CHIJ PRIMARY (TOA PAYOH)
2022 SEMESTRAL ASSESSMENT II

NAME

REGISTER NUMBER

CLASS

SCIENCE PAPER (BOOKLET A)

Primary Three

26 October 2022
1 hour 30 minutes

Additional Materials: Optical Answer Sheet (OAS)

INSTRUCTIONS TO CANDIDATES

1. Write your name, class and register number clearly above.
2. Do not turn over this page until you are told to do so.
3. Follow all instructions carefully.
4. Please hand in each section separately.

SECTION	SUB-TOTAL	MARKS OBTAINED
A	48	
B (Part 1)	16	
B (Part 2)	16	
TOTAL	**80**	

Parent's / Guardian's
Signature: .....

This document consists of **20** printed pages including the cover page.

Section A: Multiple Choice Questions (48 marks)

For each question from 1 to 24, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and shade on the Optical Answer Sheet.

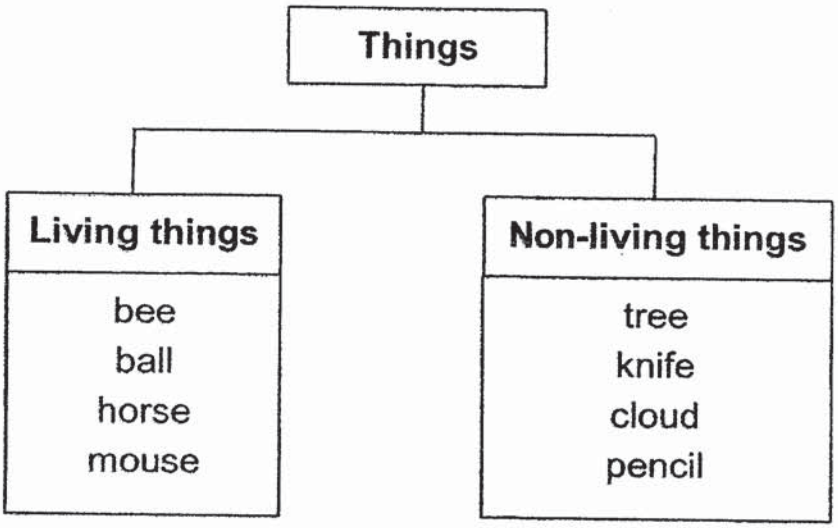
1. The table below shows the characteristics of four things, A, B, C and D. A tick (✓) means the characteristic is present.

Thing	Has four legs	Make its own food	Needs air, food and water
A	✓		✓
B	✓		
C			✓
D		✓	✓

Which of the following correctly represents A, B, C and D?

	A	B	C	D
(1)	butterfly	chair	tiger	hibiscus plant
(2)	chair	butterfly	hibiscus plant	tiger
(3)	tiger	chair	butterfly	hibiscus plant
(4)	hibiscus plant	tiger	chair	butterfly

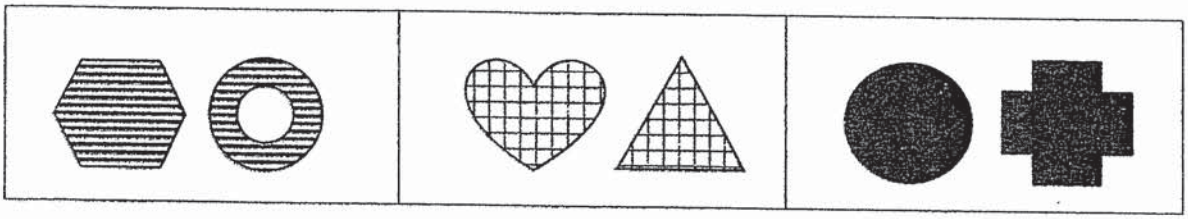
2. Study the chart.



Which of the following things have been classified wrongly in the groups?

	Living things	Non-living things
(1)	ball	tree
(2)	bee	tree
(3)	ball	cloud
(4)	bee	cloud

3. The following objects are grouped according to their _____



(1) size
(2) shape
(3) pattern
(4) number of sides

4. The pictures show a mushroom and a fern.

mushroom

fern

How are the mushroom and fern similar?

A Both make its own food.
B Both reproduce by spores.
C Both respond to changes.

