

CHAPTER 15

COLLECTION, ORGANISATION AND PRESENTATION OF DATA

More Questions for Practice

1. A dice is thrown 40 times. The outcomes obtained are as follow:

5, 2, 1, 4, 6, 1, 3, 6, 5, 2
1, 3, 2, 4, 6, 6, 4, 3, 3, 1
1, 2, 2, 3, 2, 4, 6, 5, 6, 6
4, 6, 3, 1, 1, 1, 2, 5, 5, 6

Prepare a frequency table to represent this data. Also answer the following questions:

- (a) What number has appeared the least number of times?
(b) What number has appeared the most number of times?
2. The number of road accidents occurred per day was recorded for 30 days of a month in a city. The numbers are given as follow:

6, 2, 4, 1, 0, 4, 5, 3, 3, 2, 0, 4, 2,
4, 1, 0, 5, 1, 3, 4, 3, 4, 2, 1, 0, 5,
8, 4, 2, 3

Prepare a frequency table to represent this data. Answer the following questions:

- (a) For how many days, there was no accident?
(b) For how many days, the number of accidents were less than 4?
3. The table below shows the number of ₹ 10, ₹ 5, ₹ 2 and ₹ 1 coins in a piggy bank.

Coin	Number of Coins
1	5
2	15
5	15
10	10

Represent this data by a pictograph.

4. The profit earned by a company in each year from 2012 to 2017 was as given below:

Year	2012	2013	2014	2015	2016	2017
Profit (in lakhs of rupees)	5	8	6	4	7	8

Prepare a pictograph for the given data.

5. The following data gives the education level of females in Uttar Pradesh in 2004:

Education Level	Middle	Secondary	Intermediate	Graduate and above
Number of Females (in ten thousands)	90	60	40	30

Using a scale of 1 cm for 10 units on y -axis, represent the information by a bar graph.

6. The following table gives us the death rate per thousand of some countries:

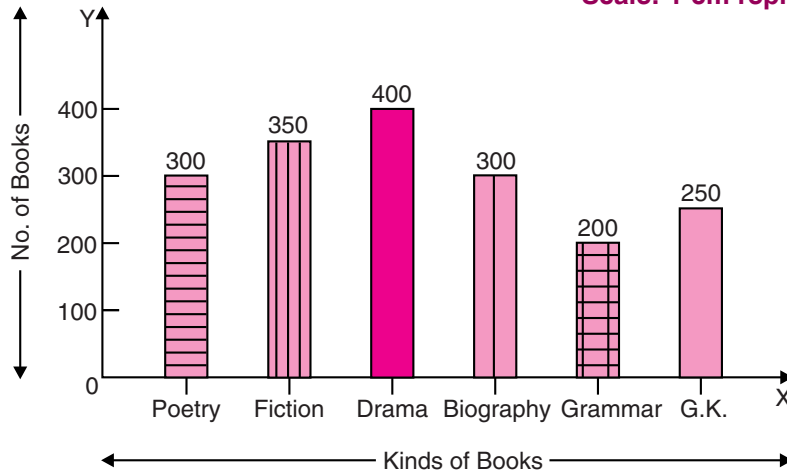
Country	India	Japan	Egypt	Australia	Russia	Pakistan
Death Rate	24	20	24	8	16	10

Using a scale of 1 cm for 4 thousand deaths on y -axis, represent the information by a bar graph.

7. The bar graph given here represents different kinds of books in a school library.

Books in a School Library

Scale: 1 cm represents 100 books.

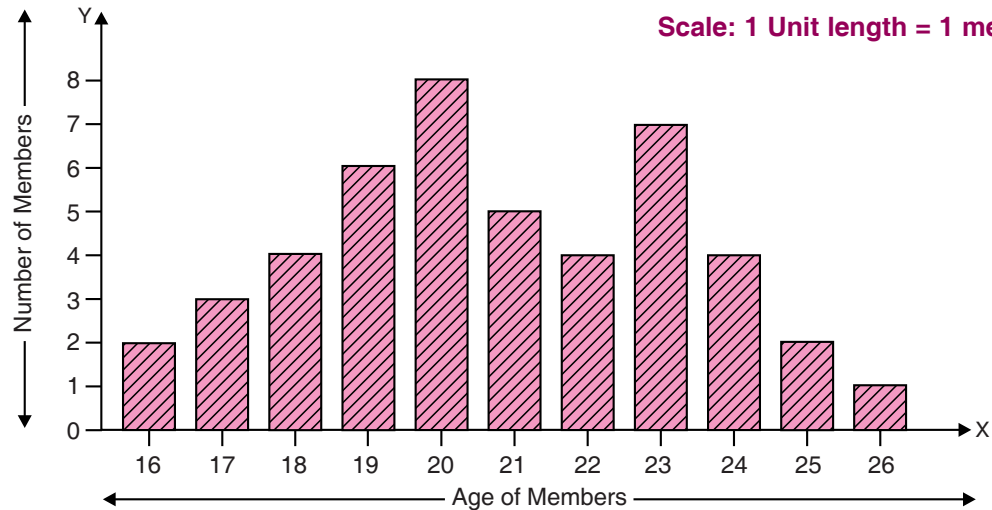


Read the graph and answer the following questions:

- What is the total number of books in the library?
 - What kind of books are the maximum?
 - Find the ratio of poetry books to the grammar books.
 - What kind of books are the minimum?
8. The bar graph below, shows the ages of all the members of a hockey club. Using the bar graph, answer the questions that follow.

Age of Members of a Hockey Club

Scale: 1 Unit length = 1 member



- How many members are 26 years of age?

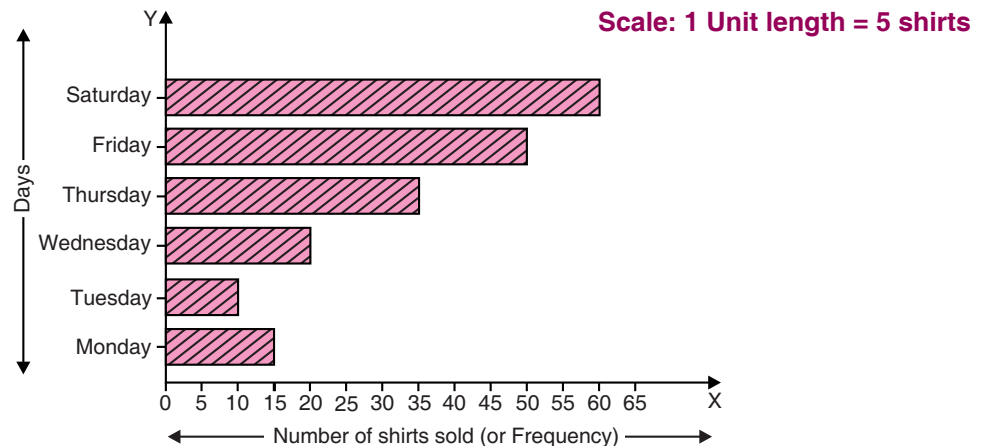
- (b) How many members are under 20 years of age?
 (c) How many members are over 20 years of age?
 (d) How many members the club has altogether?

9. The approximate number of post offices in India in the years 1961 to 1995 was as follows:

Years	1961	1970	1977	1990	1995
Approximate Number of Post Offices	4500	7500	8000	11500	12000

Draw a bar graph to represent this information.

10. Observe the given bar graph which is showing the sale of shirts in a readymade shop from Monday to Saturday.



Now answer the following questions:

- (a) What information does the above bar graph give?
 (b) On which day the maximum number of shirts were sold? How many shirts were sold on that day?
 (c) On which day the minimum number of shirts were sold?
 (d) How many shirts were sold on Thursday?
11. Find the mean and median of:
 (a) 45, 50, 52, 30, 40, 55, 70, 50
 (b) 7, 8, 9, 6, 4, 5, 10, 10, 3, 5, 8.
12. The mean of 7, 10, 11, 15 and x is 10. Find the value of x .
13. The mean of four numbers a, b, c, d is 14, and the mean of five numbers a, b, c, d, x is 12. Find the value x .
14. If the mean of 6, $y, 7, x$ and 14 is 8, find the sum of x and y .
15. Find the mean of all factors of 24.
16. The weights (in kg) of 5 men are 62, 65, 69, 66 and 61. Find the median weight.

ANSWERS

1.

Outcome	Tally Mark	Frequency
1	III	8
2	II	7
3	I	6
4		5
5		5
6	IIII	9

(a) 4 and 5.

(b) 6.

2.

Number of Accidents	Tally Mark	Frequency
0	IIII	4
1	IIII	4
2		5
3		5
4	II	7
5	IIII	3
6	I	1
7	—	0
8	I	1

(a) four days.

(b) 18 days.

7. (a) 1,800 books (b) drama books (c) 3 : 2 (d) grammar.
8. (a) 1 member (b) 15 members (c) 23 members (d) 46 members
10. (a) Sale of shirts in a readymade shop from Monday to Saturday.
 (b) Saturday; 60 shirts (c) Tuesday (d) 35 shirts.
11. (a) Mean = 49, Median = 50 (b) Mean = 7; Median = 7
12. $x = 7$
13. $x = 4$
14. $x + y = 13$
15. 7.5
16. 65 kg.