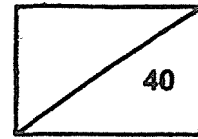


**Red Swastika School
Primary 5 Science 2021
Class Test 2**



Name: _____ () Parent's Signature: _____

Class: Pr. 5 _____ Date: 16 Aug 2021

Section A: Multiple-Choice Questions (14 x 2 = 28 marks)

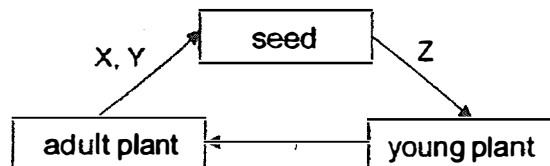
Choose the most suitable answer and write its number in the brackets provided.

1. Which of the following is most likely a characteristic of fruits dispersed by splitting?

- (1) Sweet and juicy
- (2) Brightly coloured
- (3) Has a fibrous husk
- (4) Has a dry seed pod

()

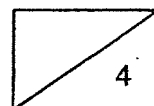
2. The diagram shows the life cycle of a flowering plant.



Which of the following represents the correct processes, X, Y and Z?

| | X | Y | Z |
|-----|---------------|---------------|---------------|
| (1) | germination | fertilisation | pollination |
| (2) | fertilisation | germination | pollination |
| (3) | pollination | fertilisation | germination |
| (4) | pollination | germination | fertilisation |

()



3. Mohan wants to find out if the fruit below could be dispersed by water.

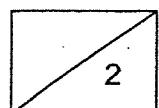


Which of the following step(s) could he use to help in his investigation?

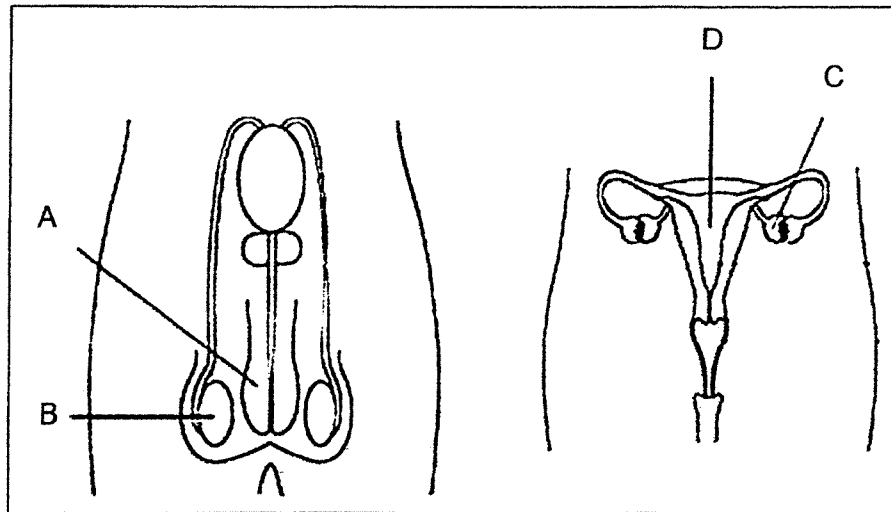
- A: Measure the size of the fruit.
- B: Place the fruit in water and observe if it floats.
- C: Cut open the fruit and observe if it contains a fibrous husk.

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

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The diagrams below show the reproductive systems in human bodies. Use the diagram to answer Questions 4 and 5.



4. Which of the following correctly identifies the parts of the system?

| | A | B | C | D |
|-----|--------|--------|--------|-------|
| (1) | penis | testis | ovary | womb |
| (2) | penis | ovary | testis | womb |
| (3) | testis | penis | ovary | womb |
| (4) | testis | penis | womb | ovary |

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5. Which of the following statements are correct?

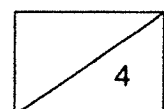
W: Egg cells are found in part C.

X: The fertilised egg develops in part D.