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

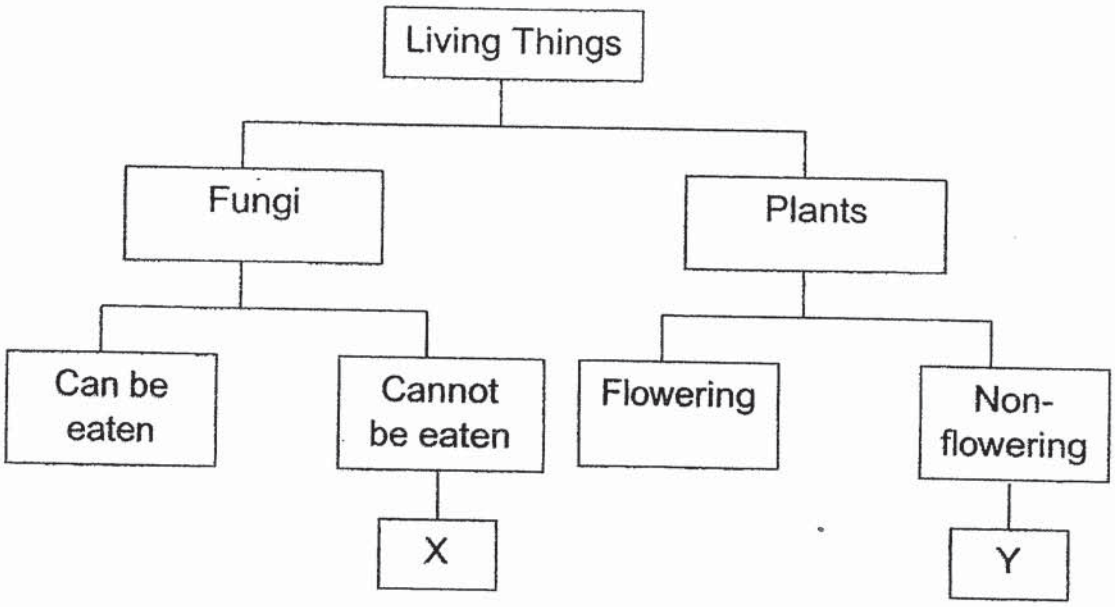
5. Jenny found an animal as shown.

animal C

Which of the following characteristics about animal C tells Jenny that it is **not** an insect?

(1) It has no wings.
(2) It has a pair of feelers.
(3) It has three body parts.
(4) It has more than six legs.

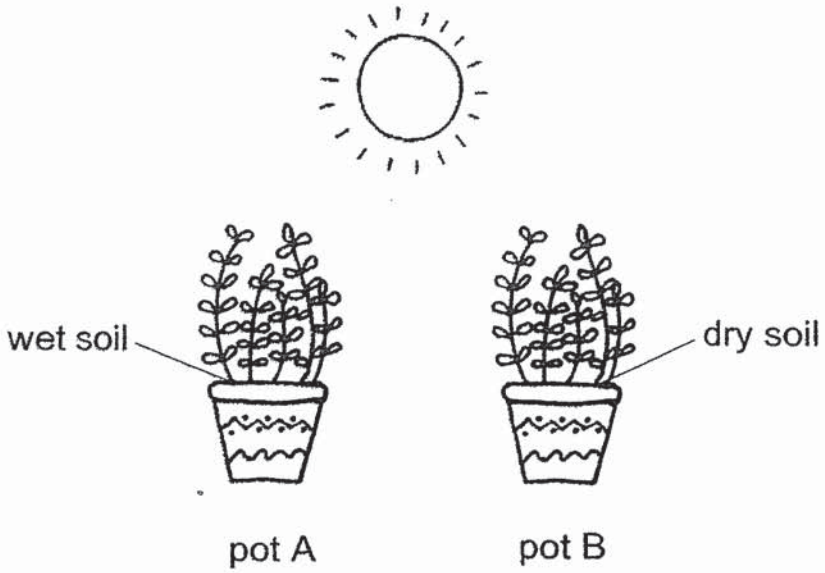
6. Study the chart below.



Based on the above information, which of the following about X and Y is correct?

(1) Both are plants.
(2) Both have flowers.
(3) Both cannot be eaten.
(4) Both are living things.

7. Nancy planted two identical plants in pots A and B. Pot A had wet soil and pot B had dry soil. Both pots were placed in the same location in the garden.

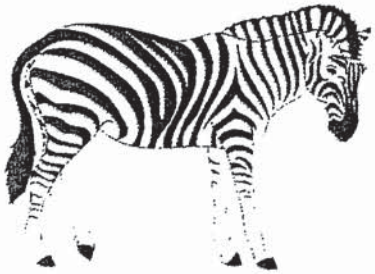


A few days later, Nancy noticed that the plant in pot A survived but the plant in pot B died.

Based on Nancy's observations, plants need _____to survive.

(1) air
(2) food
(3) water
(4) sunlight

8. David wanted to find out if animal Z is a mammal.



animal Z

Which of the following characteristics will help David identify if animal Z is a mammal?

(1) It lives on land.
(2) It has four legs.
(3) It suckles its young.
(4) It has stripes on its body.

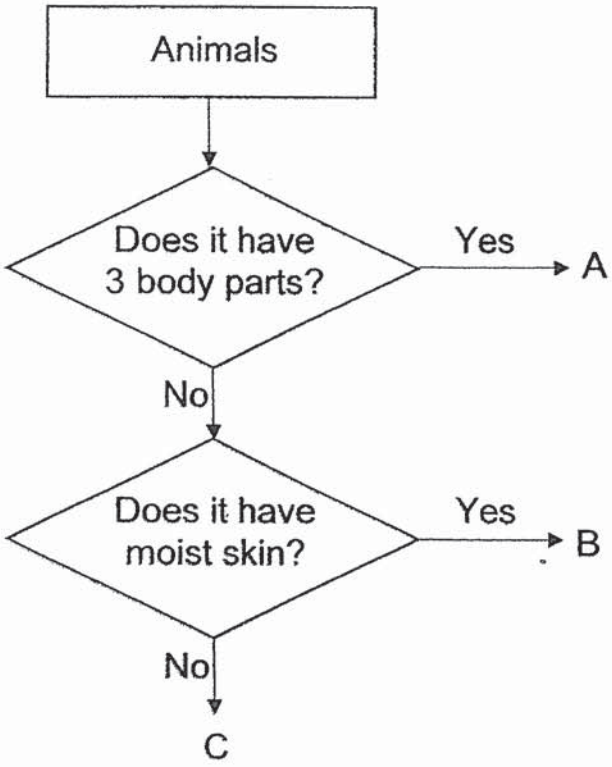
9. Study the table. A tick (✓) means the characteristic is present.

