METHODIST GIRLS' SCHOOL

Founded in 1887

PRIMARY 3
SCIENCE
WEIGHTED ASSESSMENT 2

Total Time for Paper: 45 min

INSTRUCTIONS TO CANDIDATES
Do not turn over this page until you are told to do so.
Follow all instructions carefully.
Answer all questions.

Name: _____ ( )

Class: Primary 3. _____

Date : _____

Parent's signature: _____

Section A	18
Section B	12
Total	30

This paper consists of 12 printed pages including this page.

Section A
For each question from 1 to 9, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4) and write in the bracket provided. [18 marks]

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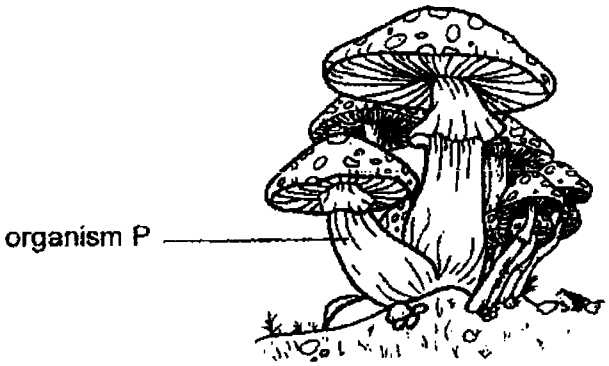
1 The diagram below shows organism P.



Which of the following is **incorrect**?

(1) It reproduces by spores.

(2) It makes its own food.

(3) It grows on another object.

(4) It breaks down other objects into simpler substances. ( )

2 Which of the following is/are true about fungi and bacteria?

A Fungi and bacteria are always harmful to us.
B Fungi and bacteria comes in different shapes and sizes.
C Fungi can reproduce but bacteria cannot reproduce.
D Fungi and bacteria can only be seen under the microscope.

(1) B only

(2) C only

(3) B and C only

(4) A and D only ( )

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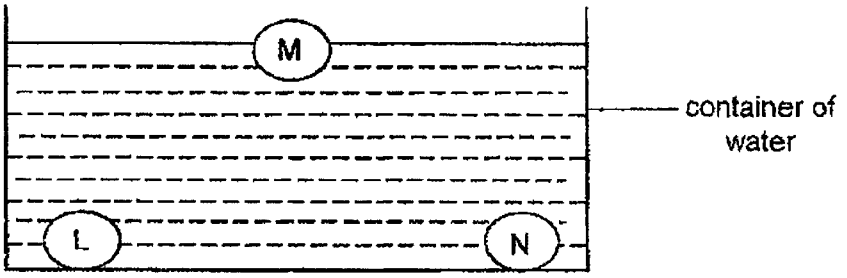
3 Miya placed three solids made of materials, L, M and N into a container of water. The three solids are of the same size. Her observation is shown below.



She made the following statements:

A L is lighter than N

B M and N are different materials.

Which statement(s) can be concluded from her observation?

(1) A only
(2) B only
(3) A and B
(4) Neither A nor B ( )

4 Study the objects listed in the table below.

X	Y
Cotton shirt	Ceramic bowl
Paper plate	Gold ring
Rubber gloves	Metal pipe

How are the objects classified?

	X	Y
(1)	Strong	Not strong
(2)	Flexible	Rigid
(3)	Floats on water	Sinks in water
(4)	Allows light to pass through.	Does not allow light to pass through.

( )

5 The diagram below shows a car.

The table below shows the properties of four different materials P, Q, R and S.

A tick (✓) shows that the material has the property.

Material	Flexible	Strong	Absorbs water	Allows light to pass through
P		✓		✓
Q	✓	✓	✓	
R	✓		✓	
S	✓	✓		

Which material, P, Q, R or S is the best choice to make part X?

