



MAHA BODHI SCHOOL  
2023 WEIGHTED ASSESSMENT 1  
SCIENCE REVIEW 1  
PRIMARY FIVE

Name : \_\_\_\_\_ (      )

Date : 2 May 2023

Class : Primary 5 \_\_\_\_\_

Duration : 50 min

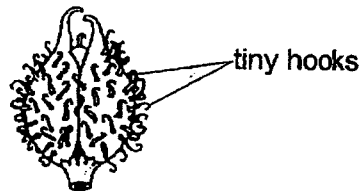
Marks: / 30

Parent's signature : \_\_\_\_\_

**Section A : [8 x 2 marks = 16 marks]**

For each question from 1 to 8, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). **Write your answer in the bracket.**

1. Study the picture of the fruit below.



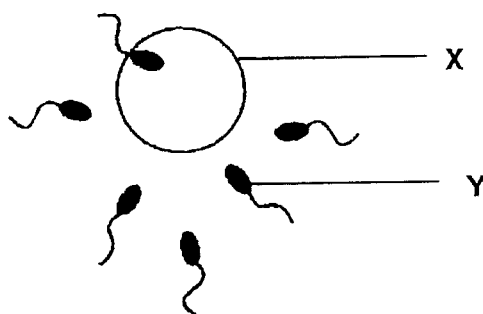
Based on your observation, how is the fruit dispersed?

- (1) wind
- (2) water
- (3) animal
- (4) splitting

(      )

/ 2

2. Study the diagram below which shows parts of the human reproductive system.

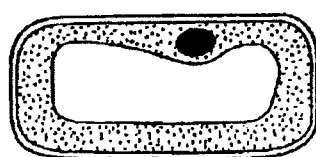


Identify X and Y and the process shown above.

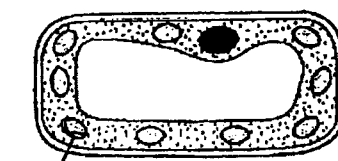
|     | Process       | X        | Y        |
|-----|---------------|----------|----------|
| (1) | Pollination   | egg cell | sperm    |
| (2) | Fertilisation | egg cell | sperm    |
| (3) | Pollination   | sperm    | egg cell |
| (4) | Fertilisation | sperm    | egg cell |

( )

3. Study plant cells G and H.



Cell G



chloroplast

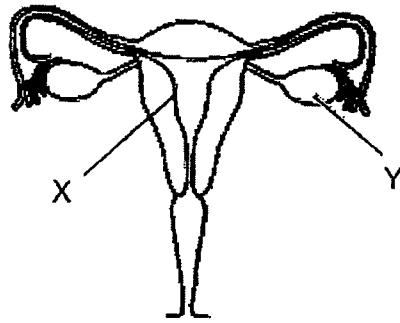
Cell H

Based on the diagrams, how is Cell G different from Cell H?

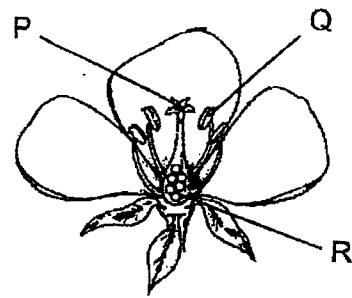
- (1) It has no nucleus.
- (2) It has no cell wall.
- (3) It has no chloroplast.
- (4) It has no cell membrane.

( )

4. Study the human and plant reproductive system shown below.



human reproductive system



plant reproductive system

Which of the following statements about both reproductive systems are true?

- A: Part Q and X produce the male reproductive cells.
- B: Part R and Y produce the female reproductive cells.
- C: The fertilised egg develops and grows in Part X and R.
- D: The fusion of male reproductive cell and female reproductive cell takes place in Part P and X.

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

( )

5. The following table shows some characteristics of the parents of a girl.

|                        | Father   | Mother |
|------------------------|----------|--------|
| Single eyelid          | ✓        | Double |
| Detached earlobe       | Attached | ✓      |
| Ability to roll tongue |          |        |
| Brown eyes             | ✓        | ✓      |

Which of the following characteristics may be passed on from her parents to her?

- A. Black eyes
- B. Double eyelid
- C. Detached earlobe
- D. Ability to roll tongue

(1) C only

(2) B and C only

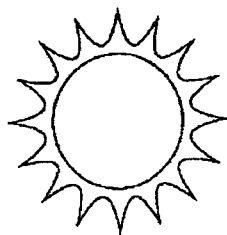
(3) A, B and C only

(4) B, C and D only

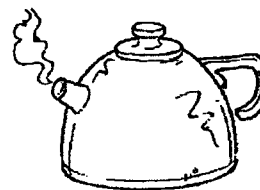
( )

6. Which one of the following is not a source of heat?

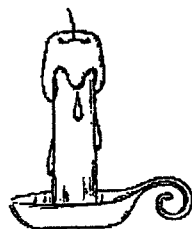
(1)



(2)



(3)

