



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

1 NOVEMBER 2018

BOOKLET A

NAME: _____ ()

CLASS: Primary 3 ()

24 questions

48 marks

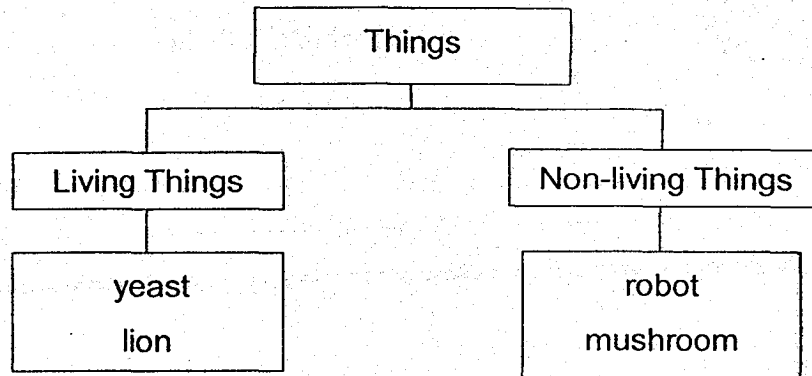
Total Time for Booklets A & B: 1 h 30 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

FOLLOW ALL INSTRUCTIONS CAREFULLY.

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). Shade the correct oval (1, 2, 3 or 4) on the Optical Answer Sheet (OAS). (48 marks)

1 Study the classification chart below.



Which one of the following has been classified wrongly?

- (1) lion
- (2) yeast
- (3) robot
- (4) mushroom

2 Which of the following is true for all insects?

- (1) have wings
- (2) have 6 legs
- (3) 2 body parts
- (4) have hair as their outer-covering

3 Which of the following statements is true about all bacteria?

- (1) All bacteria are fungi.
- (2) All bacteria are harmful.
- (3) All bacteria cannot reproduce.
- (4) All bacteria can respond to changes.

4 Organism X has the following characteristics.

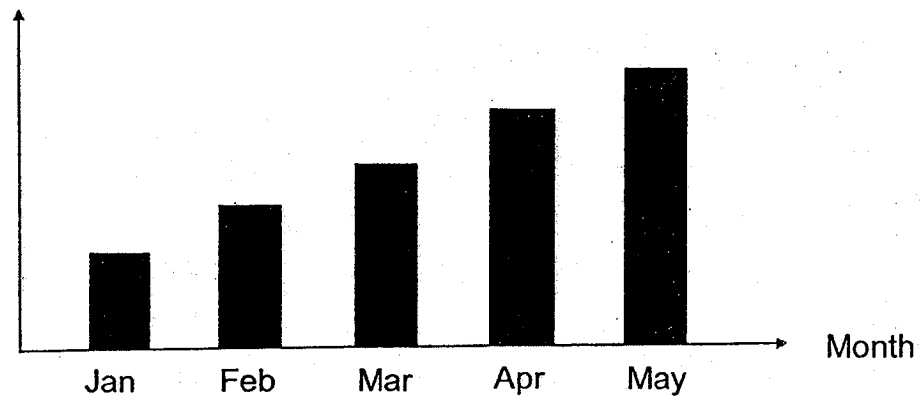
- It has scales.
- It does not have legs.
- It breathes using its lungs.

Which group of animals does organism X belong to?

- (1) fish
- (2) reptile
- (3) mammal
- (4) amphibian

5 The bar graph below shows the height of a seedling over five months.

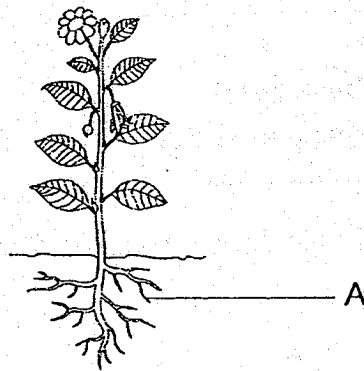
Height of seedling



Which characteristic of living things does the graph show?

- (1) Living things grow.
- (2) Living things reproduce.
- (3) Living things respond to changes.
- (4) Living things need air, food and water to survive.

6 The diagram below shows a flowering plant.



What is the function of A?

- (1) to hold the plant upright
- (2) to make food for the plant
- (3) to take in food for the plant
- (4) to hold the plant firmly to the ground

7 Study the classification table below.

| Group X | Group Y |
|------------------------------|---------------------|
| parrot ostrich penguin | cat dog sheep |

Which of the following are suitable headings for groups X and Y?

| | Group X | Group Y |
|-----|---------------------------|-------------------|
| (1) | give birth to young alive | lay eggs |
| (2) | have feathers | have hair |
| (3) | live in water only | live on land only |
| (4) | can fly | cannot fly |

8 The picture below shows a mushroom.



Which one of the following statements about the mushroom is true?

- (1) It can reproduce.
- (2) It produces flowers.
- (3) It makes its own food.
- (4) It does not respond to changes.

9 Which of the following statements about fungi are true?

- A: Fungi reproduces from spores.
- B: Fungi needs air, food and water to survive.
- C: Fungi can only be seen under a microscope.