Animal	Lays eggs	Has dry skin with scales	Has legs
R			✓
S	✓	✓	✓
T	✓	✓	

Based on the information in the table, which animal(s) is/are reptiles?

(1) R only
(2) T only
(3) R and S only
(4) S and T only

10. Study the chart.



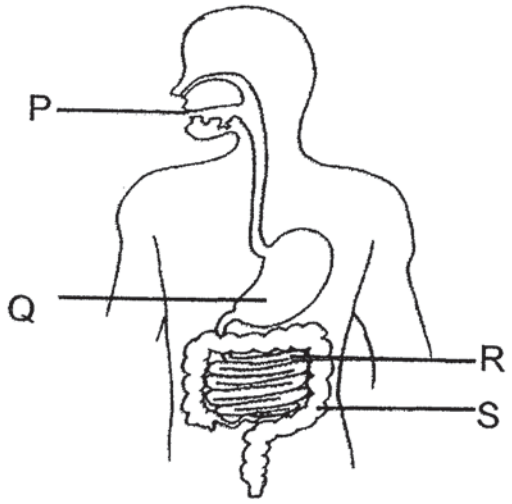
Based on the chart, which of the following is **not** correct?

(1) Both A and B have three body parts.
(2) B has moist skin but C does not have.
(3) Both B and C do not have three body parts.
(4) A has three body parts but B does not have.

11. The _____ system of the human body works together with the digestive system to transport digested food to different parts of the body.

(1) skeletal
(2) muscular
(3) circulatory
(4) respiratory

12. The diagram shows the human digestive system.



Which part(s) of the human digestive system produce(s) digestive juices?

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

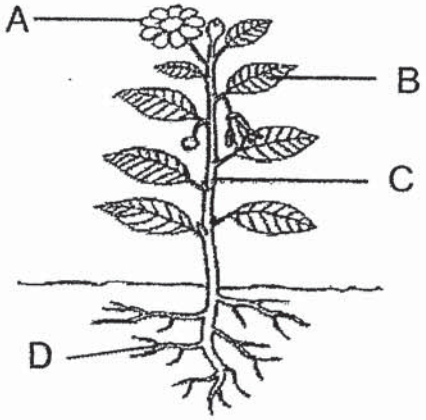
13. Sarah wanted to find out if plants need water to grow. She placed two similar plants, P and Q, in the field and observed them for some time.

Plant	Amount of water given at the start (ml)	Number of hours in the sun each day
P	100	5
Q	?	?

Some information about plant Q was missing from the table. To achieve the aim of her experiment, which of the following about plant Q is correct?

	Amount of water given at the start (ml)	Number of hours in the sun each day
(1)	100	5
(2)	100	3
(3)	0	5
(4)	0	3

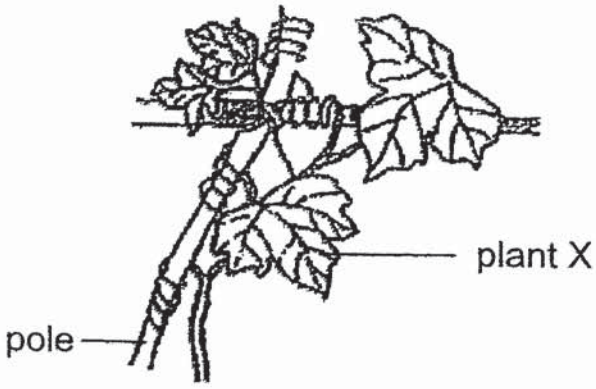
14. Study the diagram of a plant.



Which part enables the plant to make food in the presence of sunlight?

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

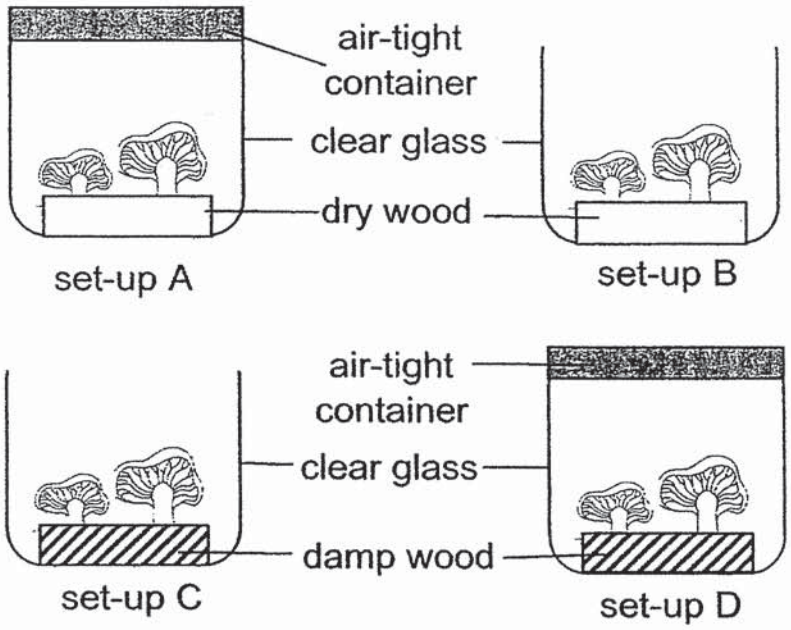
15. The diagram shows a picture of plant X which grew on a pole.



