# ATOMIC ENERGY EDUCATION SOCIETY <br> STUDY MATERIAL 

CLASS: VIII

## SUBJECT : MATHEMATICS

## UNIT 5 - DATA HANDLING

MODULE - 3/5

## HISTOGRAM:

- Grouped data can be presented using histogram.
- Histogram is a type of bar diagram, where the class intervals are shown on the horizontal axis and the heights of the bars show the frequency of the class interval.
- There is no gap between the bars as there is no gap between the class intervals.



## TO DRAW A HISTOGRAM

In drawing the histogram of a continuous grouped frequency distribution, we use the following algorithm.

## ALGORITHM

Step I - Take a graph paper and draw two perpendicular lines, one horizontal and one vertical, intersecting at O (say). Mark them at OX and OY.

Step II - Take a horizontal line OX as X -axis and vertical line OY as Y -axis.
Step III - Choose a suitable scale for X-axis and along X-axis represent class - limits.

Step IV - Choose a suitable scale for Y -axis and mark frequencies around Y -axis.
Step V - Construct rectangles with class intervals as bases and respective frequencies as heights.

## Note:

1. It should be noted that the scale for X -axis may not be same as the scale for Y -axis. The selection of scale depends upon our convenience and the type of data.
2. In histograms there is a kink before the class interval on horizontal axis. It means that markings on that axis do not begin with zero and are started from some other desired point.

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