CASE STUDY: 1

One day Bubbly, Shilpa, Priya, and Sandhya were playing Ludo during their summer break. On first throw Bubbly got 5 in her die, Shilpa also got 5, Priya got 6, and Sandhya got 0.

Answer the following questions:

- 1. What is the wrong or error in the above case study statements?
- 2. What is probability of getting 5 in a throw?
- 3. What is the Probability of getting 7 in a throw?
- 4. What is the probability of getting an even number?
- 5. What is the probability of getting an odd number?
- 6. What is the probability of getting a prime number?
- 7. What is the probability that Bubbly will be winning the game?
- **8.** Find the ratio of probabilities of getting an even and odd number.
- **9.** What is the probability of certain and sure event and impossible event?
- 10. What is the probability range of uncertain event?

CASE STUDY: 2



Answer the following questions:

- **1.** What information is depicted from the given double bar graph?
- 2. What is the marks difference of all four students from pretest to test?
- 3. Which student showed no improvement?
- 4. Which students showed minimum improvement between tests?
- 5. Which student showed maximum improvement between tests?
- 6. Find the mean of pretest marks of all four students.
- 7. Find the average of test marks of all four students.
- **8.** Find the ratio of the arithmetic mean marks of pretest and test of all four students.
- 9. How many students secured less than 75% marks in pretest?
- 10. Who is the best performer combining both pretest and test?

HOTS QUESTIONS

- Find the value of 'x' if the mean of the following data is 9.
 12, 5, 3, 18, 10, 17, x, 6, 6.
- 2. What is the probability of selecting a consonant from English alphabets?
- 3. What will be the range of possible probabilities?
- **4.** Give 3 examples for each of the following:
 - (a) Sure and certain events
 - (b) Impossible events
 - (c) Uncertain events
- 5. Prove the following statements by citing examples:
 - (a) The mode is always one of the numbers in a data.
 - (b) The mean is not always one of the numbers in a data.
 - (c) There can be more than one mode.
 - (d) The median is not always one of the numbers in a data.

CLASS: VII SUBJECT: MATHEMATICS CHAPTER: 3 (DATA HANDLING) BY Priyanka Paul