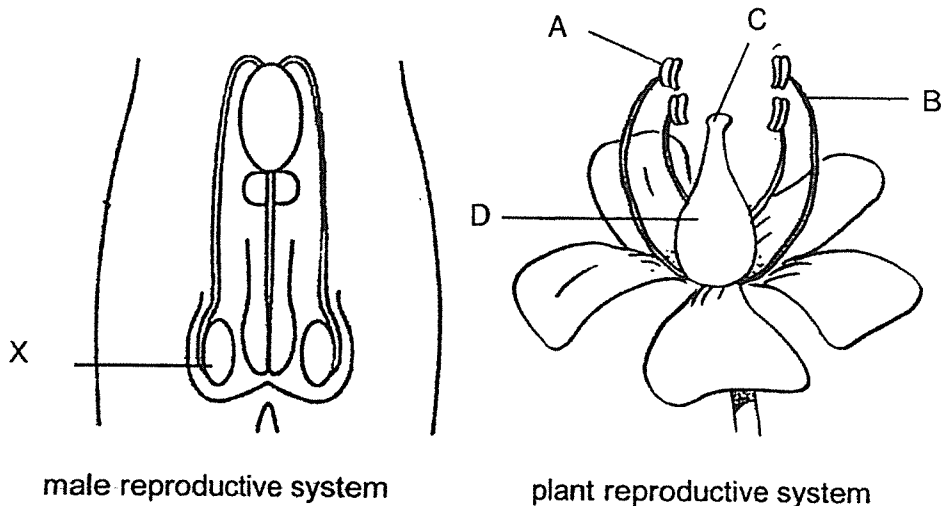
Y: Female reproductive cells are found in part B.

- (1) X and Y only
- (2) W and Y only
- (3) W and X only
- (4) W, X and Y

()



6. Study the diagrams below carefully.



Which part of the plant reproductive system has a similar function as part X?

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

()

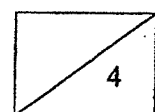
7. Flower X attracts animals that are active at night to pollinate its flowers.

Which of the following characteristic(s) does Flower X have to attract these animals for pollination at night?

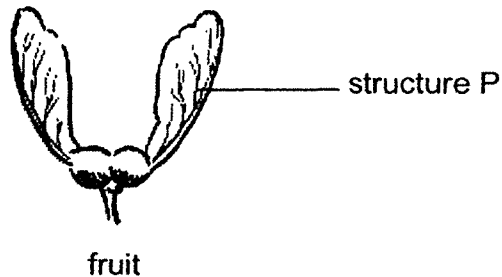
- A: Has big petals
- B: Has bright coloured petals
- C: Gives out a strong and sweet smelling scent

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

()



8. Henry wants to find out if structure P of the fruit, as shown below, helps to disperse the seed further. He plans to release some of the fruits and measure the distance travelled by the fruits.



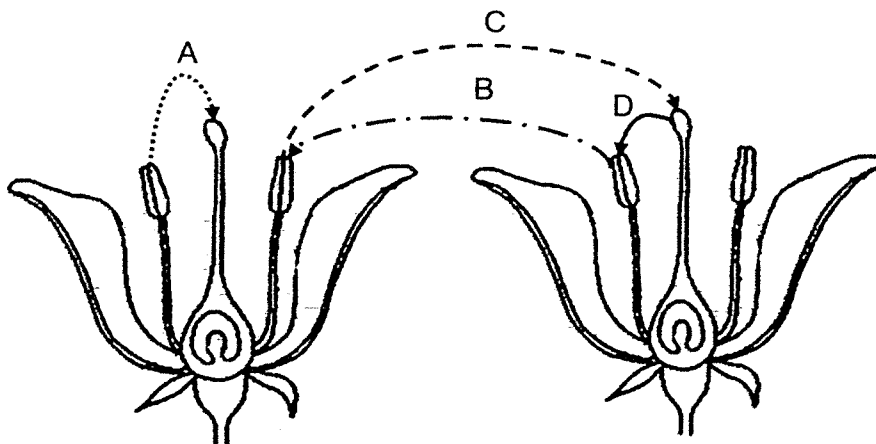
Which of the following variables should he keep the same for the experiment?

- A: location of the experiment
- B: presence of structure P
- C: distance travelled by the fruit
- D: height from which he releases the fruit

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

()

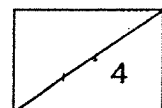
9. The diagram shows the flowers of plant Z.