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

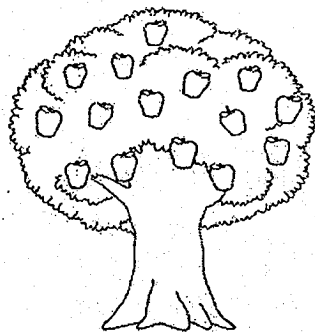
10 Which of the following body systems take air into our body?

- (1) digestive system
- (2) muscular system
- (3) circulatory system
- (4) respiratory system

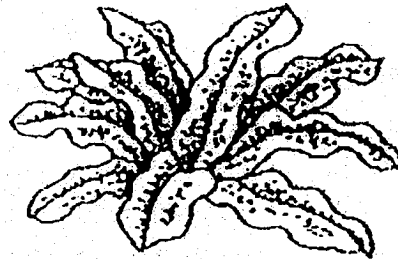
11 Which of the following body systems matches its function?

| | Systems | Functions |
|-----|-------------|---|
| (1) | skeletal | breaks down food into simpler substances |
| (2) | digestive | helps different parts of the body move |
| (3) | circulatory | carries substances to all parts of the body |
| (4) | respiratory | supports the body |

12 The diagrams below show two plants.



apple tree



bird's nest fern

How are the two plants similar?

- A Both can produce flowers.
- B Both reproduce by spores.
- C Both can make their own food.

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

- 13 Ron placed ten guppies in a tank and observed them for a few months. No guppies were added or removed from the tank after January. He recorded the number of guppies in the table below.

| Month | Number of guppies |
|----------|-------------------|
| January | 10 |
| February | 15 |
| March | 18 |

His results show that living things _____.

- (1) grow
 - (2) move
 - (3) reproduce
 - (4) need water
- 14 The pictures below show the stages in the life cycle of a butterfly.



Stage A



Stage B



Stage C

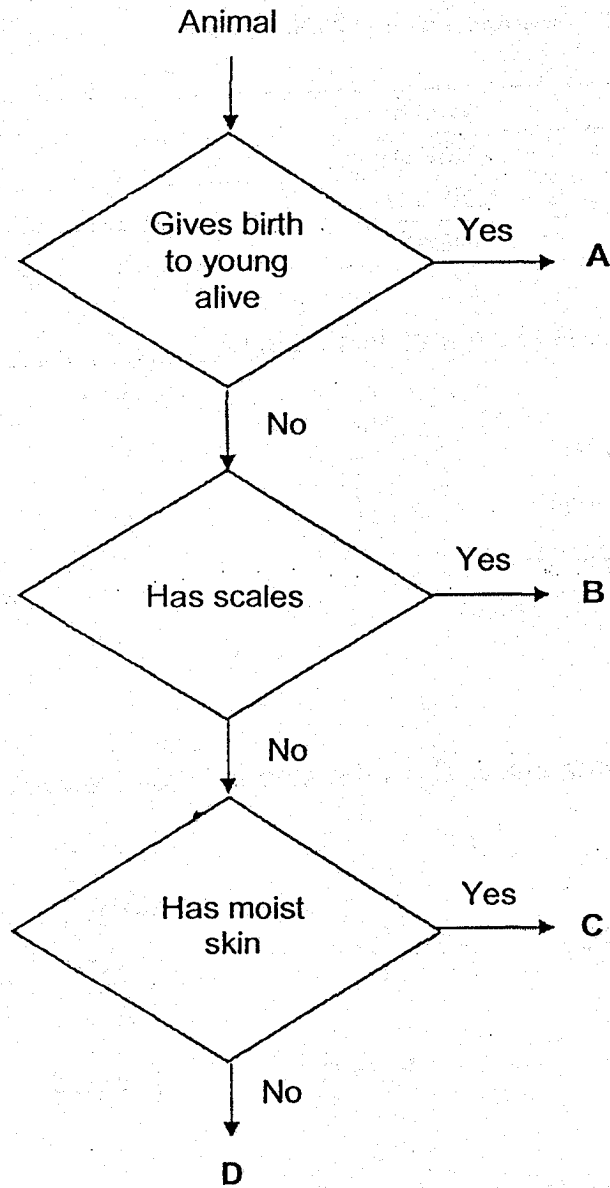


Stage D

Which of the following shows the correct representation of the life cycle of a butterfly?

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

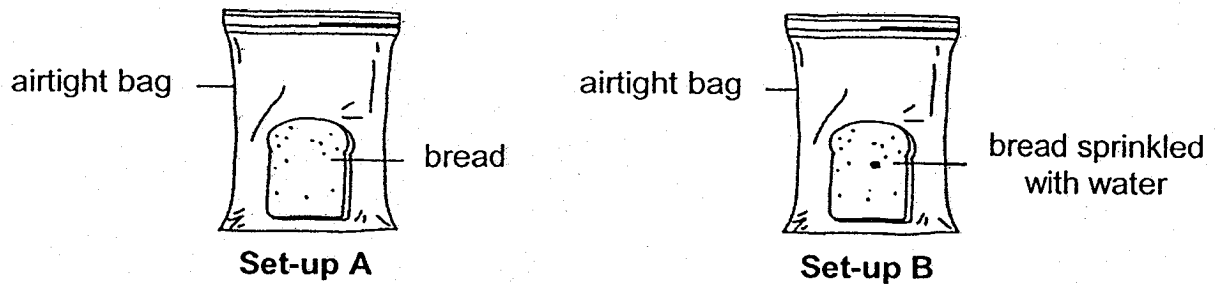
15 Study the flowchart below.



