

## Part I

(1) Write an event which definitely occur.
(2) Write an event which definitely do not occur.
(3) Write a random event.
(4) An unbiased coin is tossed. Write the outcomes of the experiment of observing.
(5) An unbiased regular cubic die with its faces numbered 1, 2, 3, 4, 5, 6 is tossed. Write the outcomes of the experiment of observing the number on the face which lands down.

## Part II

(1) A coin was tossed 20 times. The outcomes of this experiment are given in the following table.

| Experiment | Number of times <br> head occurred | Number of times <br> tail occurred |
| :--- | :---: | :---: |
| Heat | 13 |  |
| Tail | 7 |  |

i) Fill the third column.
ii) Find the experimental probability of occurring head.
iii) Find the experimental probability of occurring tail.
(2) Following table shows the detail of students who sat for the O/L examination. Fill the last column.

|  | Number of students seated | Number of students pass | Number of failed students |
| :---: | :---: | :---: | :---: |
| 11-A | 40 | 38 |  |
| 11-B | 39 | 35 | ..................... |
| 11-C | 45 | 40 | ................... |
| $11-\mathrm{D}$ | 48 | 43 |  |
| $11-\mathrm{E}$ | 46 | 42 |  |

(3) An unbiased cubic die with its faces numbered $1,2,3,4,5,6$ is tossed.
i) Find the probability of the number 2 showing up.
ii) Find the probability of an even number showing up.
iii) Find the probability of a square number showing up.

(4) As shown in the figure, a circular lamina is divided into five equal parts and an indicator is fixed at the center. Find the probability of each of the following event.

i) The indicator stopping in red.
ii) The indicator stopping in blue or white.
iii) The indicator stopping in yellow, green or red