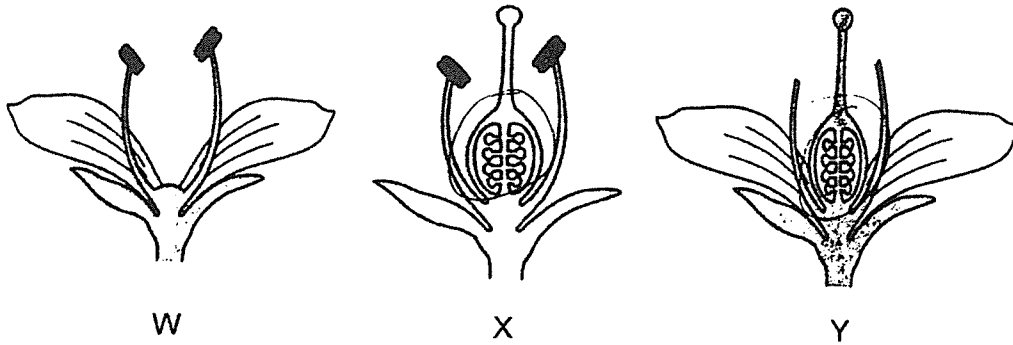
Which arrow(s) correctly shows pollination taking place?

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

()



10. The diagrams below show three flowers, W, X and Y. Some parts of the flowers have been removed.



Based on the diagrams, which of the flowers will still be able to develop into fruits after pollination?

- (1) W only
- (2) X only
- (3) W and X only
- (4) X and Y only

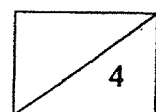
()

11. Which of the following materials conduct electricity?

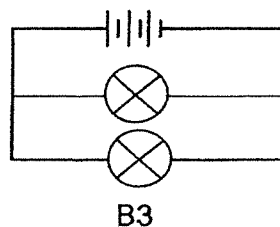
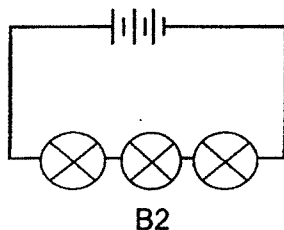
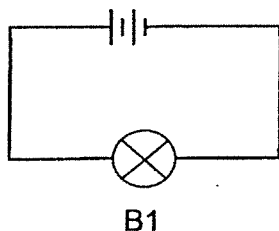
- A: Iron
- B: Steel
- C: Wood
- D: Rubber

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

()



12. Study the circuits shown.

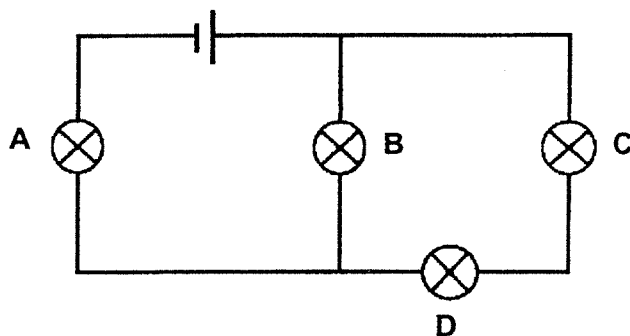


Arrange bulbs B1, B2 and B3 in order of brightness, from the least bright to the brightest.

- (1) B1, B2, B3
- (2) B2, B3, B1
- (3) B2, B1, B3
- (4) B3, B1, B2

()

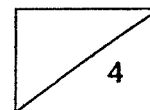
13. A circuit is set up as shown below. All of the bulbs light up.



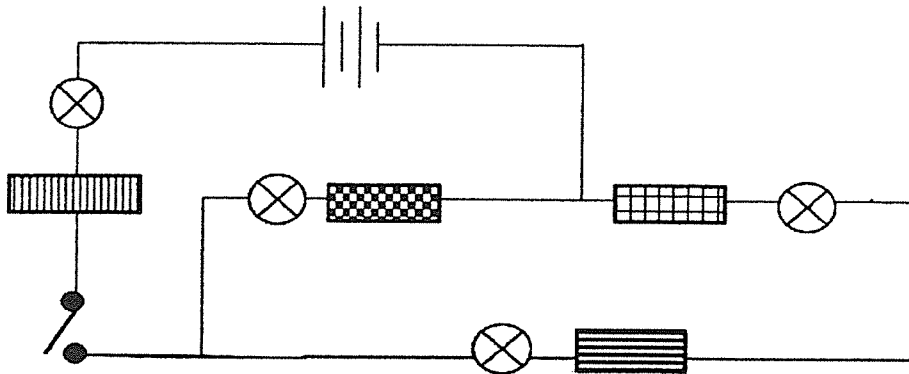
Suddenly, two of the bulbs fuse but the remaining two bulbs remain lit.
Which two bulbs could have fused?

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





()



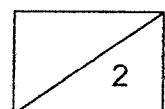
14. Jenny set up the circuit below. All the bulbs and batteries used are in working condition. When she closed the switch, only three bulbs lighted up. She was told that one of the objects in the circuit was an insulator of electricity.