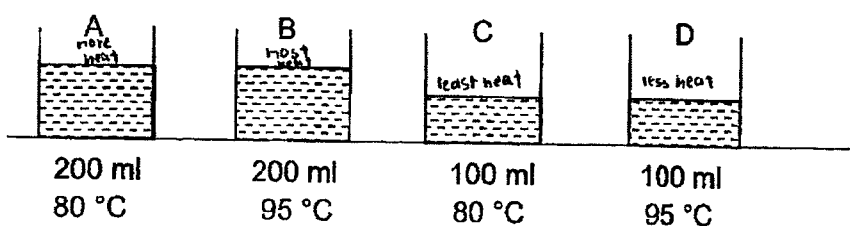


(4)



( )

7. The diagram below shows four beakers of water.



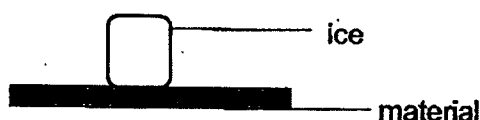
Which of the following statement(s) is/are correct?

- A: Beaker B has more heat than beaker C.
- B: Beaker A has the least amount of heat.
- C: Beaker D has the most amount of heat.
- D: The amount of heat in beaker B and D are the same.

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

( )

8. A cube of ice was placed on material as shown in the diagram below and the time taken for the ice to melt completely was recorded.



The above process was repeated using material A, B and C. The table below shows the time taken for the ice to melt completely.

|                                             | Material A | Material B | Material C |
|---------------------------------------------|------------|------------|------------|
| Time taken for ice to melt completely (min) | 10         | 15         | 7          |

Which of the statements below is correct?

- (1) Material A is the best conductor of heat.
- (2) Material B loses heat to the ice at the slowest rate.
- (3) Material B loses the most amount of heat to the ice.
- (4) Material C gains heat from the ice at the fastest rate.

( )

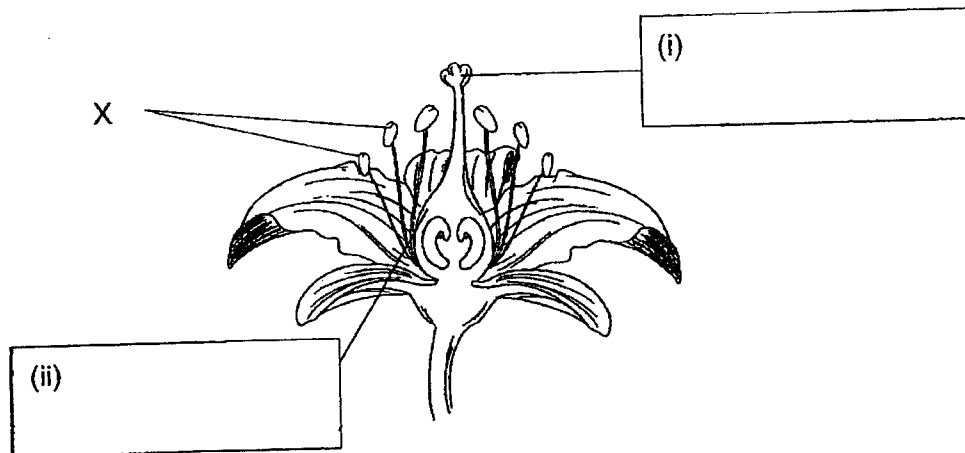
/ 4

**SECTION B : [14 marks]**

For questions 9 to 12, write your answers in this booklet.

The number of marks available is shown in the brackets [ ] at the end of each question or part-question.

9. The diagram below shows the cross section of a flower.



- (a) In the diagram above, fill in the boxes with the correct parts of the flower. [2]

- (b) All the parts X of the flower was removed.

Will the flower still able to develop into a fruit. Explain your answer. [2]

---

---

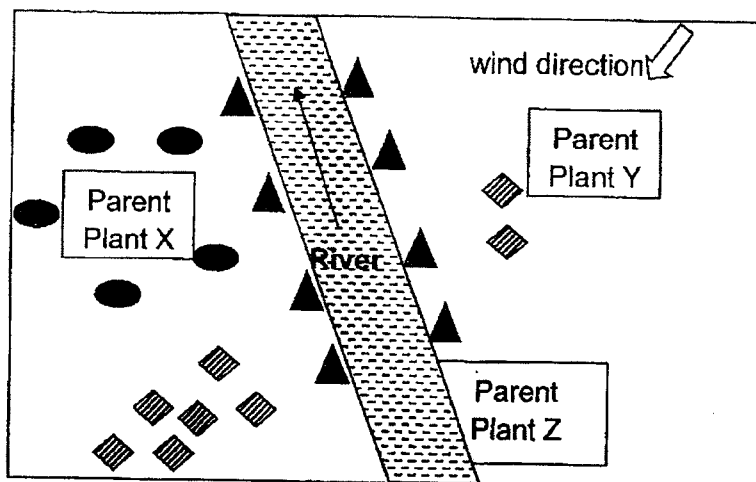
---

---

Marks:

/ 4

10. The diagram below shows the distribution of three plants X, Y and Z.

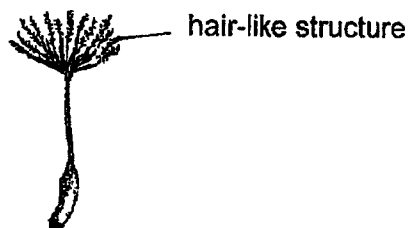


| Key | Young plant X | Young plant Y | Young plant Z |
|-----|---------------|---------------|---------------|
|     | ●             | ◈             | ▲             |

- (a) Based on the diagram, how is the fruit/seed of Plant Z dispersed? [1]

- (b) State one characteristic of the fruit/seed of Plant Z which allows it to be dispersed by the method stated in (a). [1]

- (c) Study Fruit P with hair-like structure below.

