## Part I

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.
2. Study the diagram below.


When a girl sits on the beach ball, how will the mass and shape of the beach ball be affected?

|  | mass | shape |
| :---: | :---: | :---: |
| $(1)$ | decreases | remains the same |
| $(2)$ | remains the same | changes |
| $(3)$ | increases | changes |

3. The diagrams below show three objects.


On which object(s) is the force of gravity acting on?
(1) Ball only
(2) Ball and ship only
(3) Ball, ship and balloon
4. The diagram below shows the water cycle.


What could R, S and $\mathbf{T}$ be?
(1)

| R | S | T |
| :---: | :---: | :---: |
| Water droplets | Rain | Water vapour |
| Water vapour | Clouds | Rain |
| Water vapour | Rain | Clouds |

6. The diagram below shows two bar magnets repelling each other.


Based on the diagram above, which of the following statements is true?
(1) $A$ and $B$ are like poles.
(2) $A$ and $B$ are unlike poles.
(3) Both bar magnets have lost their magnetism.
11. Paul wanted to find out if a bulb would be brighter if he increased the number of batteries used in the circuit. He arranged the batteries in series and recorded the results of his observations in the graph as shown below.

Brightness of bulb


Based on the graph above, what is the relationship between the number of batteries and the brightness of the bulb?
(1) The larger the number of batteries used, the dimmer the bulb.
(2) The larger the number of batteries used, the brighter the bulb.
(3) The number of batteries used does not affect the brightness of bulb.
12. The diagram below shows 4 bulbs, $A, B, C$ and $D$, in a circuit that is connected correctly.


Which bulbs will light up?
(1) B, C and D only
(2) All the bulbs will light up
(3) None of the bulbs will light up
13. The figure below shows an experiment to investigate photosynthesis.


Which of the leaf parts should be compared to find out whether photosynthesis needs carbon dioxide?

1) A and C
2) A and B
3) B and C
