the magnet from the staples does not affect the magnetic strength of the magnet.

(2) As the distance of the magnet from the staples increases, the magnetic strength of the magnet increases.

(3) As the distance of the magnet from the staples increases, the magnetic strength of the magnet decreases.

(4) As the distance of the magnet from the staples decreases, the magnetic strength of the magnet decreases

End of Booklet A

RED SWASTIKA SCHOOL

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2022 END OF YEAR EXAMINATION

SCIENCE

Name : _____ ( )

Class : Primary 3 / _____

Date : 1 NOVEMBER 2022

BOOKLET B

6 Questions
20 Marks

In this booklet, you should have the following:
(a) Page 12 to Page 18
(b) Questions 16 to 21

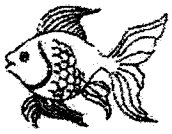
MARKS

	OBTAINED	POSSIBLE
BOOKLET A		30
BOOKLET B		20
TOTAL		50

Parent's Signature : _____

Answer all questions in the space provided.

16. Six animals are classified into the groups as shown below.

Group X	Group Y	Group Z
 	 	 

(a) Name the method of reproduction of the animals in Group X and Group Y. (1m)

(i) Group X: _____

(ii) Group Y: _____

(b) Other than the method of reproduction, state two other characteristics that only animals in Group Z have. (2m)

_____

_____

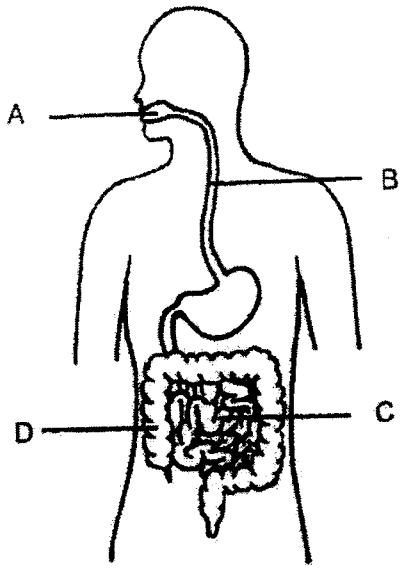
_____

(c) Jane saw a caterpillar in the garden and decided to feed it with leaves. The caterpillar moved away when Jane went nearer. Which characteristic of living things does the caterpillar show? (1m)

_____

4

17. Study the organ system below.



(a) Match the parts A, B, C and D to their correct functions. Write your answer in the table below. Each letter can only be used once. (2m)

	Function	Part
(i)	Water is absorbed from undigested food.	
(ii)	Digestion first begins in this part.	
(iii)	Digestion is completed and ends here.	
(iv)	Food is passed from the mouth to the stomach.	

2

17. Eileen conducted an experiment to find out how the amount of digestive juice affects the mass of a potato. She measured the mass of the potato after being soaked in 15 ml of digestive juice after six hours.

Eileen repeated her experiment by increasing the amount of digestive juice. The results are shown below.

	Mass of potato (g)	
Amount of digestive juice in the container (ml)	**At the start of experiment**	**Six hours later**
15	35	32
20	35	24
25	35	17
30	35	9

(b) What is the relationship between the amount of digestive juice and the mass of potato left after six hours? (1m)

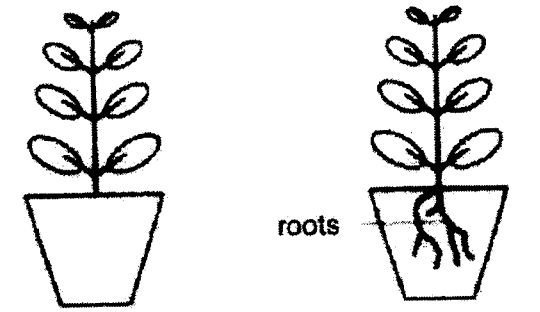
_____

_____

1

18. David set up an experiment using 2 similar pots of identical plants, X and Y. He removed the roots of the plant in pot X but did not remove the roots of the plant in pot Y as shown below.

He left both plants in a garden and continued watering them daily.



pot X (roots have been removed)

pot Y (roots have not been removed)

After two weeks, David noticed that the plant in pot X had died.

(a) Explain why the plant died after some time. (2m)

_____

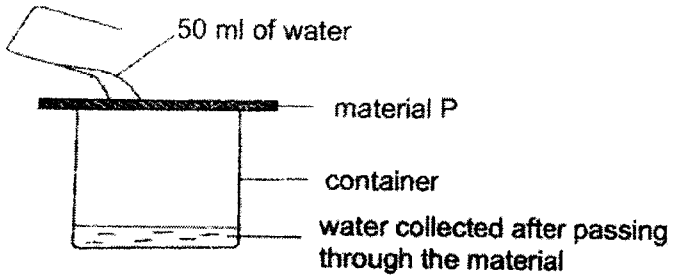
_____

(b) State another function of the roots other than the one mentioned in part (a). (1m)

_____

3

19. Guiling set up an experiment as shown. She poured 50 ml of water over material P and measured the amount of water collected in a container.

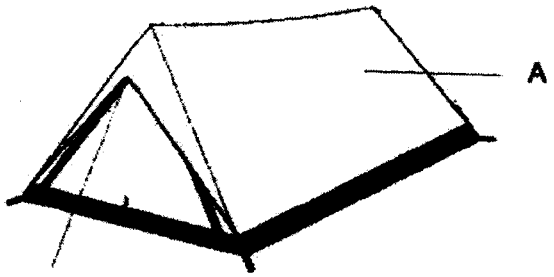


She then repeated the experiment using materials Q and R. She recorded the results in the table below.