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

| | A | B | C | D |
|-----|-----------|-----------|-----------|-----------|
| (1) | amphibian | mammal | insect | fish |
| (2) | bird | insect | mammal | amphibian |
| (3) | mammal | amphibian | insect | bird |
| (4) | mammal | fish | amphibian | insect |

16 Sandy prepared two set-ups as shown below.



After 3 days, she observed mould growing on the bread in set-up B but there was no mould on the bread in set-up A.

What can she conclude based on her observation?

- (1) Mould needs air to grow.
- (2) Mould needs water to grow.
- (3) Mould needs warmth to grow.
- (4) Mould needs sunlight to grow.

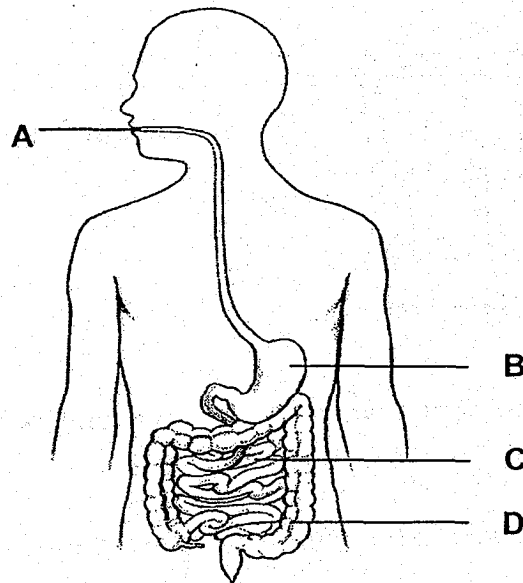
17 The table below shows the characteristics of animals, P and Q.

| | Animal P | Animal Q |
|------------------------------------|----------|----------|
| Does it have a 4-stage life cycle? | No | No |
| Does the young resemble the adult? | No | Yes |

Which of the following could animals P and Q be?

| | Animal P | Animal Q |
|-----|-----------|-----------|
| (1) | Cockroach | Chicken |
| (2) | Frog | Cockroach |
| (3) | Chicken | Butterfly |
| (4) | Mosquito | Frog |

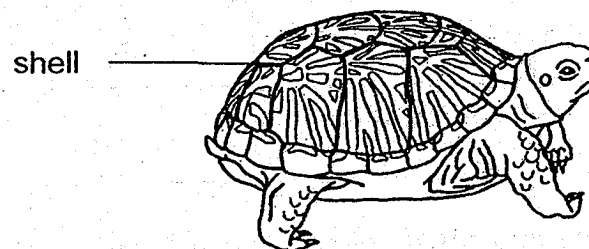
18 The picture below shows the human digestive system.



Which part of the digestive system is excess water absorbed into the bloodstream?

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

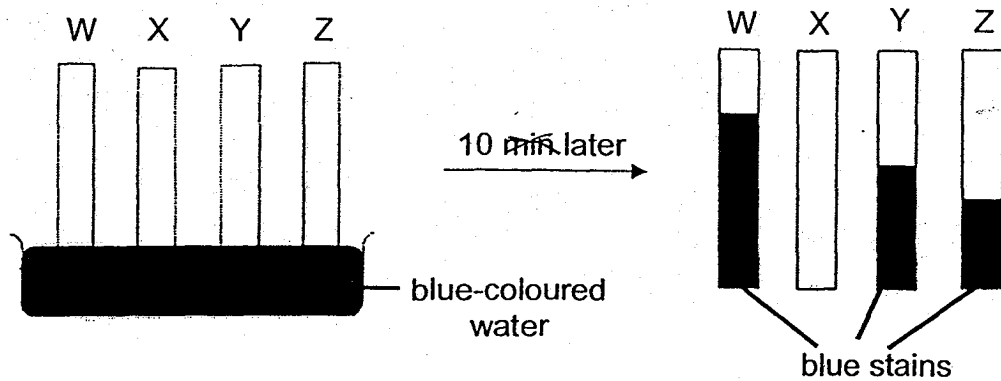
19 A tortoise has a shell.



Which property allows the shell to protect the tortoise from being eaten by other animals?

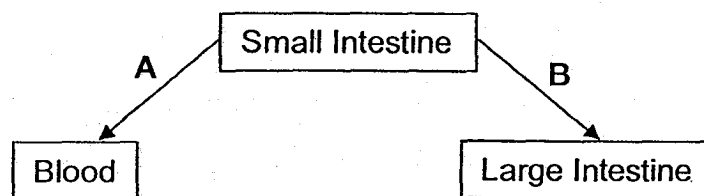
- (1) strength
- (2) flexibility
- (3) waterproof
- (4) ability to float

- 20 Paul dipped four different materials, W, X, Y and Z, into a container filled with blue-coloured water. After ten seconds, Paul removed the materials from the container and his results are as shown below.



Based on his results, which material is the most suitable for making a towel to dry wet surfaces?

