Data Handling

- 1. What is the probability that a number selected from the numbers 1, 2, 3,, 25 is a prime number, when each of the given numbers is equally likely to selected.
- 2. Tickets numbered from 1 to 20 are mixed up together and then a ticket is drown at random. What is the probability that the ticket has a number which is a multiple of 3 or 7.
- 3. 17 cards numbered 1,2,3 17 are put in a box and mixed thoroughly. One person draws a card from the box. Find the probability that the number on the card is
 - (a) odd (b) a prime (c) divisible by 3
- (d) divisible by 3 and 2 both
- 4. A bag contains 5 red balls, 8 white balls, 4 green balls and 7 black balls. If one ball is drawn at random. Find the probability that it is
 - (a) Black
- (b) red
- (c) not green
- 5. A child has a block in the shape of a cube with one letter written on each face as shown below.

A	В	С	D	Е	A

The cube is thrown once. What is the probability of getting (i) A (ii) D

- 6. A letter is chosen at random from the letters of the word ASSASSINATION. Find the probability that the letter chosen is a
 - (i) vowel (ii) consonant
- 7. The number of members in 20 families of a township are 6, 8, 4, 3, 5, 6, 7, 4, 3, 4, 5, 6, 4, 5, 4, 3, 3, 6, 4 and 3. Prepare a frequency distribution table for the data and answer the following questions:
- (i) What is the smallest family size? How many families are of this size?
- (ii) What is the largest family size? How many are of this size?
- (iii) What is the most common family size?
- 8. The heights of 10 girls were measured in cm and the results were as follows:

143, 148, 135, 150, 128, 139, 149, 146, 151, 132

- (i) What is the height of the tallest girl?
- (ii) What is the height of the shortest girl?
- (iii) What is the range of the data?
- (iv) Find the mean height.
- (v) How many girls are there whose heights are less than the mean height?
- 9. The following data give the pocket expenses of 100 students of a school

Weekly pocket expenses (in rupees)	30	35	45	50	55	60	65
Number of students	6	10	14	22	35	9	4

Prepare a grouped frequency distribution of class intervals of equal width, taking one of the class intervals as 30-40

10. The following distribution table shows the performance of 270 candidates appearing for Army Education Corps intelligence test.

I.Q	55-69	69-83	83-97	97-111	111-125
No. of candidates	20	50	75	75	50

Draw a histogram for this distribution.

Answers:

$$1.\frac{9}{25}$$

$$2.\frac{2}{5}$$

$$3.\frac{9}{17}, \frac{7}{17}, \frac{5}{17}, \frac{2}{17}$$

$$4.\frac{7}{24}, \frac{5}{24}, \frac{5}{6}$$

$$5.\frac{1}{3}, \frac{1}{6}$$

6.
$$\frac{6}{13}, \frac{7}{13}$$

Data Handling & Graphs

- 1. Draw a bar graph to represent Ajay's score, out of 100, in five subjects in an examination. Subject English, Hindi, Maths, Science, Social St. Marks: 78, 72, 96, 88, 80 respectively.
- 2. The population of 40 villages (in thousands) is given below:
 6, 12, 8, 9, 14, 4, 4, 3, 6, 10, 9, 16, 4, 5, 7, 8, 11, 16, 20, 17, 3,
 8, 10, 12, 7, 6, 4, 9, 12, 11, 15, 17, 13, 12, 22, 6, 12, 5, 9, 13.
 Construct a frequency distribution table using class intervals 0-5,
 5-10, ------
 - Draw a Histogram to represent the above data.
- 4. Plot the following points on a Cartesian System.

3.

 $A (-3, 2), \qquad B(2, -5), \qquad C(0, 7), \qquad D(-4, -6), \qquad E(-5, 0), \\ F(0, -4), \qquad P(6, 0), \qquad O(0, 0) \qquad M(3, 7), \qquad N(5, -2), \\ Q(7, 3), \qquad R(-5, 7)$