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

6 The table below shows the properties of three objects A, B and C.

Properties	Objects		
	A	B	C
Bends easily		✓	✓
Does not allow light to pass through	✓	✓	✓
Absorbs water			✓

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

	A	B	C
(1)	mirror	cotton towel	rubber band
(2)	rubber band	mirror	cotton towel
(3)	mirror	rubber band	cotton towel
(4)	rubber band	cotton towel	mirror

( )

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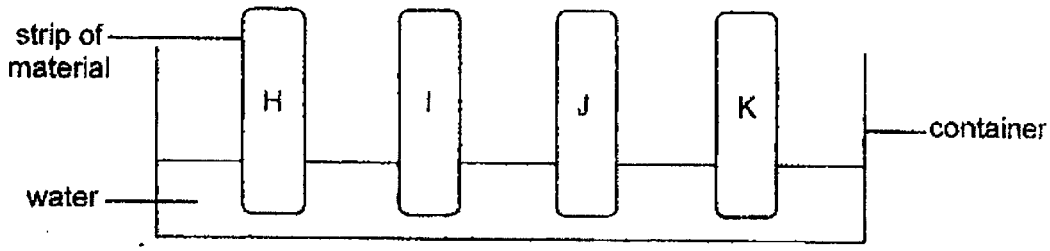
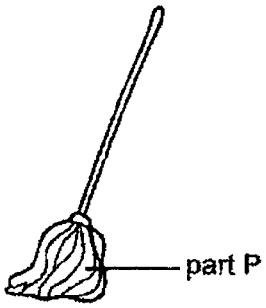
7 Kadita conducted an experiment to find out how much water can be absorbed by four strips of different materials H, I, J and K of the same mass, size and thickness. She placed the four strips of materials into a container of water for an hour and measured their mass.



The table below shows her results.

Material	Mass at first (g)	Mass after an hour (g)
H	5	18
I	5	5
J	5	7
K	5	10

Kadita wanted to choose a suitable material to make part P of a mop.



Which material is most suitable to make part P of a mop?

(1) H
(2) I
(3) J
(4) K

( )

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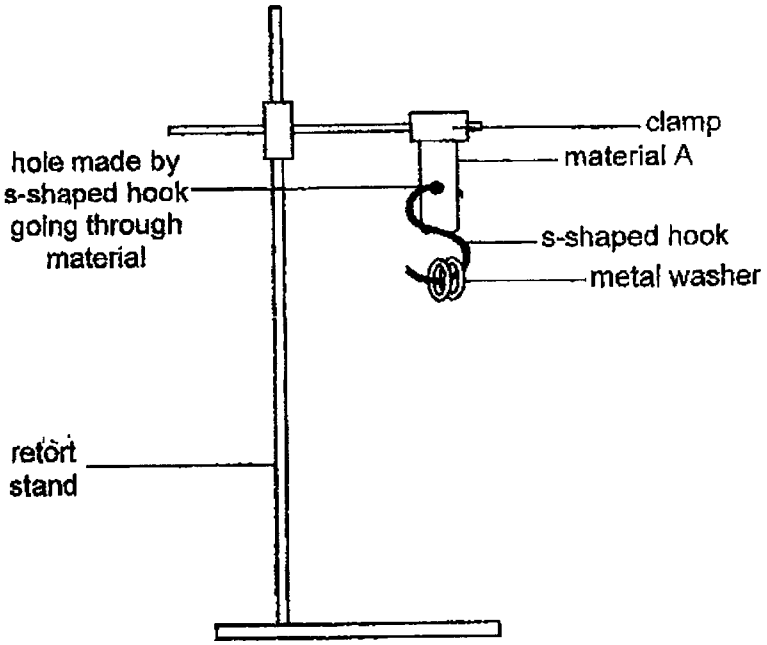
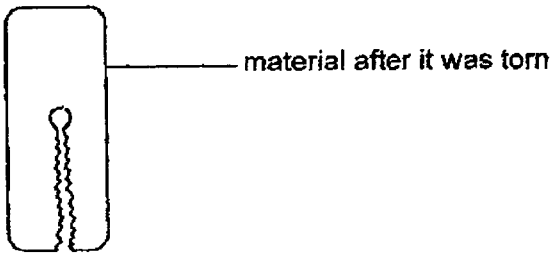
8 Lesley set up the experiment as shown below to test the strength of three different materials, A, B and C, of similar size and thickness.



She hung the metal washers one at a time until the hook tore through material A and repeated the experiment with materials B and C.