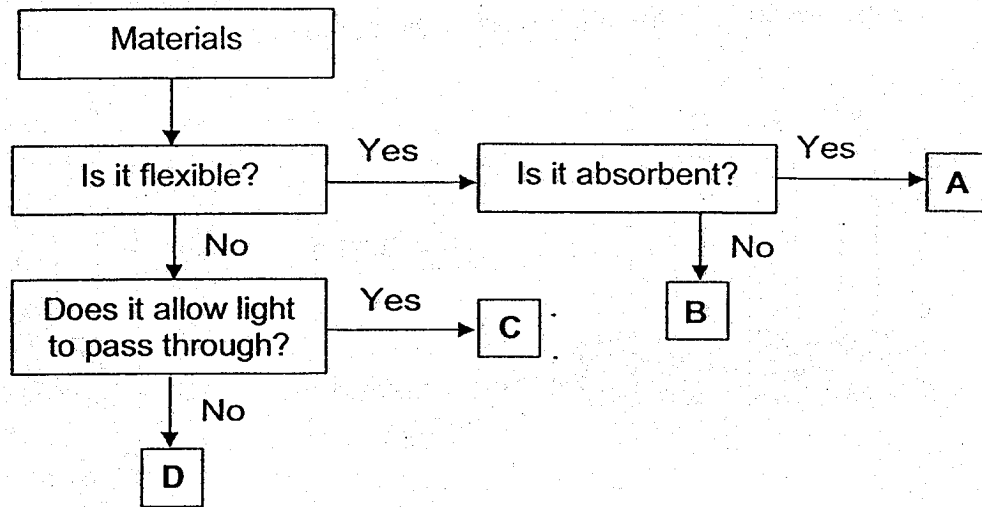
- (1) W
 - (2) X
 - (3) Y
 - (4) Z
- 21 Study the diagram below. A and B represent the substances that leave the small intestine to the different parts of the body.



Which of the following correctly represents A and B?

| | A | B |
|-----|-----------------|-----------------|
| (1) | water | digested food |
| (2) | digested food | undigested food |
| (3) | undigested food | digested food |
| (4) | digested food | water |

22 Study the flowchart below.



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

| | A | B | C | D |
|-----|---------|---------|--------|---------|
| (1) | Fabric | Rubber | Glass | Metal |
| (2) | Plastic | Wood | Glass | Wood |
| (3) | Fabric | Ceramic | Metal | Plastic |
| (4) | Wood | Plastic | Rubber | Fabric |

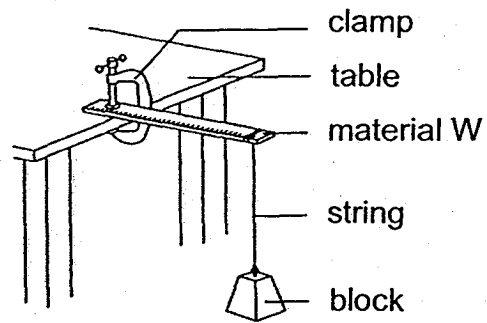
23 The picture below shows a pair of spectacles.



Why is the lens of spectacles usually made of plastic?

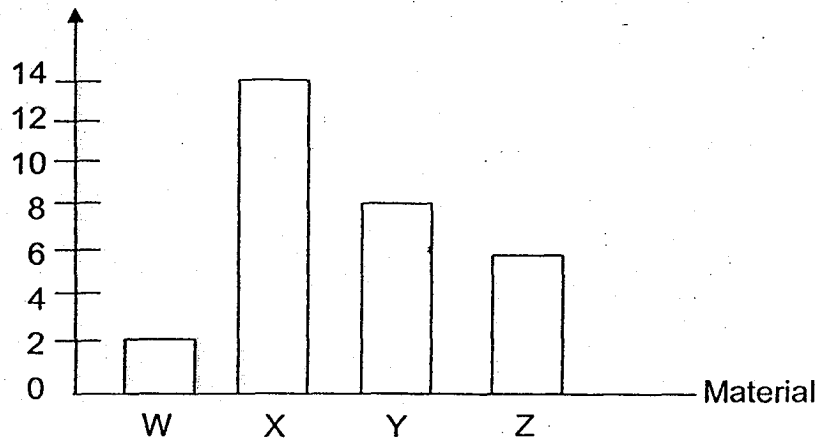
- (1) It can float.
- (2) It is flexible.
- (3) It is absorbent.
- (4) It allows light to pass through.

24 Justin set up an experiment as shown below to test the flexibility of material W.



He measured the distance material W was pulled down by the block. He repeated the experiment with materials X, Y and Z. The bar graph below shows his results.

Distance the material was pulled down by the block (cm)



Which material is the most flexible?

- (1) W
- (2) X
- (3) Y
- (4) Z

- End of Booklet A -



MARIS STELLA HIGH SCHOOL (PRIMARY)

SEMESTRAL ASSESSMENT 2

SCIENCE

1 NOVEMBER 2018

BOOKLET B

NAME:

()

CLASS: Primary 3 ()

10 questions

32 marks

Total Time for Booklets A & B: 1 h 30 min

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.
FOLLOW ALL INSTRUCTIONS CAREFULLY.