What will happen to plant X if the pole is removed?

(1) It will not take in water.
(2) It will not be able to grow upright.
(3) It will not be able to develop flowers.
(4) It will grow a thicker stem to support itself.

16. Emma grew some mushrooms in four set-ups, A, B, C and D. They were placed in the classroom over a period of 2 weeks.



In which of the following set-ups, will the mushrooms grow best in?

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

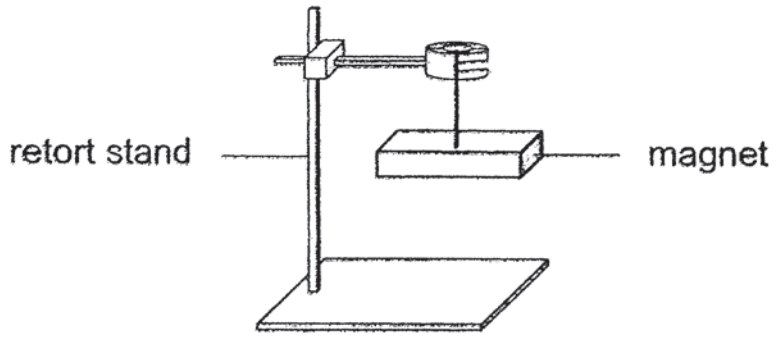
17. The table shows the characteristics, Y and Z, of bacteria and mould. A tick (✓) means the characteristic is present.

Characteristic	Bacteria	Mould
Y	✓	
Z		✓

Which of the following characteristics of Y and Z are correct?

	Y	Z
(1)	Reproduce by spores	Can make its own food
(2)	Reproduce by spores	Can only be seen under a microscope
(3)	Can only be seen under a microscope	Reproduce by spores
(4)	Can only be seen under a microscope	Can make its own food

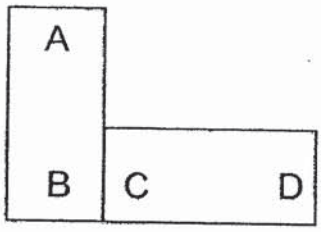
18. Lionel hung a magnet as shown. He gave the magnet a gentle spin. The magnet turned and eventually stopped.



In which direction, will the magnet come to a rest?

(1) east-west
(2) north-east
(3) south-west
(4) north-south

19. Study the arrangement of the two magnets with ends, A, B, C and D as shown.



Based on the arrangement, three pupils made the following statements.

Andy:	A will repel C.
Betty :	A will attract D.
Charles:	B will attract D.

Which of the pupils is/are correct?

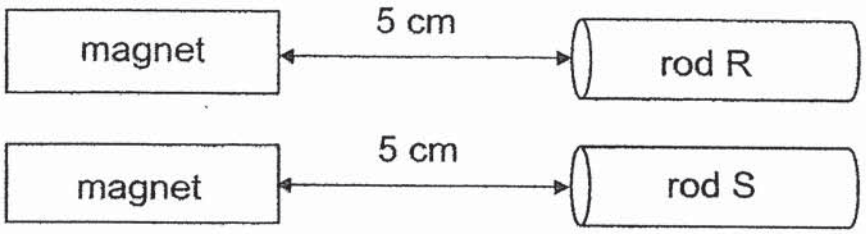
(1) Charles only

(2) Andy and Betty only

(3) Andy and Charles only

(4) Andy, Betty and Charles

20. Tara placed two identical magnets at an equal distance from two metal rods, R and S, as shown.



She observed that rod R moved towards the magnet but rod S did not move at all.

Based on Tara's observation, which statement is correct?

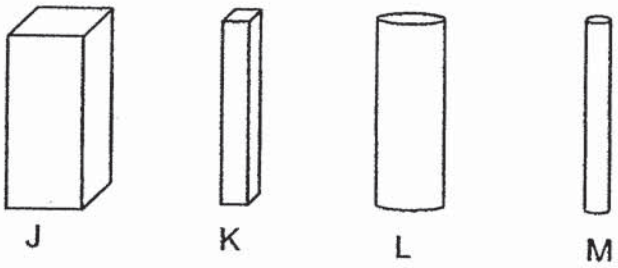
(1) Rod R is non-magnetic.

(2) Rod S is non-magnetic.

(3) Rod R is definitely a magnet.

(4) Rod S is definitely made of iron.

21. Weiling conducted an experiment using magnets of different sizes. She wanted to find out the strength of each magnet.



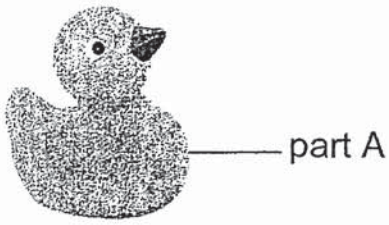
She brought each magnet near a pile of iron pins. The table shows the number of iron pins attracted by the magnets, J, K, L and M, from different distances.

Magnet	Distance between magnet and pins (cm)	Number of iron pins attracted
J	7	8
K	2	13
L	8	11
M	4	13

Based on the table, which of the following statements is correct?

(1) J is the weakest magnet.
(2) L is a weaker magnet than K.
(3) K is as strong a magnet as M.
(4) Weiling cannot tell which magnet is the strongest.