Which one of the following objects was the insulator of electricity?

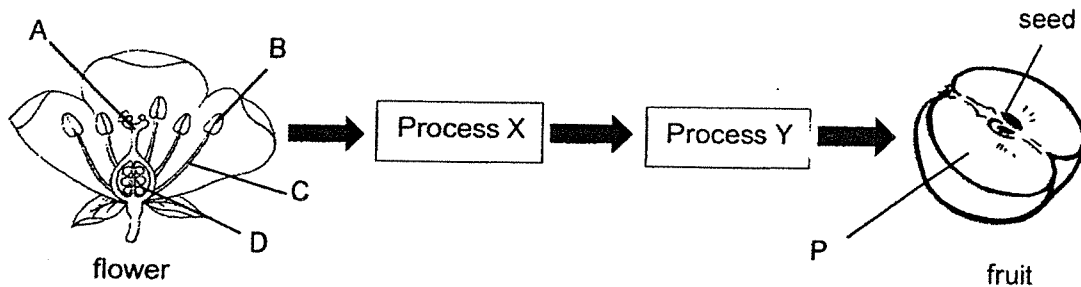
- (1) 
- (2) 
- (3) 
- (4) 

()



Section B: Open-ended Questions (3 Questions: 12 marks)

15. The diagram below shows some of the stages of sexual reproduction in plants.



- (a) Process X takes place before Process Y. Both processes are needed for the flower to develop into a fruit. Identify the two processes. (1m)

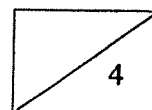
Process X: _____

Process Y: _____

- (b) Name the part of the flower that part P of the fruit developed from. (1m)

- (c) Which part of the flower, A, B, C or D, did the seed of the fruit develop from? (1m)

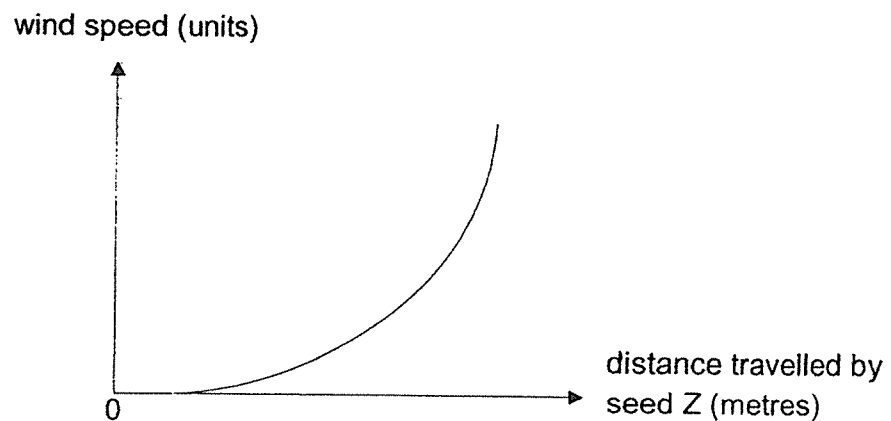
- (d) The seeds of the fruit need to be dispersed far away so as to prevent overcrowding. How does this help the young plants to grow healthily? (1m)



16. The diagram below shows seed Z. The seed is not edible.



John observed the distance travelled by seed Z and recorded his observations in the graph shown below.



- (a) State a physical characteristic of seed Z based on the dispersal method mentioned above. Do not mention size. (1m)

- (b) Based on the graph, how does wind speed affect the distance travelled by seed Z? (1m)

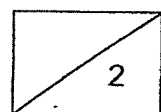


Diagram 1 shows the location of plants A and B.