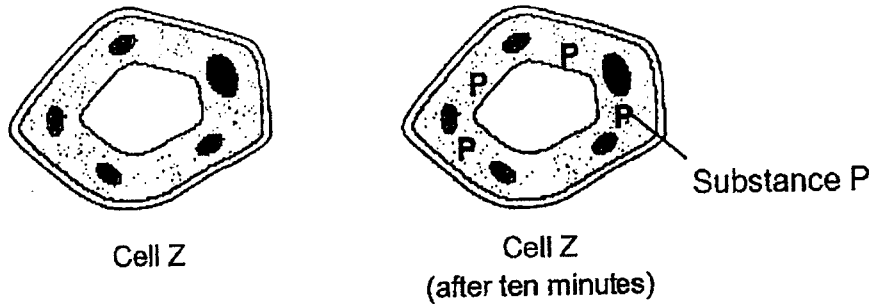


Based on the plant distribution diagram above, which plant X, Y or Z does fruit P represents? Explain your answer. [1]

Marks: / 3

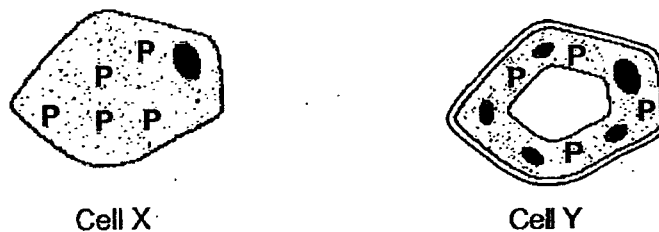
11. (a) Gareth carried out an experiment with cell Z. He placed cell Z in a dish containing substance P.

After ten minutes, he found that there were substance P in cell Z as shown in diagram below.



Explain why substance P was observed in cell Z. [1]

- (b) He carried out the experiment with cell X and cell Y. He placed both cells in a dish containing substance P.



Substance P were found in both cells X and Y as shown above. After some time, one of the cells burst.

Which cell, X or Y, burst? Explain why the cell burst after some time in substance P. [2]

Marks:

/ 3

12. The table below shows the change in length of three materials, P, Q and R, as the surrounding temperature changes.

| Surrounding temperature (°C) | Length of material (units) |     |     |
|------------------------------|----------------------------|-----|-----|
|                              | P                          | Q   | R   |
| 26                           | 200                        | 200 | 200 |
| 27                           | 201                        | 205 | 210 |
| 28                           | 202                        | 210 | 220 |
| 29                           | 203                        | 215 | 230 |

- (a) What is the relationship between the surrounding temperature and the length of the materials? [1]

---



---

- (b) Explain why the length of the materials change with the surrounding temperature? [1]

---



---

- (c) Based on the results above, which material is best used for making balcony tiles where it will be exposed to the sun for a long period of time? Explain why. [2]

---



---



---



---



---

Marks: / 4

~ END OF PAPER ~



**SCHOOL :** MAHA BODHI PRIMARY SCHOOL  
**LEVEL :** PRIMARY 5  
**SUBJECT :** SCIENCE  
**TERM :** WA1 (2023)

**CONTACT :**

---

**SECTION A**

| Q 1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 |
|-----|----|----|----|----|----|----|----|
| 3   | 2  | 3  | 2  | 2  | 3  | 1  | 2  |

**SECTION B**

|      |                                                                                                                                                                                                                                                                                                                                                                                             |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q9)  | <p>a)i)stigma ii)ovary</p> <p>b)Yes. All of the female parts is not removed. The flower can still be pollinated and fertilisation can still take place.</p>                                                                                                                                                                                                                                 |
| Q10) | <p>a) Plant Z is dispersed by water.</p> <p>b) Plant Z has to be able to trap air to float on the surface of the water.</p> <p>c) Plant Y. The young plant Y was dispersed following the direction of the wind. The hair-like structure allows it to stay afloat in the wind for a longer period of time.</p>                                                                               |
| Q11) | <p>a) The cell membrane of cell Z allowed substance P to enter the cell.</p> <p>b) Cell X burst as it does not have cell wall to help it have a regular shape. After some time, more of substance P will enter cell Y, eventually causing it to burst.</p>                                                                                                                                  |
| Q12) | <p>a) The higher the surrounding temperature the longer the length of the materials.</p> <p>b) The materials will gain heat from the surrounding temperature and expand, causing the length of the materials to change.</p> <p>c) Material P. material P least increased in length as temperature increase. The tile increase least in size so the tiles will be least likely to crack.</p> |