22. Mei Ling played with a toy while bathing.



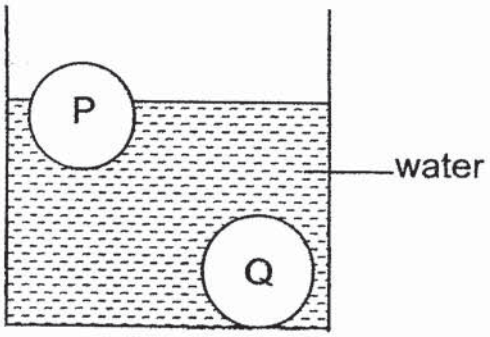
The toy was able to do the following:

- It can float.
- It can be squeezed.

Which of the following most correctly states the properties of part A?

	Flexibility	**Sink in Water**
(1)	Yes	Yes
(2)	Yes	No
(3)	No	Yes
(4)	No	No

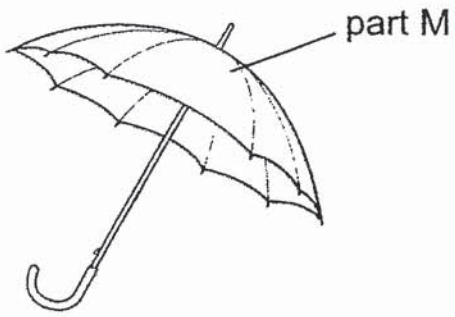
23. Siti dropped two balls, P and Q, made of different materials into a beaker of water. She observed them after some time and the results are as shown.



Which of the following materials are balls, P and Q, likely made of?

	P	Q
(1)	ceramic	metal
(2)	plastic	glass
(3)	metal	ceramic
(4)	glass	plastic

24. Aminah conducted an experiment to find out which material, R, S, T and U, is most suitable for making part M of the umbrella as shown.



She soaked four materials, R, S, T and U, into four similar beakers containing 250 m/ of water each. After some time, she removed the materials and recorded the amount of water left in each beaker as shown in the table.

Material	**Amount of water left in the beaker (m/)**
R	248
S	140
T	100
U	0

Based on the results in the table, which material is most suitable for making part M of the umbrella?

(1) R
(2) S
(3) T
(4) U

-End of Booklet A-

CHIJ PRIMARY (TOA PAYOH)
2022 SEMESTRAL ASSESSMENT II

NAME

REGISTER NUMBER

CLASS

SCIENCE PAPER (BOOKLET B)

Primary Three

26 October 2022
1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

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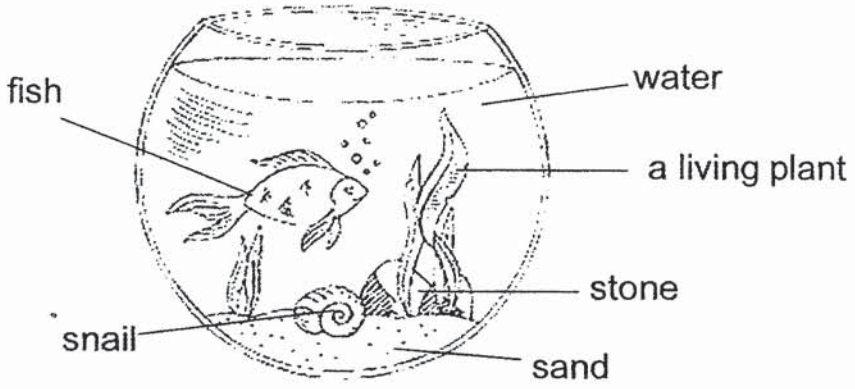
This document consists of **13** printed pages including the cover page.

Part 1 | 16

Section B: Open Ended Questions (32 marks)

For each question from 25 to 34, write your answers in the spaces provided. The number of marks allotted for each question is shown in brackets.

25. Study the diagram.



Peter classified the following things into two groups, L and M.

Group L	Group M
Respond to changes	**?**
fish plant snail	stone sand

(a) Give a suitable heading for Group M. [1]

Group M: _____

(b) Peter added a plastic plant into the fish bowl. He classified the plastic plant under Group M. Other than your answer in **(a)**, give another characteristic of the plastic plant in Group M. [1]

_____

_____

Question 25c continues on the next page.

(c) Peter added another fish into the fish bowl. After a few weeks, he observed that some fish eggs were found. What characteristic of living things does this show? [1]

_____

_____

26. The table shows the characteristics of four living things.
A tick (✓) shows that it has the characteristic.

	Living things			
Characteristic	**A**	**B**	**C**	**D**
Make its own food	✓			✓
Reproduce from spores	✓	✓		
Give birth			✓	

(a) Based on the table, state one similarity and one difference between living things A and B. [2]

(i) Similarity: _____

_____

(ii) Difference: _____

_____

(b) Based on the information in the table, which living things, A, B, C or D, best represents the following? [1]

(i) bird's nest fern : _____

(ii) monkey : _____

27. Bala observed a plant over 5 weeks. He measured and recorded its height as shown.

Number of weeks	Height of plant (cm)
1	4
2	7
3	11
4	?
5	16

(a) What is the change in height of the plant over the 5 weeks? Circle the correct answer in the brackets. [1]

As the number of weeks (*increases, decreases, remains the same*), the height of the plant also (*increases, decreases, remains the same*).