BOOKLET A: _____ / 48

BOOKLET B: _____ / 32

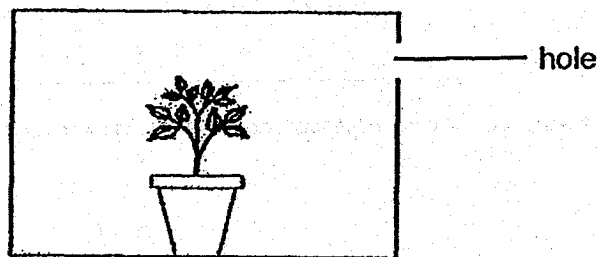
TOTAL: _____ / 80

PARENT'S SIGNATURE: _____

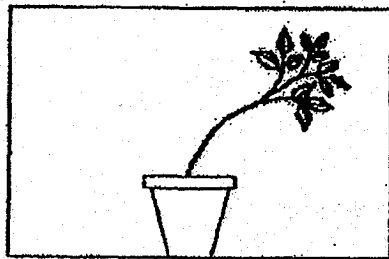
For questions 25 to 34, write your answers in this booklet. The number of marks available is shown in brackets [] at the end of each question or part question.

(32 marks)

- 25 John placed a pot of plant in black box with a hole. The box was then placed in the garden.



The diagram below shows the changes observed after a week.



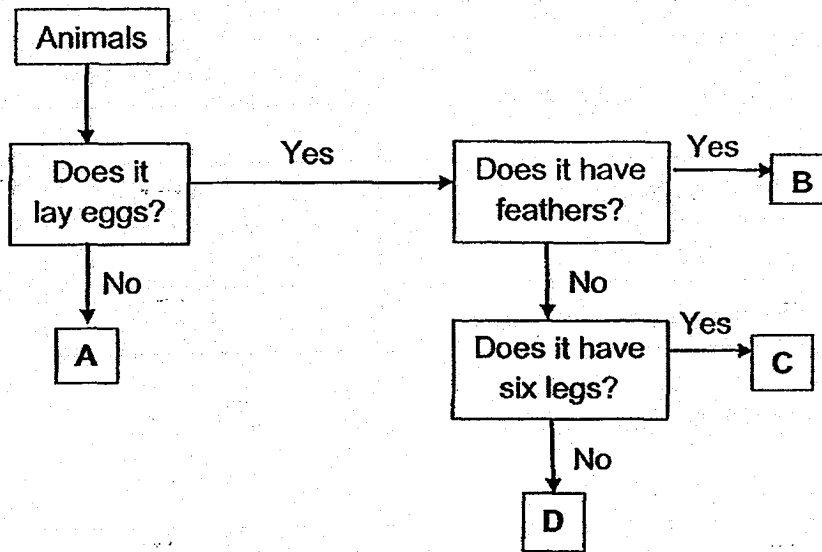
Based on the changes observed, state two characteristics of living things. [2]

Characteristic 1:

Characteristic 2:



26 Study the flowchart below.



(a) Describe animal B.

[1]

(b) State one difference between animals B and D.

[1]

(c) Which animal group does animal A belong to?

[1]

(d) State another characteristic of animal C that is not shown in the flowchart.

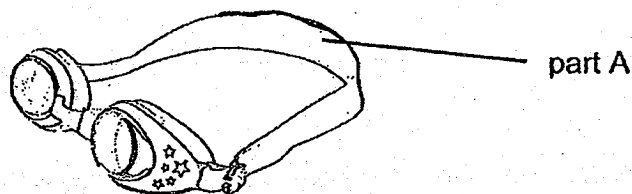
[1]

- 27 The table below shows the properties of 3 different materials, X, Y and Z. A tick (✓) indicates that the property is present.

| Properties of Materials | Materials | | |
|----------------------------------|-----------|---|---|
| | X | Y | Z |
| It is strong. | ✓ | ✓ | ✓ |
| It is flexible. | ✓ | | |
| It allows light to pass through. | | | ✓ |

- (a) State two properties of material Y. [2]

- (b) The picture below shows a pair of goggles.



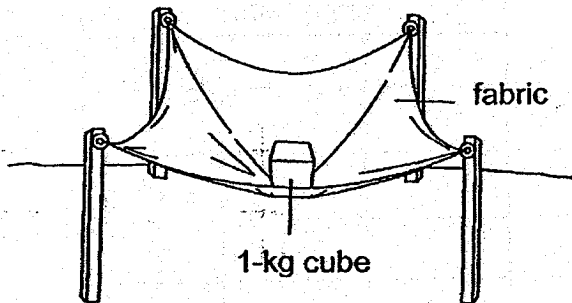
- (i) Which material, X, Y or Z, is the most suitable for making part A? [1]

- (ii) Which property is most important in making sure that the goggles can fit tightly on the head? [1]

| Properties | Tick (✓) in the correct box |
|------------------------------|-----------------------------|
| flexible | |
| able to float | |
| allows light to pass through | |

| | |
|--|---|
| | 4 |
|--|---|

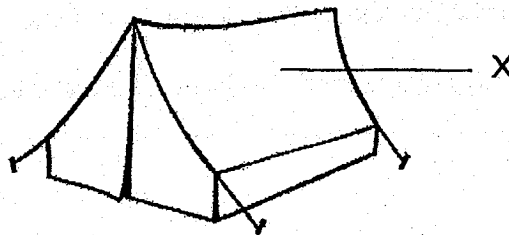
- 28 Sam carried out an experiment using 3 different pieces of fabric, A, B and C. He tied the corners of each piece of fabric to four poles as shown below and added 1-kg cubes one at a time, until the fabric tore. The table below shows his results.



| Fabric | Number of 1-kg cubes added before fabric tore |
|--------|---|
| A | 15 |
| B | 10 |
| C | 50 |

- (a) Which property of material is Sam testing? [1]

The picture below shows a tent that is used for camping. It has to withstand heavy rain and frequent folding and unfolding.



