

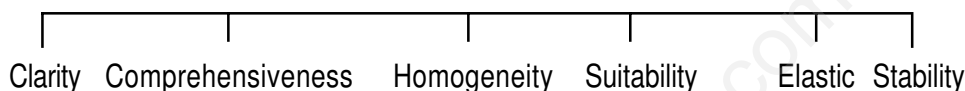
Organisation & Presentation of Data

* **Key points :**

organisation of data refers to the systematic arrangement of figures in such a form that comparison of masses of similar data may be facilitated and further analysis may be possible.

* Classification is the grouping of related facts into different classes.

Characterstics of Classification



* Variable is a characteristic or a phenomenon which is capable of being measured and changes its value overtime.

* Frequency is number of times on item repeats itself in the series.

* Continuous variables are those variables that increase continuously or in fraction.

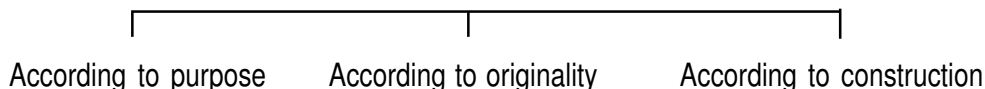
* A mass of data collected by investigator in its crude form called raw data. It is an unorganised mass of the various items.

* Both the lower limit and the upper limit of a class - interval are included in that class itself called inclusive series.

* When the class intervals are so fixed that the upper limit of one class - interval is the lower limit of the next class interval, it is called an exclusive series.

* The method of arranging data orderly in form of raws and columns is known as tabulation.

Kinds of tables



Features of a good table

- * Compatible title
 - * Helpful in comparison.
 - * Ideal size
 - * Stubs
 - * Clarification of units.
 - * Percentage and ratio.
 - * Source simple.
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- * Bar diagrams are those diagrams in which data are presented in the form of bars and rectangles.
 - * Utility / Merits of Diagrammatic Presentation.
 1. Make simple to compare data
 2. Attractive and eye catchers.
 3. Longterm memorising effect.
 4. Useful in comparative / relative study.
 - * Sub divided bar diagrams are those diagrams Which present simultaneously, total values and parts there in a set of a data.
 - * Pie or circular diagram is a circle divided into various segment showing the percent value of a series.
 - * Histogram is graphical presentation of a frequency distribution of a continuous series.
 - * Frequency polygon is drawn by joining the mid points of the tops of rectangles in a histogram.
 - * Frequency curve is obtained by joining the points of a frequency polygon through free hand smoothed curves not by straight lines.
 - * Cumulative frequency curves or ogive curve is the curve which is constructed by plotting cumulative frequency data on the graph paper in the form of a smooth curve.

1 Marks Questions

1. What is meant by organisation of data?
2. State the meaning of classification.
3. What is meant by homogeneity of data?
4. State the meaning of qualitative classification.
5. Define raw data.
6. Define discrete series or frequency array.
7. What is meant by exclusive series?
8. Write the name of the series which include all items up to its upper limit.
9. What is meant by frequency?
10. State the meaning of class intervals.
11. What is meant by tabulation?
12. Define caption as a part of table.
13. What is meant by manifold table?
14. Define bar diagrams.
15. State the meaning of sub-divided bar diagrams.
16. Define pie-diagram.
17. What is meant by histogram?
18. State the meaning of frequency curve.
19. Write the name of the curve which is formed by joining mid point of the top of all rectangles in a histogram.
20. Define the ogive curve.
21. What is meant by false base line.

3/4 Marks questions

1. State the objectives of classification.
2. Write the characteristics of a good classification.
3. Define the discrete and continuous variables with the help of example.

4. Write three importances of classification.
5. State the features of a good table.
6. State the merits of tabular presentation.
7. Define pie diagram. Write the steps of making pie diagram.
8. Write any three differences between tabular and diagrammatic presentation.
9. Make a frequency distribution from following dataes.

Use exclusive method and first class interval is 100-110

125 108 112 126 110 113 136 130 149 155
 120 130 126 138 125 132 119 125 140 148
 145 137 144 150 142 150 137 132 166 154

10. Present the following data by multiple bar diagram

Year	Ist class	IInd Class	Passed
2007	40	80	130
2008	80	100	120
2009	100	120	180

11. Present the following data of final consumption expenditure of a family with the help of a pie diagram.

Items	Expenditure (in Rupees)
Cloths	1600
Food	2400
Education	1000
Electricity	1500
Others	2500

12. Make a frequency distribution by using the class interval of 4. use exclusive method.

10	17	15	22	16	11	19	24	29	18
25	26	32	14	20	17	23	27	30	19
15	18	24	35	15	18	21	28	33	18
34	13	10	16	22	20	29	19	23	31

13. Make a Histogram from following data.

Marks	No. of students.
30-35	10
35-40	24
40-45	30
45-50	44
50-55	28
55-60	22
60-65	14
65-70	8

14. Present the following data of the construction of building of a school. with the help of pie diagram.

Items	Percentage expenditure.
Wages	15
Bricks	20
Wooden work	5
Paint	10
Steel	25
Cement	12
Supervision	7
Others	6

5/6 marks questions

1. Explain the parts of a good table.
2. Explain the precautions to be observed while constructing a good table.
3. Make “Less than” and “More than” ogive curves from following datas.

Marks	No. of Students
0-10	20
10-20	14
20-30	24
30-40	26
40-50	28
50-60	38
60-70	40
70-80	10

4. Make Histogram and frequency polygon from following data.

Marks	No. of students
30-35	10
35-40	12
40-45	20
45-50	26
50-55	38
55-60	28
60-50	18
65-70	12

Answer of 1 mark questions.

1. Organisation of data refers to the systematic arrangement of figures in such a form that comparison of masses of similar data may be facilitated and further analysis may be possible.
2. Classification is the grouping of related facts into different classes.
3. The similarity of features of all the units of a class called homogeneity.
4. The classification according to qualities or attributes of the data called qualitative classification.
5. A mass of data in its crude form is called raw data. It is an unorganised mass of the various items.
6. A discrete series of frequency array is that series in which data are presented in a way that exact measurement of items are clearly shown.
7. When the class intervals are so fixed that the upper limit of one class interval is the lower limit of the next class interval it is called an exclusive series.
8. Inclusive series.
9. Frequency is number of times an item repeats itself in the series.
10. The class intervals are the lowest and highest values that can be included in the class.
11. The method of arranging data orderly in form of rows and columns is known as tabulation.
12. Caption is the title given to the columns of a table. It indicates information contained in the columns.
13. Manifold table shows more than three characteristics of the data.
14. Bar diagrams are those diagrams in which data are presented in the form of bars and rectangles.
15. Sub divided bar diagrams are those diagrams in which more than

one data are presented simultaneously, total values and parts there in a set of data.

16. Pie diagram is a circle divided into various sagement showing the percent value of a series.
17. Histogram is a graphical presentation of a frequency distribution of a continuous series.
18. Frequency curve is obtained by joining the points of a frequency polygan through freehand smoothed curves not by straight lines.
19. Frequency polygon.
20. It is the curve which is constructed by plotting cumulative frequency data on the graph paper in a form of a smooth curve.
21. When there is a large gap between zero and minimum value of a variable than to minimise this gap we use false base line.