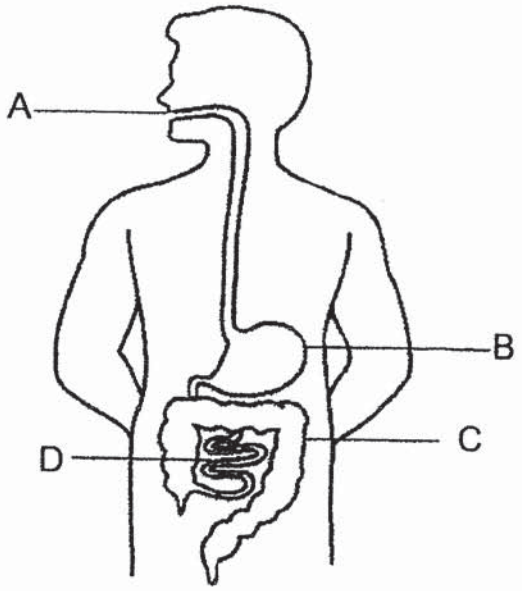
(b) What would most likely be the height of the plant in week 4? [1]

_____ cm.

(c) Based on the changes in the height of the plant, what is the characteristic of living things shown? [1]

Living things can _____ .

28. Lina studied the human digestive system as shown.



(a) What is the main function of part C? [1]

_____

(b) Name part D and state its main function. [1]

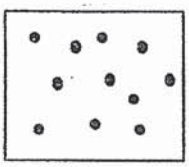
_____

_____

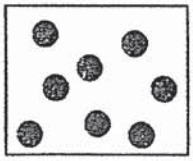
Question 28c continues on the next page.

(c) Lina ate an apple. The diagrams show some samples of the apple, X, and Y, taken from two different parts of her digestive system. [1]

sample X



sample Y

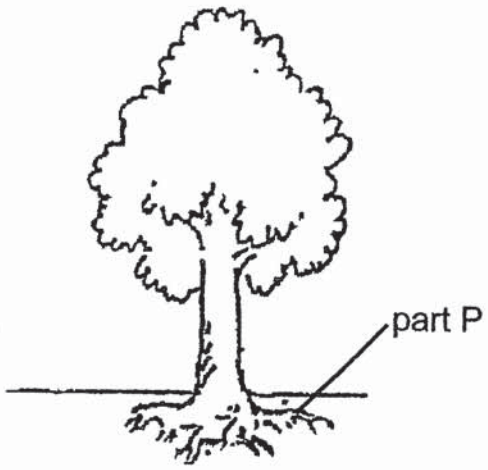


From which parts of the digestive system, B or D, could samples X and Y be taken from?

Sample X: _____

Sample Y: _____

29. The diagram shows a tree.



(a) Name part P of the tree. [1]

Part P : _____

(b) Besides water, part P also absorbs another substance from the soil which enable the tree to grow well. Name the substance. [1]

Substance: _____

(c) The tree fell easily during a heavy storm because of part P. Based on the diagram, explain why. [2]

_____

_____

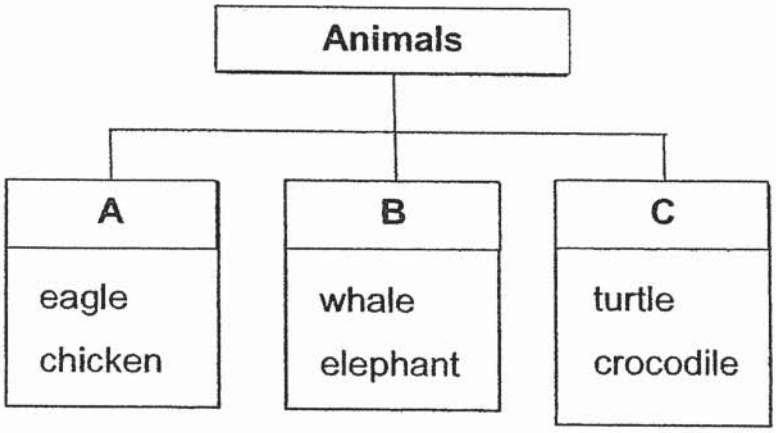
Name: _____ ( )

Class: _____

Part 2

16

30. Latifah grouped some animals into a chart as shown.



(a) What characteristic did Latifah use to group the animals? [1]

_____

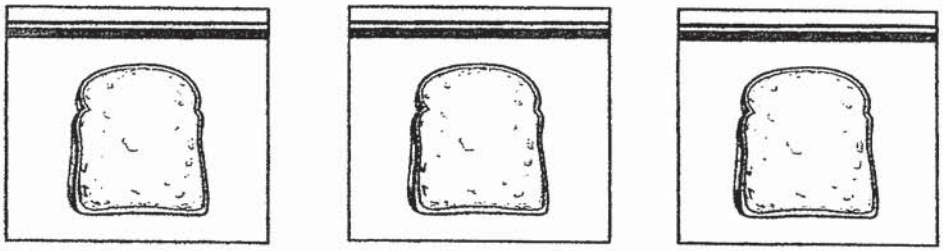
(b) In which group, A or B, would a bat be correctly classified in? [1]

_____

(c) Latifah decided to regroup the animals based on their way of reproduction. Write down suitable headings in the boxes below. [1]

_____	_____
whale elephant	eagle chicken turtle crocodile

31. Raju carried out an experiment using three identical slices of bread, X, Y and Z. The three slices of bread were placed into sealed bags and left on the table in a room.



bread X (10 ml of water was added)

bread Y (toasted)

bread Z (no water was added)

A week later, Raju observed greenish-black patches growing on all three slices of bread.