- (b) Which fabric, A, B or C, is most suitable for making part X of the tent? Give a reason for your answer. [1]

- (c) Other than the property tested, state another important property of the material chosen for it to be suitable for making part X of the tent. [1]

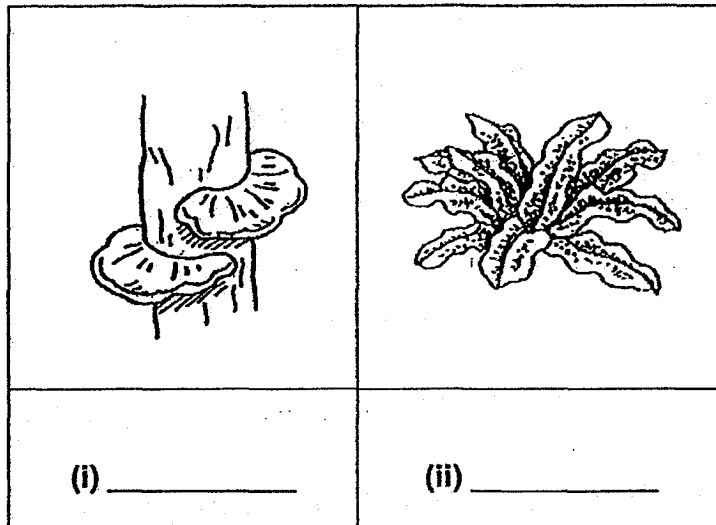
- 29 The table below shows the characteristics of three organisms, A, B and C. A tick (✓) indicates that the characteristic is present.

| Characteristic | Organisms | | |
|----------------------------------|-----------|---|---|
| | A | B | C |
| It bears flowers. | ✓ | | |
| It lives on land. | | ✓ | ✓ |
| It reproduces by spores. | | ✓ | ✓ |
| It is able to make its own food. | ✓ | ✓ | |

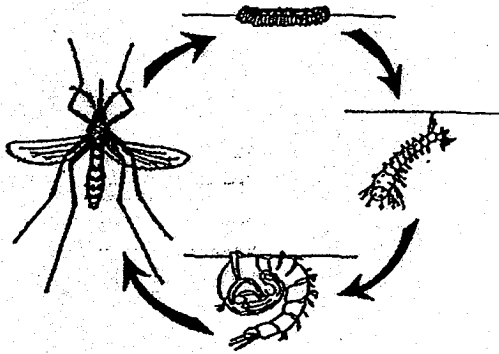
- (a) Based on the table above, state one similarity between organisms A and B. [1]

- (b) The pictures below shows two of the organisms.

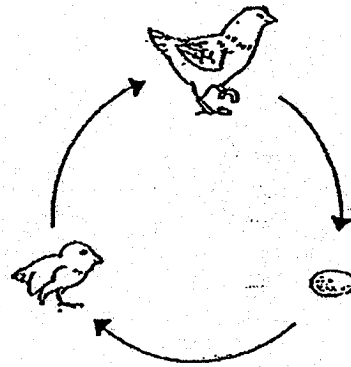
Identify the organisms by filling in the blanks with the letters A, B or C. [2]



30 Study the life cycles of animals P and Q below.



Life cycle of Animal P



Life cycle of Animal Q

(a) How do animals P and Q reproduce?

[1]

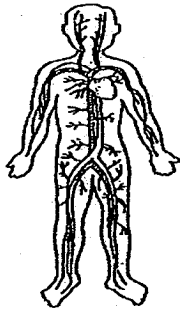
(b) State two differences between the life cycles of animals P and Q.

[2]

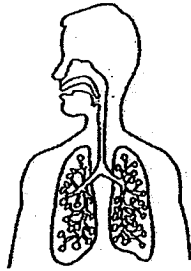
(i) _____

(ii) _____

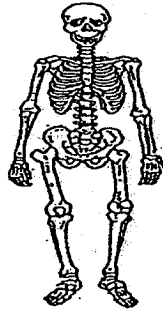
31 The diagrams below show four different human body systems.