Material	Amount of water collected in the container (ml)
P	15
Q	40
R	0

(a) Which property of materials did Guiling test in this experiment? (1m)

_____



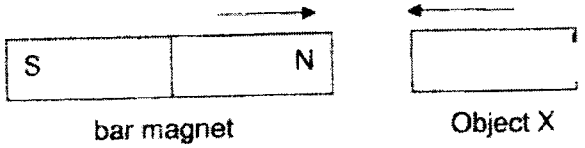
(b) Based on the results of the experiment above, which material, P, Q or R, should Guiling choose to make part A of the camping tent? Explain why. (2m)

_____

_____

3

20. Kate placed a bar magnet close to object X as shown in the diagram below.



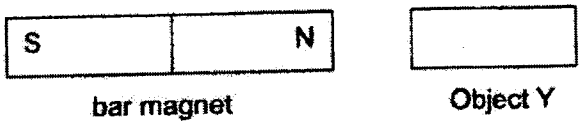
She noticed that object X was attracted to the bar magnet. So, she concluded that object X must be another magnet.

(a) Is Kate's conclusion correct? Why? (2m)

_____

_____

She then placed the bar magnet close to object Y. She observed that object Y did not move.



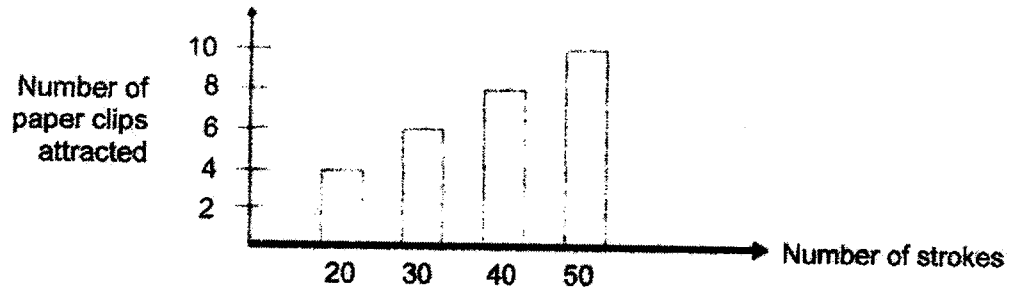
(b) What could be a possible material for object Y? (1m)

_____

3

21. Johan conducted an experiment to find out how the number of strokes made by a magnet on an iron nail would affect the magnetic strength of the iron nail. After the iron nail was magnetised each time, he counted the number of paper clips it could attract.

The results of his experiment are shown below.



(a) Name one variable that was changed in this experiment. (1m)

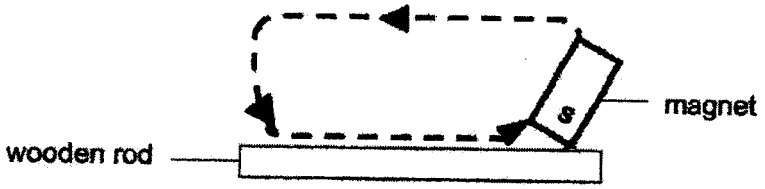
_____

(b) What can he conclude from the results of his experiment? (1m)

_____

_____

Johan replaced the iron rod with a wooden rod. He stroked the wooden rod with a bar magnet several times as shown in the diagram.



(c) Can the wooden rod attract the paper clips? Explain why. (2m)

_____

_____

End of Booklet B
Please check your answers.

4

ANSWER KEY

YEAR : 2022
LEVEL : PRIMARY 3
SCHOOL : RED SWASTIKA SCHOOL
SUBJECT : SCIENCE
TERM : END OF YEAR EXAMINATION

BOOKLET A

Q1	4	Q2	2	Q3	3	Q4	4	Q5	1
Q6	2	Q7	2	Q8	4	Q9	1	Q10	3
Q11	3	Q12	1	Q13	2	Q14	4	Q15	3

BOOKLET B

Q16a)	i) Give birth to their young ii) lay eggs
Q16b)	They have six legs and three body parts.
Q16c)	Living things respond to changes.
Q17a)	<table><tr><th></th><th>Function</th><th>Part</th></tr><tr><td>i)</td><td>Water is absorbed from undigested food.</td><td>D</td></tr><tr><td>ii)</td><td>Digestion first begins in this part.</td><td>A</td></tr><tr><td>iii)</td><td>Digestion is completed and ends here.</td><td>C</td></tr><tr><td>iv)</td><td>Food is passed from mouth to the stomach.</td><td>B</td></tr></table>
Q17b)	As the amount of digestive juice increases, the mass of potato left decrease.
Q18a)	There are no roots so the roots cannot absorb water for the plant.
Q18b)	Roots hold the plant firmly to the ground.
Q19a)	Waterproof
Q19b)	R. It does not allow water to pass through so the camper staying in the tent will remain dry.
Q20a)	No. Object X could be a magnetic material. If it is a magnet, she needs to see repulsion with the bar magnet.
Q20b)	Wood/ plastic/ rubber/ any non-magnetic material
Q21a)	The number of stokes made by a magnet.
Q21b)	The more the number of stroke made by a magnet on iron nail, the greater the magnetic strength of the iron nail.
Q21c)	No. The wooden rod is a non-magnetic material

END