(a) What are the greenish-black patches? [1]

_____

(b) Which slice of bread will the greenish-black patches grow first? [1]

_____

(c) What is the purpose of adding water onto bread X before putting it into the sealed bag? [1]

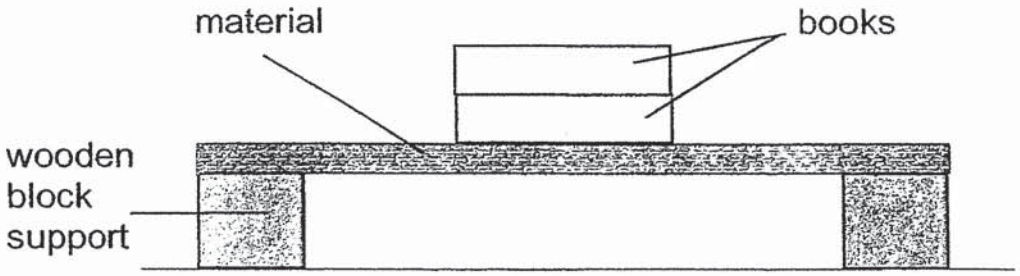
_____

_____

(d) Name the group of living things which the greenish-black patches belong to. [1]

_____

32. Janice conducted an experiment using different types of materials, A, B, C and D. She placed some books on each material to find out how much it can hold before breaking.



The table shows the results of her experiment.

Material	Number of books it can hold before breaking
A	21
B	9
C	27
D	15

(a) What property of material was Janice testing? [1]

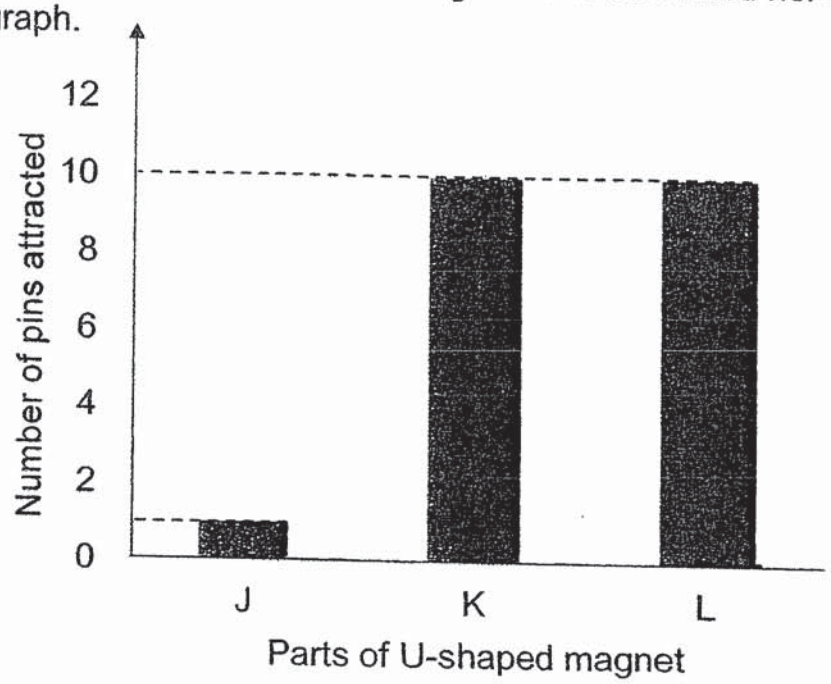
_____

(b) Janice wanted to make a bag to carry 26 books. Which material is best suitable for her to use? Explain your answer. [2]

_____

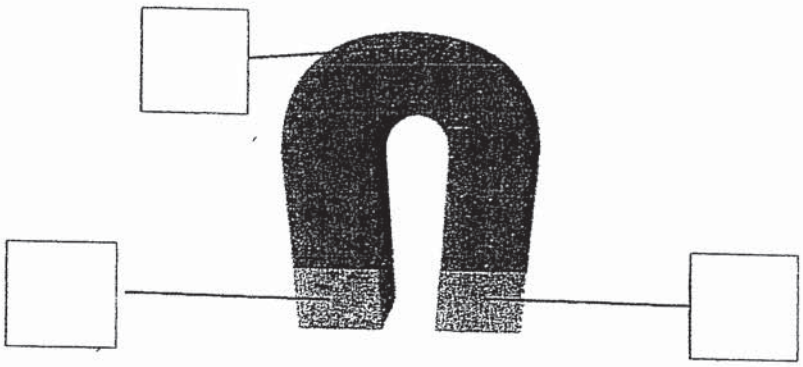
_____

33. Fiona labelled three parts of a U-shaped magnet, J, K and L. She placed the U-shaped magnet into a box of pins and noticed that the pins were attracted to the magnet. She recorded her observation in a graph.



(a) Based on the graph, label the positions, J, K and L, in the boxes below.

[1]



(b) What can Fiona conclude about the characteristic of magnet from this experiment?