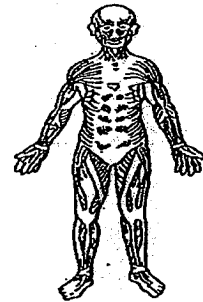
System W



System X



System Y



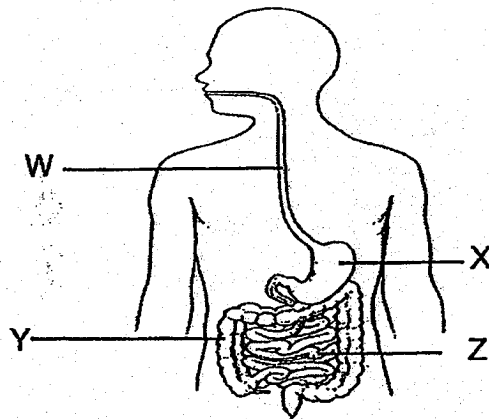
System Z

(a) Match systems W, X, Y and Z to the body systems in the table below. [2]

| | Name of body systems | Systems |
|-------|----------------------|---------|
| (i) | Respiratory system | |
| (ii) | Skeletal system | |
| (iii) | Muscular system | |
| (iv) | Circulatory system | |

(b) State one function of system Y. [1]

32 The diagram below shows a human digestive system.

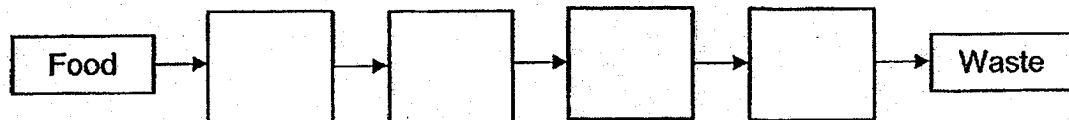


(a) Name parts X and Y. [2]

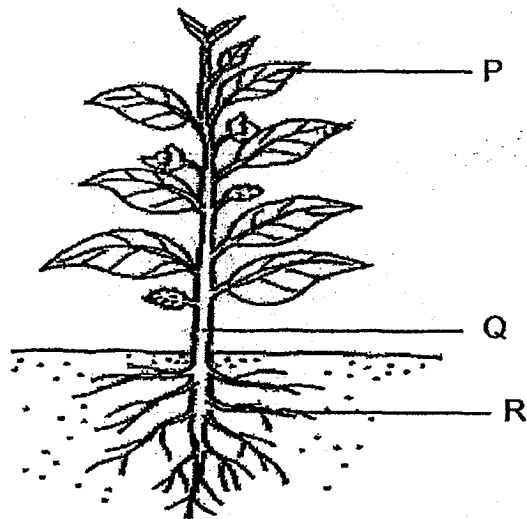
| Part | Part of the digestive system |
|------|------------------------------|
| X | |
| Y | |

(b) At which part of the digestive system, W, X, Y or Z, is digestion completed? [1]

(c) Fill in the boxes with letters, W, X, Y and Z, to show the parts of the digestive system food moves through after it enters the digestive system. [1]



33 Study the diagram of the plant below.



(a) Name parts Q and R of the plant.

[2]

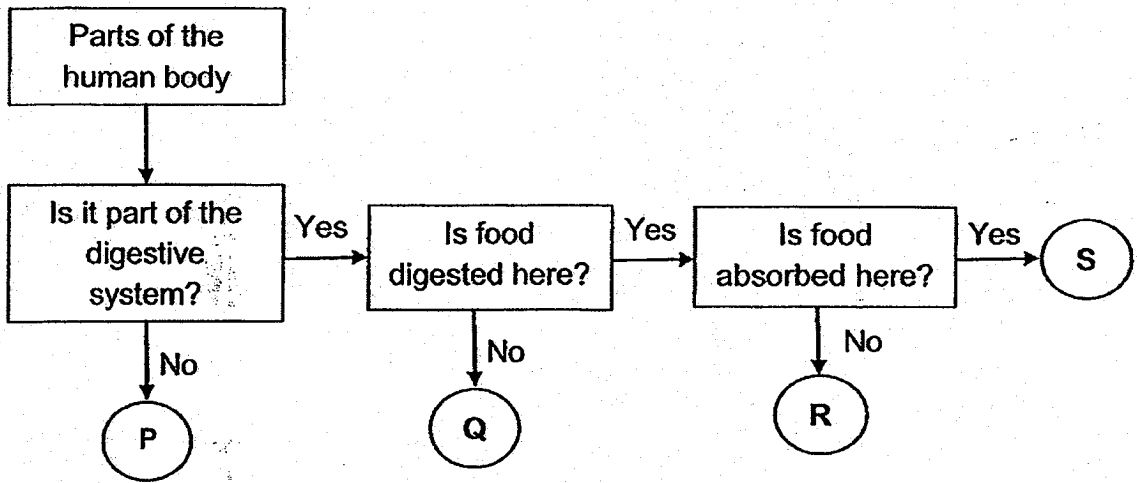
(i) Q: _____

(ii) R: _____

(b) State the function of part P.

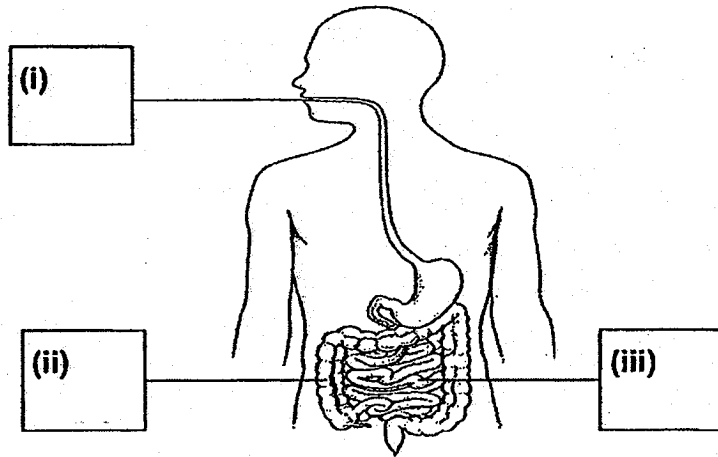
[1]

