## Section A

For each question from 1 to 16 , three options are given. One of them is the correct answer. Make your choice (1, 2 or 3 ). Shade your answer on the Optical Answer Sheet. ( $16 \times 2$ = 32 marks)
(S)*

1. Which of the following organisms produce seeds?
(1) fungi
(2) bacteria
(3) flowering plants
(S)*
2. The table below shows Linda's answers to three questions about ferns.

| Question | Answer |
| :---: | :---: |
| A- Can it reproduce? | Yes |
| B- Does it make its own food? | No |
| C- Does it have seeds? | Yes |

(1) A
(2) $B$
(3) C
(S)
3. Study the classification chart below.


Which of the following animals represent X and Y ?

|  | $\mathbf{X}$ | $\mathbf{Y}$ |
| :--- | :--- | :--- |
| $(1)$ | Bee | Elephant |
| $(2)$ | Goat | Penguin |
| $(3)$ | Elephant | Dragonfly |

(S)
4. The diagram below shows the different parts of the digestive system.


Which of the following statements about the parts above is/are correct?
(1) Digestion begins in part B.
(2) Digestion is completed in part C .
(3) Part A does not absorb digested food.
(S)*
5. Tim set up an experiment as shown below. He observed that the pin was attracted to the magnet when object A was placed between them. However, this did not happen when object $B$ was used.


|  | Material of Object A | Material of Object B |
| :--- | :---: | :---: |
| $(1)$ | Iron | Copper |
| $(2)$ | Aluminium | Steel |
| $(3)$ | Iron | Plastic |

(M) ${ }^{*}$
6. Jane used the following set-ups as shown below to find out if plants needed carbon dioxide to carry out photosynthesis.


What were the purposes of the plastic bag and substance $X$ in the set-up?

|  | Plastic Bag | Substance X |
| :--- | :--- | :--- |
| (1) | to prevent carbon dioxide <br> produced by the organisms in <br> the soil from escaping | to remove carbon dioxide in <br> the jar |
| (2) | to ensure that the water <br> droplets formed on the inner <br> surface of the jar is not from <br> the soil in the pot | to remove carbon dioxide in <br> the jar |
| (3) | to prevent water vapour from <br> escaping from the soil in the <br> pot | to remove water vapour in the <br> jar |

(S)
7. The diagram shows an electrical circuit.


All the light bulbs light up when the switch is closed. If bulb 3 (B3) fuses, which of the following light bulbs will still light up?
(1) B1 only
(2) B2 and B4 only
(3) B1, B2 and B4
(S)
8. Substance $Y$ freezes at $65^{\circ} \mathrm{C}$ and boils at $800^{\circ} \mathrm{C}$.

Which of the following shows the correct state of substance Y at $50^{\circ} \mathrm{C}$ and $600^{\circ} \mathrm{C}$ ?

| State of Substance $\mathbf{Y}$ at |  |  |
| :--- | :---: | :---: |
| $(1)$ | $\mathbf{6 0} \mathbf{0}^{\circ} \mathbf{C}$ |  |
| $(1)$ | Liquid |  |
| $(3)$ | Solid | Gas |
|  | Liquid | Gas |

(S)*
9. Sally carried out an experiment as shown below. She dropped 4 blocks made of different materials into a large tray of plasticine.


She conducted the experiment and measured the depths of the dent that each of the blocks make in the plasticine. She recorded them in the table below.

| Block | Depth of the dent made in the <br> plasticine $(\mathbf{c m})$ |
| :---: | :---: |
| Wood | 0.4 |
| Aluminium | 1.2 |
| Lead | 2.75 |
| Plastic | 1.95 |

Based on information in the table, which of the following could Sally conclude from her experiment?

A: The wooden block had the greatest amount of kinetic energy before hitting the plasticine.

B: The lead block had the greatest mass and the wooden block had the least mass.
C : The bigger the size of the block, the deeper the dent made in the plasticine.
(1) A only
(2) B only
(3) C only
(C) ${ }^{*}$
10. A heavy box was pulled by the same force over four different surfaces, $\mathrm{W}, \mathrm{X}, \mathrm{Y}$ and Z . The graph below shows the distance moved by each box over time.


Which of the following statements are true?
A: $\quad$ Surface $X$ is rougher than Surface $Y$.
B: $\quad$ The type of surface affects the amount of friction produced.
C: The friction produced between the box and Surface $Z$ is the least.
D: Surface $W$ is the smoothest because the distance moved by the box is the furthest.
(1) A and B only
(2) C and D only
(3) A, B and C only
(S)*
11. The picture below shows a Common Basilisk. It is a lizard which lives near rivers and streams. It has the ability to run across the surface of water for short distances using its large feet equipped with flaps of skin along its toes. It can also stay motionless on land for a long time.


Which one of the following correctly matches the Common Basilisk's adaptations to their type and function?

|  | Special Large Feet <br> For Running <br> Across Water <br> Surface | Staying Motionless <br> For A Long Time | Function Of <br> Adaptation |
| :--- | :---: | :---: | :---: |
| $(1)$ | Structural <br> Adaptation | Behavioural <br> Adaptation | Escape Predators |
| $(2)$ | Structural <br> Adaptation | Structural <br> Adaptation | Obtain Food |
| $(3)$ | Behavioural <br> Adaptation | Structural <br> Adaptation | Escape Predators |

(S)*
12. The diagram below shows the different blood samples $A, B, C$ and $D$, in a human body.


Blood samples A, B, C and D were taken from different blood vessels in the body. Which one of the following graphs best represents the amount of oxygen in the blood samples?
(1)

Amount of oxygen



(S)*
13. When lan placed an object between the light source and the white screen, a shadow of the object was cast on the white screen as shown below.


Which of the following changes should lan make to the set-up such that he could observe a bigger shadow of the object?

A: Use a brighter light source.
B: Move the screen further from the object.
C: Move the light source nearer to the object.
(1) A and B only
(2) B and C only
(3) A and C only
(S)
14. Study the diagrams of the flowers below.


After pollination, which of the flower(s) above will be able to develop into a fruit?
(1) A and B only
(2) B and C only
(3) A and C only
(C)*
15. Three beakers containing tap water were heated with identical bunsen burners in the same room. The time taken for each beaker of water to boil was recorded.


Which one of the following is definitely true about the result of the experiment?
(1) Set-up C took the longest time
(2) Set-up B took the shortest time
(3) Set-up C took a longer time than set-up $A$
$(\mathrm{M})^{*}$
16. The diagram below shows how the four bulbs $A, B, C$ and $D$ are connected to two batteries in a circuit.


Which bulb(s) will light up when bulb $\mathbf{D}$ fuses?
(1) A and B only
(2) B and C only
(3) C and D only

