

Exercise 7.2

1. The following data refer to sales (in crores of ₹) of a company for five years. Represent it with a simple bar diagram.

<i>Year</i>	<i>Sales</i>
1981	12
1982	15
1983	19
1984	25
1985	40

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2. The following is the central government expenditure (in crores of rupees) for various sectors of the economy in the Third Five-Year Plan:

<i>Sector</i>	<i>Expenditure</i> <i>(in crores of rupees)</i>
Transport and communication	620
Irrigation and Power	570
Agriculture and Community Development	350
Industry	280
Rural Services	190

Represent it by a bar diagram.

3. In a study on certain disease, the following data were obtained.

<i>Age at first detection (in years)</i>	<i>Number of patients</i>
4 – 8	2
8 – 12	12
12 – 16	15
16 – 20	25
20 – 24	18
24 – 28	12
28 – 32	3
32 – 36	1

Represent the data by a histogram.

4. Draw the histogram for the following data:

<i>Class interval</i>	<i>Frequency</i>
25 – 29	5
30 – 34	15
35 – 39	23
40 – 44	20
45 – 49	10
50 – 54	7

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5. The ages of 50 teachers working in a secondary school in a big city are as follows :

<i>Age (in years)</i>	<i>No. of teachers</i>
20 – 25	2
25 – 30	4
30 – 35	5
35 – 40	10
40 – 45	15
45 – 50	8
50 – 55	5
55 – 60	1

Represent the above data by a histogram.

6. Draw a histogram of the following data :

<i>Monthly wages (in rupees)</i>	<i>Number of workers</i>
325 – 350	30
350 – 375	45
375 – 400	75
400 – 425	60
425 – 450	35
Total	245

7. Draw a histogram for the daily earnings of 30 drug stores given in the following table :

<i>Daily earnings (in rupees)</i>	<i>Number of stores</i>
150 – 200	14
200 – 250	9
250 – 300	3
300 – 350	4

8. The ages of workers in a factory are as follows:

<i>Age (in years)</i>	<i>Number of workers</i>
11 – 13	3
13 – 15	4
15 – 17	5
17 – 19	6
19 – 21	5
21 – 23	4
23 – 25	3

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Represent the above data by a histogram.

9. The monthly profits (in rupees) of 100 shops are distributed as follows:

<i>Profit per shop</i>	<i>Number of shops</i>
0 – 50	12
50 – 100	18
100 – 150	27
150 – 200	20
200 – 250	17
250 – 300	6

Draw the histogram and frequency polygon for the above data.

10. Construct a histogram and a frequency polygon for the following data where the distribution of height (in cm) of 100 children is given below:

<i>Height (in cm)</i>	<i>No. of children</i>
124 – 128	5
128 – 132	8
132 – 136	17
136 – 140	24
140 – 144	16
144 – 148	12
148 – 152	6
152 – 156	4
156 – 160	3
160 – 164	5

11. The following is the distribution of total household expenditure (in rupees) of manual workers in a city:

<i>Expenditure (in rupees)</i>	<i>Number of manual workers</i>
100 – 150	25
150 – 200	40
200 – 250	33
250 – 300	28
300 – 350	30
350 – 400	22
400 – 450	16
450 – 500	8

Draw a histogram and a frequency polygon representing the above data.

12. Following table shows a frequency distribution for the speed of cars passing through at a particular spot on a high way:

<i>Class interval (in km / h)</i>	<i>Frequency</i>
30 – 40	3
40 – 50	6
50 – 60	25
60 – 70	65
70 – 80	50
80 – 90	28
90 – 100	14

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Draw a histogram and frequency polygon representing the data above.

13. Represent the data given below by a histogram:

<i>Age (in years)</i>	<i>Number of workers</i>	<i>Age in (years)</i>	<i>Number of workers</i>
11 – 13	3	19 – 21	5
13 – 15	4	21 – 23	4
15 – 17	5	23 – 25	3
17 – 19	6		

14. Represent the following data by a histogram and construct the frequency polygon.

<i>Wages (in ₹)</i>	<i>Frequency</i>
4 – 6	2
6 – 8	8
8 – 10	15
10 – 12	12
12 – 14	2
14 – 16	1

15. The following table gives the distribution of students of two sections according to the marks obtained by them.

Section A		Section B	
Marks	Frequency	Marks	Frequency
0 – 10	2	0 – 10	5
10 – 20	12	10 – 20	11
20 – 30	18	20 – 30	15
30 – 40	13	30 – 40	12
40 – 50	5	40 – 50	7

Represent the marks of the students of both the sections on the same graph by two frequency polygons.

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