Histogram

HISTOGRAM

Steps:

1. Arrange the data in an ascending order
2. Make class interval so that all the data are covered
3. Construct a frequency table
4. Draw adjacent bars having the heights determined by the frequency

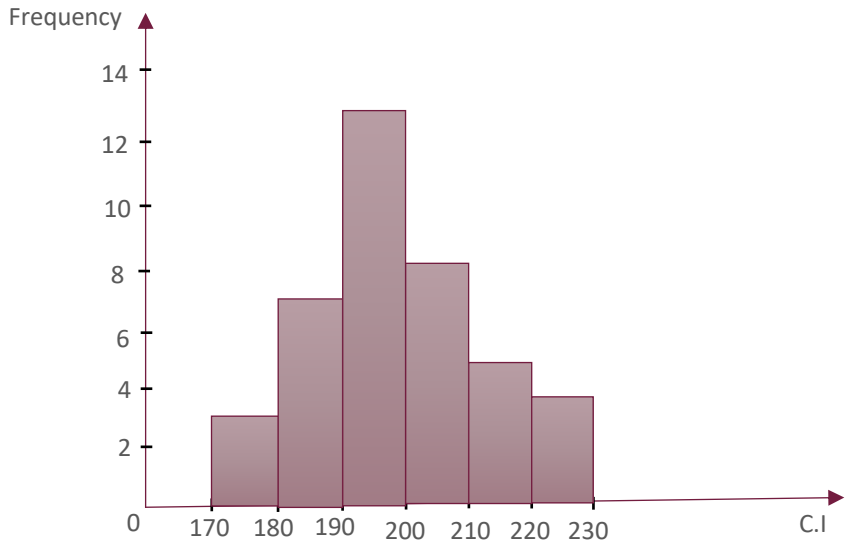
The following data shows the blood cholesterol level of 40 people. Construct a histogram for the given data.

213, 192, 187, 216, 221, 174, 200, 181, 206, 212, 193, 200, 193, 195, 221, 196, 199, 205, 191, 204, 220, 178, 196, 171, 204, 183, 183, 211, 194, 191, 194, 188, 202, 184, 183, 200, 193, 213, 191, 227

Ans.

171, 174, 178, 181, 183, 183, 183, 184, 187, 188, 191, 191, 191, 192, 193, 193, 193, 194, 194, 195, 196, 196, 199, 200, 200, 200, 202, 204, 204, 205, 206, 211, 212, 213, 213, 216, 220, 221, 221, 227

Class interval	Frequency
170-180	3
180-190	7
190-200	13
200-210	8
210-220	5
220-230	4



1. The following data set represents the scores on intelligence quotient (IQ) examinations of 40 sixth-grade students at a particular school:

   114, 122, 103, 118, 99, 105, 134, 125, 117, 106, 109, 104, 111, 127, 133, 111, 117, 103, 120, 98, 100, 130, 141, 119, 128, 106, 109, 115, 113, 121, 100, 130, 125, 117, 119, 113, 104, 108, 110, 102

   Present this data set in a frequency histogram.

2. The following data (in thousands of dollars) represent the net annual income for a sample of taxpayers:

   47, 55, 18, 24, 27, 41, 50, 38, 33, 29, 15, 77, 64, 22, 19, 35, 39, 41, 67, 55, 121, 77, 80, 34, 41, 48, 60, 30, 22, 28, 84, 55, 26, 105, 62, 30, 17, 23, 31, 28, 56, 64, 88, 104, 115, 39, 25, 18, 21, 30, 57, 40, 38, 29, 19, 46, 40, 49, 72, 70, 37, 39, 18, 22, 29, 52, 94, 86, 23, 36

   a. Graph this data set in a histogram having 5 class intervals.
   b. Graph this data set in a histogram having 10 class intervals.