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	B	C	D	E	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, --------
3. Draw a Histogram to represent the above data.
4. Plot the following points on a Cartesian System.

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