For grouped data, the end points of class intervals are specified on the horizontal axis and the number of observations (or frequencies) along the vertical axis of the graph. Often class mid-values are written on the horizontal axis rather than the end points of class intervals. In either case, the width of each bar indicates the class interval while the height indicates the frequency of observations in that class.

Listed below are the various types of histograms:

(i) Simple bar charts
(ii) Grouped (or multiple) charts
(iii) Deviation bar charts
(iv) Subdivided bar charts
(v) Paired bar charts
(vi) Sliding bar charts
(vii) Relative frequency bar charts
(viii) Percentage bar charts

Figure 2.2 is a histogram for the frequency distribution given in Table 2.12 of Example 2.1.

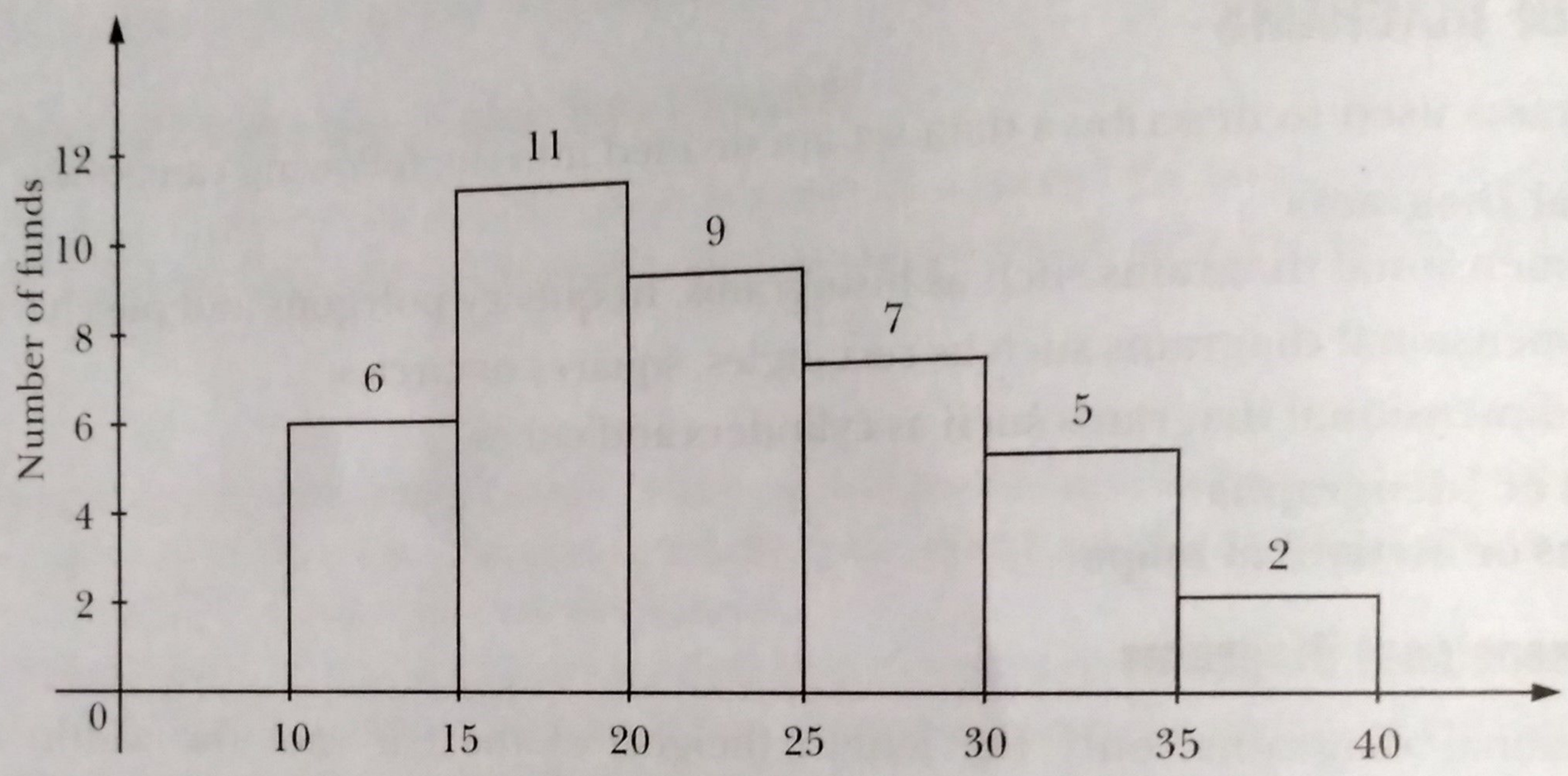

Figure 2.2: Histogram for Mutual Funds

Simple Bar Diagrams (Charts) The simple bar charts can also be used for displaying values of categorical variables. To do this observations are first tallied into summary tables and then graphically displayed as either *bar charts* or *pie charts*.

Bar charts are used to represent only one characteristic of data and there are as many bars as number of observations. Since bars are of the same width and only the length varies, the relationship among them can be easily established.

Sometimes only lines are drawn for comparison of given variable values. The different measurements to be shown should not have too much difference, so that the lines may not show too much dissimilarity in their heights. The lines may be either vertical or horizontal depending upon the type of variable—numerical or categorical.

Example 2.16: The data on the production of oil seeds in a particular year is presented in Table 2.34

Table 2.34

Oil Seed	*Yield (Million tonnes)*	*Percentage Production (Million tonnes)*
Ground nut	5.80	43.03
Rapeseed	3.30	24.48
Coconut	1.18	8.75
Cotton	2.20	16.32
Soyabean	1.00	7.42
	13.48	100.00