The table below shows her results.

Material	Number of metal washers needed to tear through the material
A	3
B	11
C	6

What could Lesley conclude based on her results?

(1) Material A is stronger than material B.

(2) Material A is stronger than material C.

(3) Material C is stronger than material B.

(4) Material B is stronger than material A. ( )

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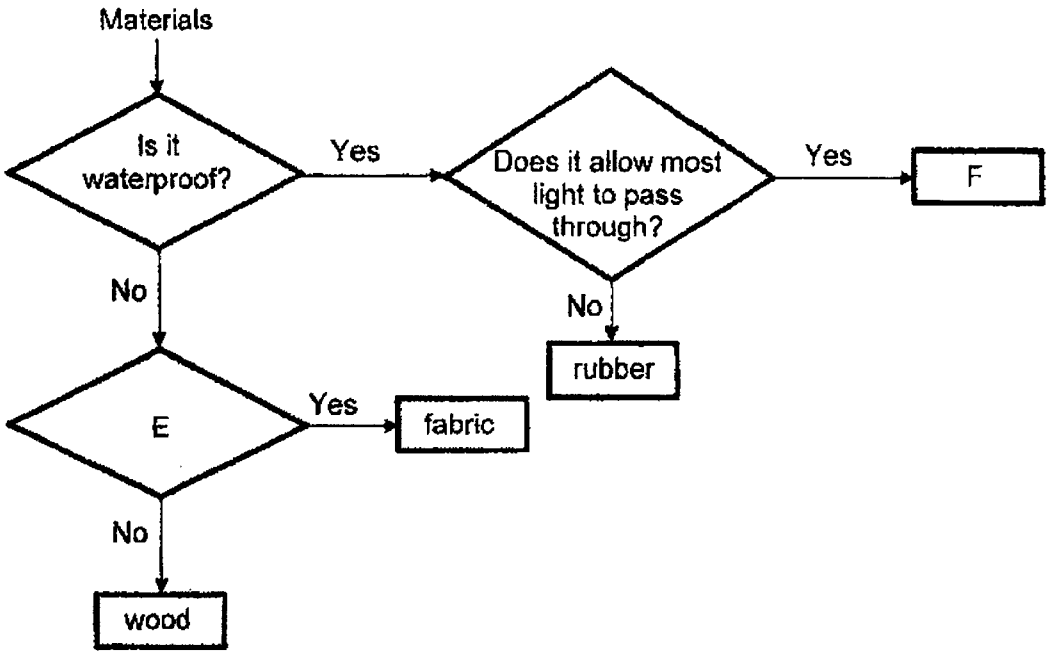
9 The flow chart below shows the classification of some materials based on their properties.



What one of the following best represents E and F?

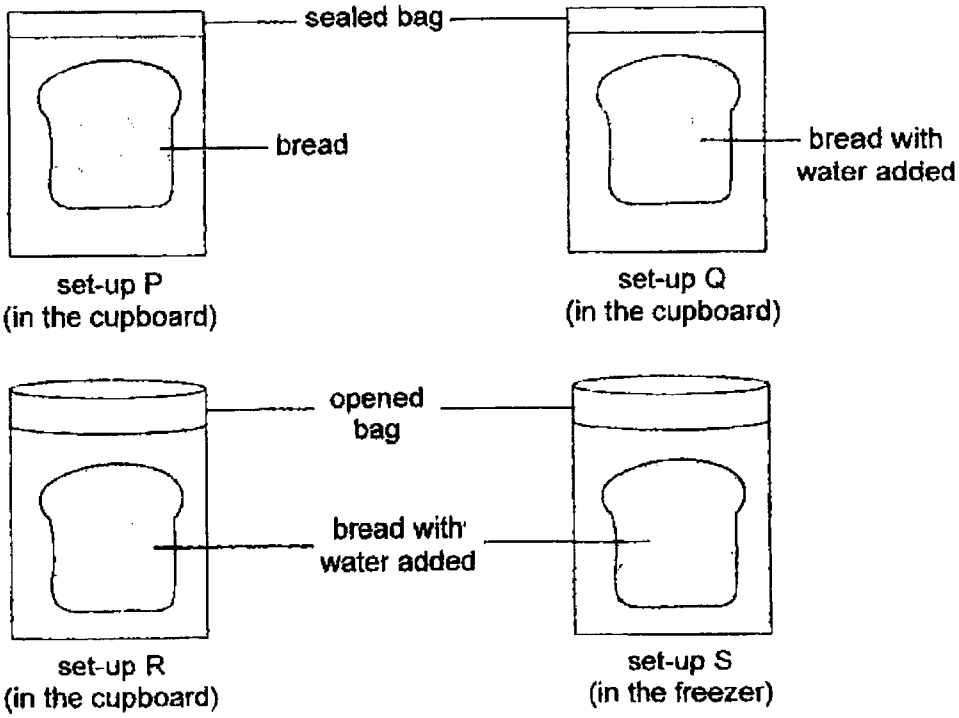
	E	F
(1)	Is it strong?	ceramic
(2)	Is it flexible?	glass
(3)	Does it float in water?	plastic
(4)	Does it sink in water?	metal