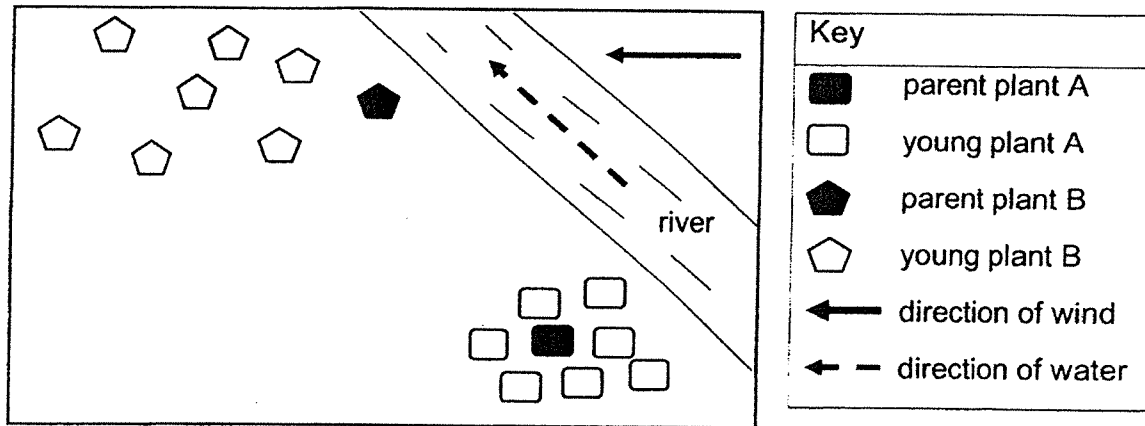
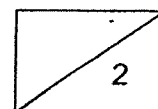


Diagram 1

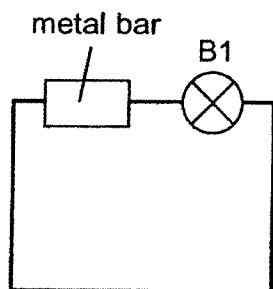
(c) Which plant, A or B, is seed Z most likely from? (1m)

(d) The diagrams below show three fruits X, Y and Z. Put a tick (✓) in the box which is most likely the fruit of Plant A in diagram 1. (1m)

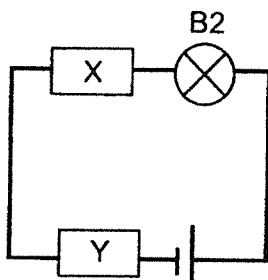
| | | |
|--|--|---|
| <p>juicy flesh</p> <p>Fruit X</p> | <p>wing-like structure</p> <p>Fruit Y</p> | <p>pod-like structure</p> <p>Fruit Z</p> |
| | | |



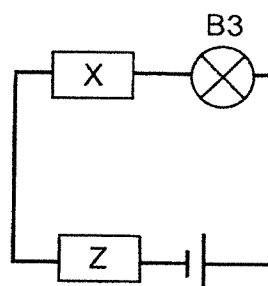
17. All the bulbs and batteries in the circuits below are identical and are in working condition. X, Y and Z are objects which are added to the circuits.



B1 does not light up



B2 lights up

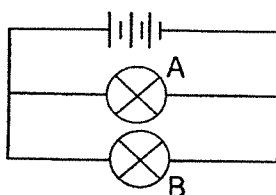


B3 does not light up

- (a) Give a reason why B1 did not light up? (1m)

- (b) Based on the diagram, what can be concluded about material Z? (1m)

Study the circuit below.



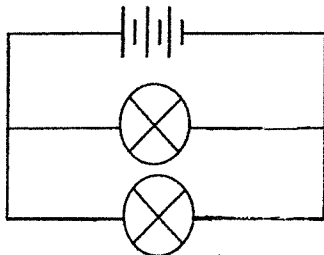
The table below shows the brightness of bulb B when different numbers of the same type of batteries are used in the circuit.

| Number of batteries used | Brightness of bulb B (units) |
|--------------------------|------------------------------|
| 1 | 20 |
| 2 | 30 |
| 3 | 40 |

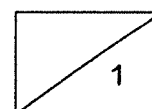
- (c) What is the relationship between the number of batteries used and the brightness of bulb B? (1m)

- (d) In the circuit diagram below, where can two switches be installed such that when one switch is closed, only one bulb lights up?

Draw two "X" to show the locations of where the switches can be installed. (1m)



End of paper
Please check your answers



ANSWER KEY

YEAR : 2021
LEVEL : PRIMARY 5
SCHOOL : RED SWASTIKA SCHOOL
SUBJECT : SCIENCE
TERM : CLASS TEST 2

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

| | | |
|-----|-----|---|
| Q15 | (a) | X: Pollination Y: Fertilisation |
| | (b) | Ovary |
| | (c) | D |
| | (d) | The young plants do not need to compete for sunlight, space, water, and minerals after germination. |
| Q16 | (a) | wind |
| | (b) | The higher the rate of the wind speed is, the further the seed will travel. |
| | (c) | B |
| | (d) | Fruit Z |
| Q17 | (a) | The circuit of B does not have any batteries in the circuit |
| | (b) | Z is an insulator of electricity |
| | (c) | The more batteries used, the brighter bulb B was |
| | (d) | |

1
END