Frequently Asked Questions

1. What is a Histogram?

Answer: A histogram is a graphical display of data using bars of different heights. Total area of the rectangles in a histogram represents the total frequency. A histogram with more number of class intervals is more effective in depicting the structure of the frequency distribution.

2. Why histogram is considered as a popular tool?

Answer: A histogram is a popular tool to organize and display a large set of measurements presented in a table, into a more user friendly format.

3. Is it possible to show the histogram graph without Title?

Answer: The title briefly describes the information that is contained in the Histogram. Thus, title is important to show in the graph.

4. What are the advantages of histogram?

Answer: Advantages of histogram are:

- Each rectangle shows distinctly separate class in the distribution
- The area of the rectangle in relation to all other rectangles shows the proportion of the total number of observations pertaining to that class

5. What are the difference between histogram and bar graph?

Answer: Difference between histogram and bar graph:

Histogram	Bar Graph
It consists of rectangles touching each other.	It consists of rectangles normally separated from each other with equal space.
The frequency is represented by the area of each rectangle.	The frequency is represented by height. The width has no significance.
It is two dimensional.	It is one dimensional. It is used as a virtual aid to represent data.

6. What are the five W's of data and why it is important?

Answer: Five W's of data are: who, where, what, when and why.
These are important for understanding and interpreting the data.

7. What are the two important characteristics of bars?

Answer: Two important characteristics of bars are height and width.
The height represents the number of times the values within an interval occurred.

The width represents the length of the interval covered by the bar. It is the same for all bars.

8. What would be the class interval for the following data points?
   35, 100, 300.

Answer: For 35 – Class interval would be 5-7.
For 100 – Class interval would be 10.
For 300 – Class interval would be 20.

9. What are the disadvantages of histogram?

Answer: Disadvantages of histogram are:

- It cannot be constructed for open ended classes
- It can be misleading if the distribution has unequal class intervals and suitable adjustments in frequencies are not made

10. What is the use of legend in the graph?

Answer: The legend provides additional information that documents where the data came from and how the measurements were gathered.

11. Define Histogram.

Answer: According to Opermann -"A histogram is a bar chart or graph showing the frequency of occurrence of each value of the variable being analyzed."

12. Why histogram is easy to understand?

Answer: A Histogram helps the viewer to understand where the majority of values falls in a measurement scale, and how much variation is there in the data.

13. How the starting point of the class interval is determined while constructing the histogram?

Answer: In order to determine the starting point of the class interval use the smallest data point in your measurements as the starting point of the first interval. The starting point for the second interval is the sum of the smallest data point and the interval width.

14. What are the key points to keep in mind while plotting the data in the graph?

Answer: While plotting the data we should keep in mind that the class intervals will appear in the horizontal axis, the frequencies in the vertical axis, and the height of the rectangle bars representing the frequency of each class interval. Check whether the graph so performed is logical and reasonable.

15. How do we calculate the width of the class interval?

Answer: To compute the interval widths divide the range by the number of intervals. When computing the interval width, round the data up to the next higher whole number to come up with values that are convenient to use.