( )

Section B

For questions 10 to 14, write your answers in the space provided. [12 marks]

10 Harith conducted an experiment to find out the conditions required for bread mould to grow. He placed four similar slices of bread in four identical bags under different conditions as shown below.



(a) Which two set-ups should he use to find out if water is required for bread mould to grow? [1]

(b) After one week, Harith observed there were mould growing on the bread in set-ups P, Q and R but not in S. Suggest a reason why no mould grew on the bread in set-up S. [1]

2

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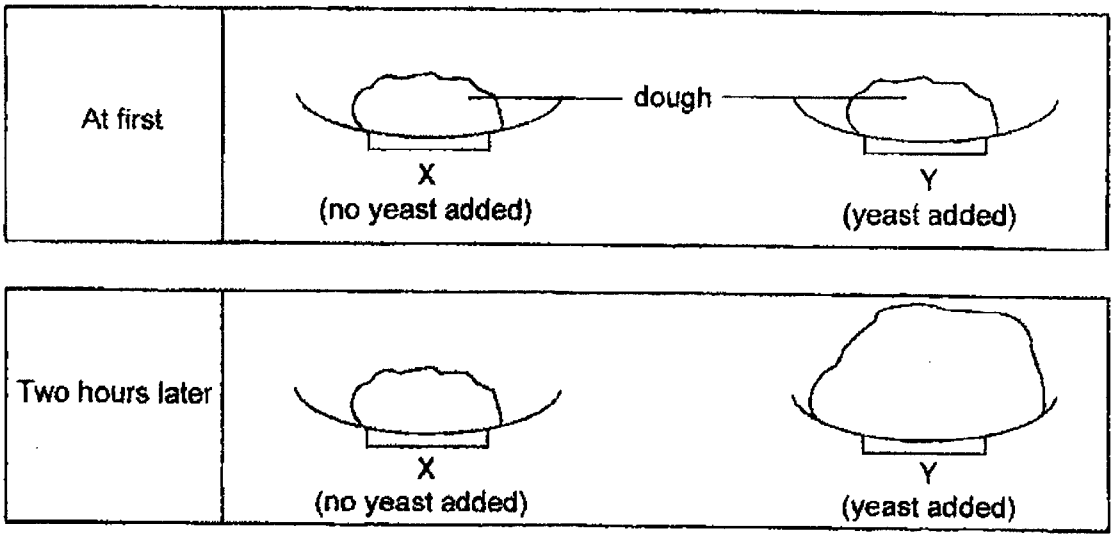
11 Wanwan conducted an experiment with yeast and two pieces of dough of the same type and mass to find out if yeast is required for dough to rise. She puts both plates of dough, X and Y, in the science lab for two hours as shown below.