34 Study the flowchart below.

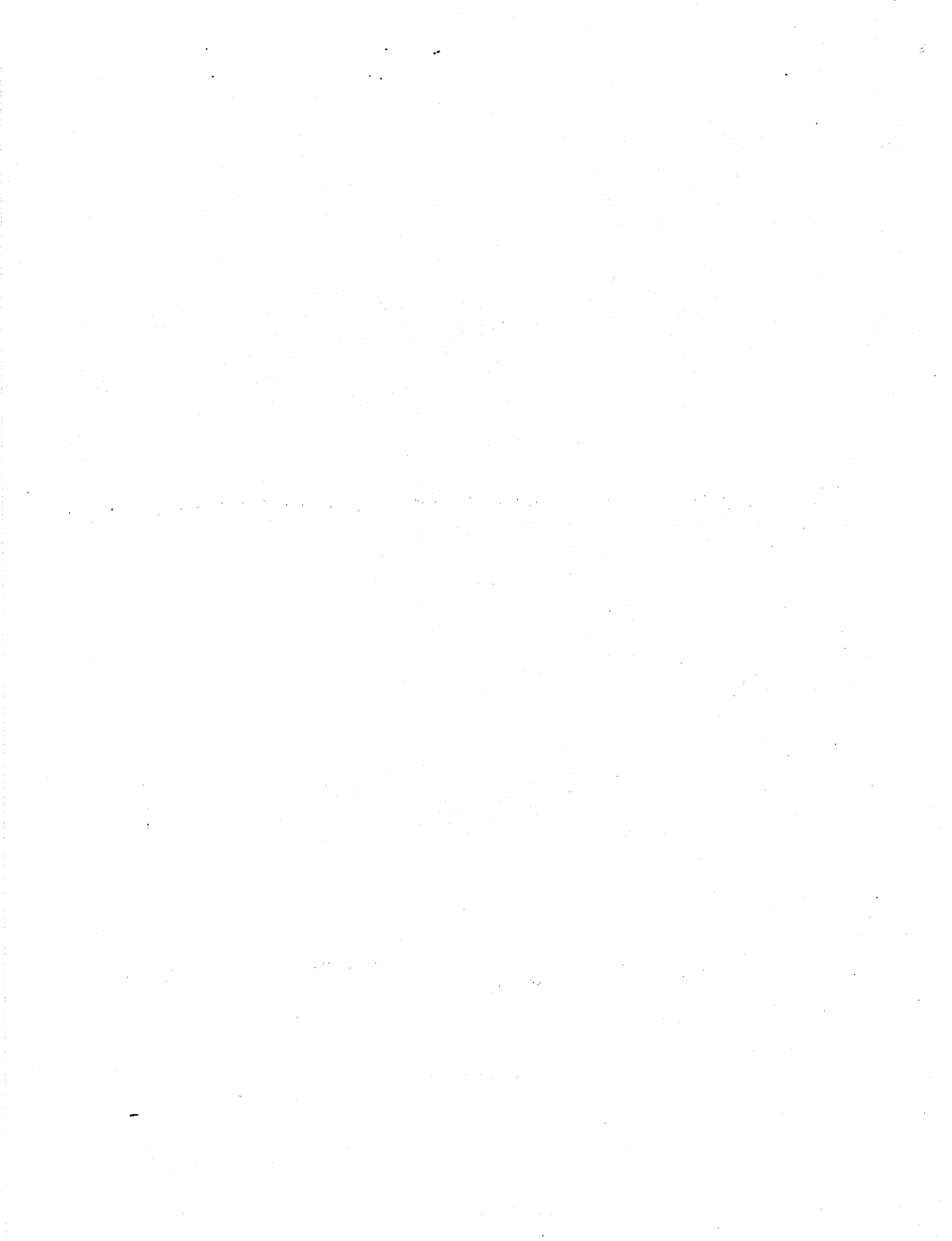


Label the human digestive system with parts, P, Q, R or S.

[3]



- End of Booklet B -



EXAM PAPER 2018 (P3)

SCHOOL : MARIS STELLA

SUBJECT : SCIENCE

TERM : SA2

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

Q25) Characteristic 1 : Living things respond to changes around them.

Characteristic 2 : Living things grow.

Q26) a) It lays egg and has feathers.

b) B has feathers but D does not have.

c) Mammals

d) It has three body parts.

Q27) a) It is strong and it is stiff.

b) i) X

ii) flexible

Q28) a) strength

b) C. It is the strongest.

c) Waterproof

Q29) a) Both are able to make its own food.

b) (i) C

(ii) B

Q30) a) They reproduce by laying eggs.

b) i) P has four stages but Q has three.

ii) Q's young looks like it's adult but P's does not.

Q31) a) (i) X

(ii) Y

(iii) Z

(iv) W

b) It keeps the body upright.

Q32) a) X : stomach

Y : large intestine

b) Z

c) W - X - Z - Y

Q33) a) i) Q : stem

ii) R : roots

b) It helps the plant make food.

Q34) (i) R

(ii) Q

(iii) S