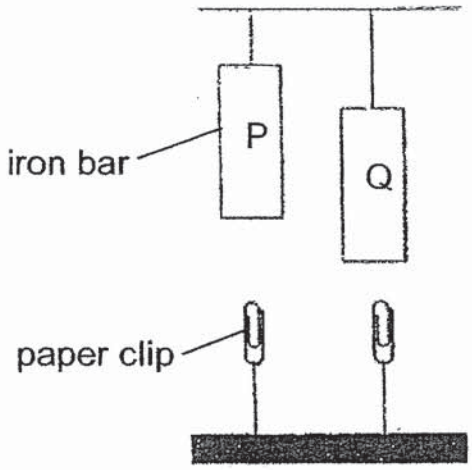
[1]

_____

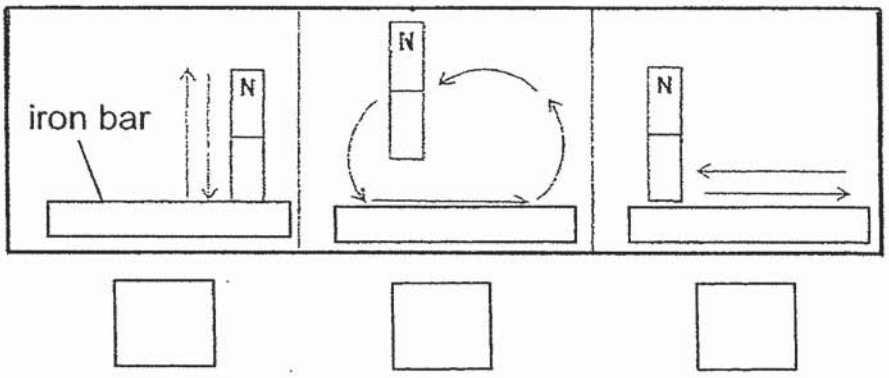
_____

34. Laura conducted an experiment using two similar iron bars, P and Q. Each bar was stroked with different number of times by a magnet.

She hung the two iron bars above two similar paper clips to test their magnetic strength. The diagram shows the furthest distance each iron bar, P and Q, can attract the paper clips from.



(a) Put a tick (✓) in the box which shows the correct stroking method. [1]



(b) Based on Laura's observation, explain why iron bar P is a stronger magnet. [1]

Questions 34c and d continue on the next page.

(c) Give a reason how iron bar P has become a stronger magnet than iron bar Q. [1]

(d) Beside the stroking method, name another method that Laura could use to make the two iron bars into temporary magnets. [1]

-End of Paper-

YEAR : 2022
LEVEL : PRIMARY 3
SCHOOL : CHIJ PRIMARY (TOA PAYOH)
SUBJECT : SCIENCE
TERM : SEMESTRAL ASSESSMENT II

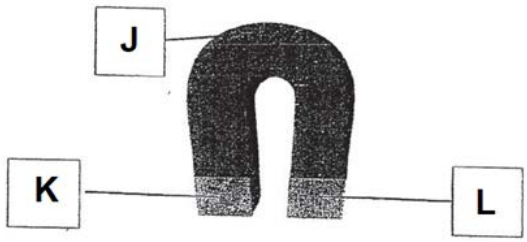
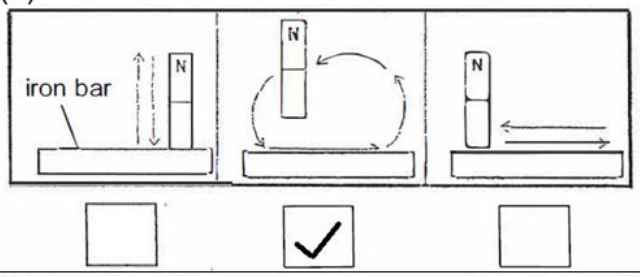
SECTION A

Q1	3	Q2	1	Q3	3	Q4	4	Q5	4
Q6	4	Q7	3	Q8	3	Q9	4	Q10	1
Q11	3	Q12	4	Q13	3	Q14	2	Q15	2
Q16	3	Q17	3	Q18	4	Q19	2	Q20	2
Q21	4	Q22	2	Q23	2	Q24	1		

SECTION B

Q25	(a) Group M: Does not respond to changes
	(b) Does not grow
	(c) Living things reproduce
Q26	(a) i. Similarity: Both reproduce from spores. ii. Difference: Living things A makes its own food while living thing B does not.
	(b) i. A ii. C
Q27	(a) (increases),...(increases).
	(b) 13 cm
	(c) grow
Q28	(a) To absorb water from undigested food.
	(b) Small intestine to break down food into simple substances.
	(c) Sample X: D Sample Y: B

Q29	(a)	Roots
	(b)	Nutrients
	(c)	The tree fell easily as the roots of the tree were not spread out to hold the tree firmly to the ground.
Q30	(a)	Outer covering
	(b)	Group B
	(c)	Give birth to young / Lays eggs
Q31	(a)	Mould
	(b)	Bread X
	(c)	To see whether mould needs water to grow.
	(d)	Fungi
Q32	(a)	Janice was testing the strength of the materials.
	(b)	Material C. It is the most suitable as it can hold the most number of books before breaking. Therefore, it is the strongest bag.

Q33	(a) 
	(b) The magnetic force is strongest at its poles.
Q34	(a)  ☐ ☑ ☐
	(b) Iron bar P is a stronger magnet as it can attract the paper clip from a further distance than iron bar Q.
	(c) Laura stroked iron bar P more times than Q.
	(d) Laura could use the electrical method.