(a) What is the changed variable in the experiment? [1]

_____

(b) Wanwan's friend, Jane, said that yeast is a type of bacteria. Do you agree with her? Explain why. [1]

_____

_____

2

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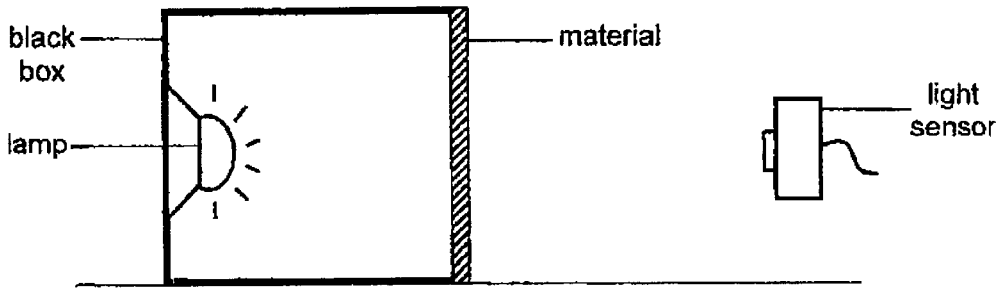
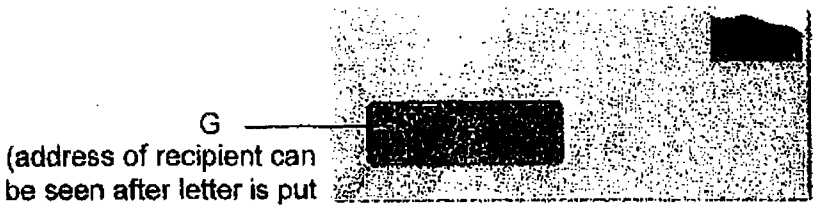
12 Edith carried out an experiment to find out how much light can pass through three materials, A, B and C, as shown below.



She used a light sensor to measure the amount of light that passed through each material and recorded her results in the table below.

Materials	Amount of light that passes through each material (unit)
A	380
B	0
C	100

Edith wanted to select suitable materials to make part G of an envelope as shown below.



envelope

Based on the results, which material, A, B or C is most suitable to make part G of the envelope? Explain your answer. [2]

_____

_____

2

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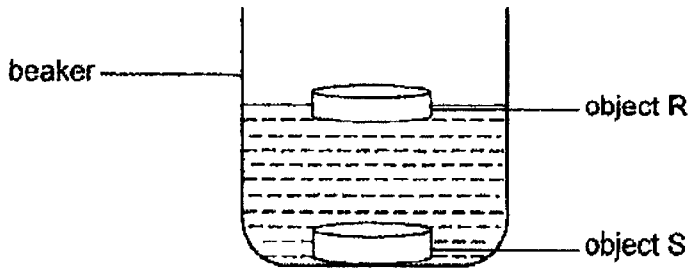
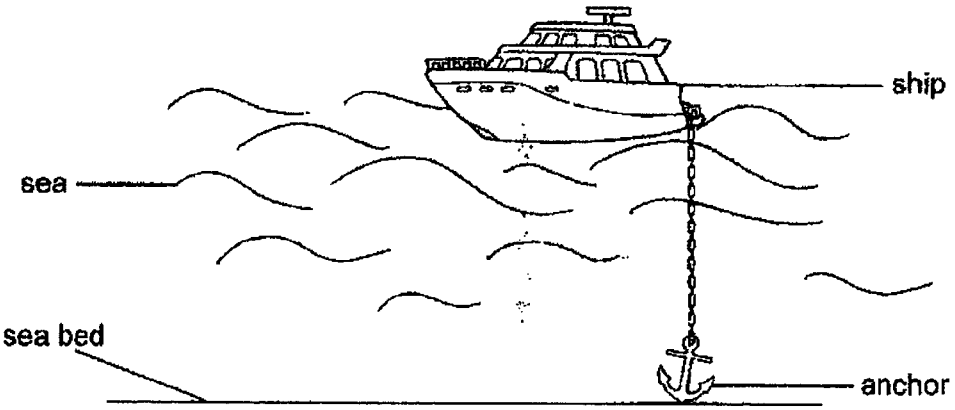
13 Zilong conducted an experiment by placing two objects, R and S, made of different materials, into a beaker of water as shown below.



(a) Based on the diagram above, what property of material is Zilong comparing? [1]

_____

The diagram below shows a ship with its anchor thrown into the sea. The anchor holds the ship to the seabed and prevents the ship from moving on its own when it is out at sea.



