For each question from 1 to 18, three options are given. One of them is the correct answer. Make your choice (1, 2 or 3). [36 marks]

1. Observe the diagrams below. Which of the following can move on its own from place to place?



(2)

(1)



(3)



2. Study the classification chart below.



Which of the following has/have been classified incorrectly?

- (1) Heart
- (2) Lungs
- (3) Small Intestine
- 3. In the diagram below, the arrows show how substance X is being transported to various parts of a plant.



What is substance X?

- (1) Food
- (2) Water
- (3) Mineral salts

4. The diagram below shows two fruits, A and B, from different plants.



Fruit A

Fruit B

How are fruits A and B likely to be dispersed?

|     | Α       | В         |
|-----|---------|-----------|
| (1) | Water   | Splitting |
| (2) | Animals | Wind      |
| (3) | Wind    | Animals   |

5. Below shows four stages of a life cycle.



Which of the following shows the correct sequence of the life cycle?



6. The picture below shows an animal that can change its colour to blend in with its surrounding.



Changing its colour to blend in with its surroundings is an adaptation for

(1) reproduction

- (2) protecting itself from predators
- (3) coping with extreme temperatures
- 7. Study the food chain shown below.

Plants -----> Ants -----> Frogs ----> Eagles

After the population of frogs is reduced by a disease, which of the following will likely show the effect on the other populations of organisms in the above food chain?

|     | Ants     | Eagles    |
|-----|----------|-----------|
| (1) | increase | increase  |
| (2) | decrease | no change |
| (3) | increase | decrease  |

Adam wants to test how the amount of light affects the growth of a plant.
Look at the set-ups carefully.



In which two of the following setups should he use to have a fair comparison?

- (1) A and B
- (2) A and C
- (3) B and C
- 9. Study the circuits below.



Which of the following circuits will the bulb light up?

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

10. Aisha held an empty plastic bottle underwater as shown below.



As she unscrewed and removed the bottle cap, which of the following observations would she observe?

- (1) The water level in the pail would begin to rise.
- (2) All the air would be trapped in the bottle by the water in the pail.
- (3) The water from the pail would flow into the bottle to replace the air.
- 11. Johan poured some of the water from Container A to Container B so that it is half-filled.



What are some observations that Johan could make?

- (1) The shape of the water changed.
- (2) There was a change in the state of water.
- (3) The water in Container A could be compressed into Container B.

12. Study the diagram shown below.



Object X

Which one of the following could be Object X?

- (1) Steel bar
- (2) Plastic rod
- (3) Bar magnet
- 13. Midhar set up an experiment as shown in the diagram below.



Which of the following are possible materials for rings R and S?

|     | R         | S         |
|-----|-----------|-----------|
| (1) | Magnet    | Steel     |
| (2) | Steel     | Aluminium |
| (3) | Aluminium | Magnet    |

14. A magnet was placed on a steel tabletop. A push was exerted on the magnet to move it horizontally across the table from point X to point Y as shown in the diagram below.



Which of the following force(s) must the push overcome for the magnet to move from point X to point Y?

- (1) Frictional force only
- (2) Magnetic force only
- (3) Frictional force and magnetic force

15. Ezhar wanted to test how much light is able to pass through material X. He set up his test as shown in the diagram below.



When he switched on the torch, he observed a shadow as shown on the screen below.



Which of the following statements is true about material X?

- (1) Material X allows all light to pass through.
- (2) Material X allows no light to pass through.
- (3) Material X allows some light to pass through.
- 16. Ali had a glass bottle with a lid. He could not open the lid as it was too tight.



Which of the following are possible ways he can use to open the lid?

- (1) X and Z only
- (2) X and Y only
- (3) Y and Z only

Mrs Ratna was cooking a pot of soup as shown in Figure 1.
She noticed that when she put some vegetables into the boiling water, the boiling stopped almost immediately for a short while as shown in Figure 2.



Why did the water stop boiling for a short while when the vegetables were put into the pot?

(1) The pot lost heat to the surroundings.

(2) The boiling water lost heat to the vegetables.

(3) The vegetables lost heat to the boiling water.

18. Liping placed an iron rod near a tray of steel pins as shown below.



She added two more batteries to the set-up. Which of the following shows her observations?

|     | Number of steel pins attracted | Reading on the weighing scale |
|-----|--------------------------------|-------------------------------|
| (1) | increases                      | increases                     |
| (2) | increases                      | decreases                     |
| (3) | decreases                      | remains the same              |

## SOME USEFUL WORDS\*

| 1  | anus                            | 44 | light                        |
|----|---------------------------------|----|------------------------------|
| 2  | attract / repel                 | 45 | liquid                       |
| 3  | battery                         | 46 | lung                         |
| 4  | blood (vessel)                  | 47 | magnet / magnetic material   |
| 5  | boil / boiling                  | 48 | mammal                       |
| 6  | breathe                         | 49 | mass / weight                |
| 7  | bulb                            | 50 | measuring cylinder           |
| 8  | butterfly                       | 51 | melt / melting               |
| 9  | carbon dioxide                  | 52 | metal                        |
| 10 | chicken                         | 53 | mouth                        |
| 11 | circulation                     | 54 | muscles                      |
| 12 | cockroach                       | 55 | mushroom                     |
| 13 | condense / condensation         | 56 | nitrogen                     |
| 14 | conductor / insulator           | 57 | (north / south / like) poles |
| 15 | contract / contraction          | 58 | nose                         |
| 16 | (electric) current              | 59 | oxygen                       |
| 17 | deforestation                   | 60 | plastic / rubber / wood      |
| 18 | digestion                       | 61 | pollinate / pollination      |
| 19 | earth                           | 62 | pollute / pollution          |
| 20 | electricity /electrical circuit | 63 | predator                     |
| 21 | energy                          | 64 | prey                         |
| 22 | evaporate / evaporation         | 65 | producer                     |
| 23 | expand / expansion              | 66 | push/pull                    |
| 24 | fertilise / fertilisation       | 67 | reflect                      |
| 25 | flexible                        | 68 | reproduce                    |
| 26 | float /sink                     | 69 | respiration                  |
| 27 | flower food (chain)             | 70 | root                         |
| 28 | force                           | 71 | seed (dispersal)             |
| 29 | freeze / freezing               | 72 | shadow                       |
| 30 | friction                        | 73 | shape                        |
| 31 | frog                            | 74 | skeleton                     |
| 32 | fungi                           | 75 | solid                        |
| 33 | gas                             | 76 | space                        |
| 34 | germinate / germination         | 77 | spore                        |
| 35 | global warming                  | 78 | spring balance               |
| 36 | gravity                         | 79 | steam                        |
| 37 | gravitational force             | 80 | steel                        |
| 38 | heart                           | 81 | stem                         |
| 39 | heat (gain / loss)              | 82 | stomach                      |
| 40 | insect                          | 83 | switch                       |
| 41 | (large/small) intestine         | 84 | temperature / thermometer    |
| 42 | iron                            | 85 | volume                       |
| 43 | leaf                            | 86 | water (vapour)               |

## \*This list is not exhaustive. Candidates may be required to use words not found in the list.