(bi) Based on Zilong's experiment, which object, R or S, is suitable for making the anchor? Explain your answer. [1]

_____

_____

(bii) State one other property that the material must have so that it can be used to make an anchor. [1]

_____

3

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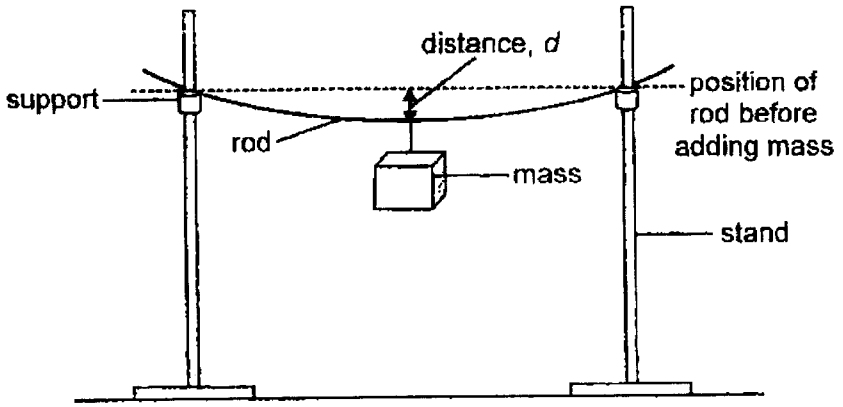
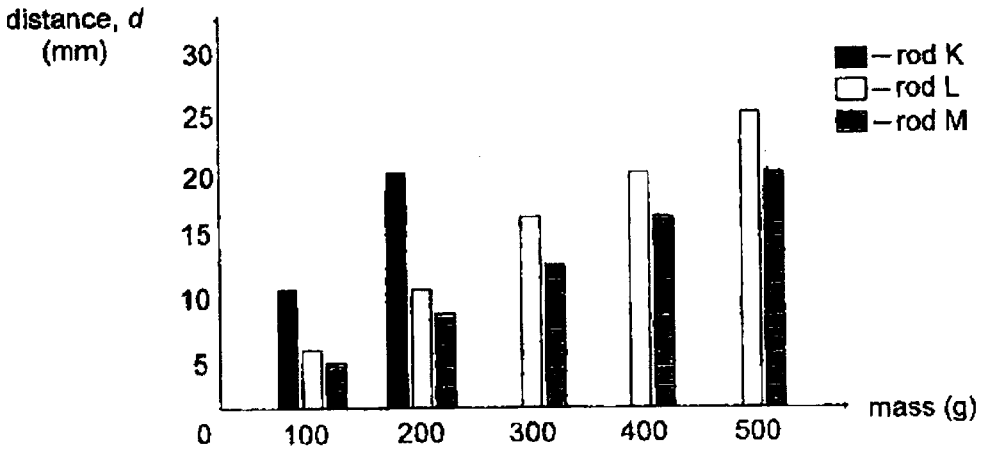
14 Masha carried out an experiment on rod K using the set-up shown below. She measured the distance, *d*, at the middle of the rod after adding each mass.



She repeated the experiment using rods L and M of different materials but of the same length. Her results are shown below.



(a) Which property of material was Masha comparing? [1]

(b) When a mass of 200g was added, which rod, K, L or M bent the most? [1]

(c) Why was Masha not able to obtain a reading for rod K when more than 200g of mass was added? [1]

End of Paper

SCHOOL : METHODIST GIRLS' PRIMARY SCHOOL
LEVEL : PRIMARY 3
SUBJECT : SCIENCE

WA 2

2	1	2	2	4	3	1	4	2	

Q10)	(a) Set-up P and Q (b) Set-up S was put in the freezer so it was too cold for mould to grow.
Q11)	(a) Whether the yeast was added to the dough. (b) I do not agree with Jane because yeast is a fungi, not bacteria.
Q12)	Material A as it lets the most light through.
Q13)	(a) Whether the material floats or sinks (b) (i) Object S. S sinks in water so it is the most suitable for making the anchor. (ii) The anchor must be waterproof.
Q14)	(a) How flexible the material is (b) Rod K (c) Rod K broke