Chapter # 2: **Presentation of data**

1. **What do you meant by the term 'classification'?**

Ans: The process of arranging data into classes or categories according to some common characteristics present in the data is called classification.

Examples:

1- Sorting of letters in a post office, the letters are classified according to the cities

2- The students of the college are classified according to their hair color.

3- The students of the university are classified according to their heights.

2. **Write down the types of classification.**

Ans: The data may be classified according to one, two or many characteristics:

i. One-way Classification: When the data is classified by one characteristic, it is called one way classification.
ii. Two-way classification: When the data is classified by two characteristics, it is called two-way classification.
iii. Many-ways classification: When the data is classified by many characteristics, it is called many-way classification.

3. **How many forms of classification?**

Ans: There are four main forms of classification:

i. Quantitative Classification.
ii. Qualitative Classification.
iii. Geographical Classification.
iv. Chronological or temporal Classification.

Quantitative Classification: When the data is classified by quantitative characteristics, it is called quantitative classification. For example, weight, height, income, etc.
Qualitative Classification: When the data is classified by qualitative characteristics, it is called qualitative classification. For example, sex, religion, color, intelligence, etc.
Geographical Classification: When the data is classified by geographical regions or locations, it is called geographical or spatial classification. For example, provinces, divisions, districts, cities, etc.

Chronological Classification: When the data is classified according to its time of occurrence, it is called chronological or temporal classification. For example, years, months, weeks, days, etc.

4. **Define tabulation.**

Ans: The process of arranging data into rows and columns is called tabulation.

5. Differentiate between class limits and class boundaries.

Ans:

Class Limit: Each class start from a lower limit and ends at an upper limit.

For Example:

Class	20 ----30	30 ------40	40 --------50	50 --------60

In the above example 20 is lower limit and 30 is upper limit of the first class and same goes for the others.

Class Boundary: Class limits are called class boundaries if the upper limit of 1st class equals to the lower limit of 2nd class and so on. Hence if classes progress without break, class limits are called class boundaries. In case we don't have equal classes then it can be converted easily by increasing the upper class limit and decreasing the lower class limit by the same amount so that there are no gaps left among the classes. For example add 0.5 in upper class and 0.5 in lower class.

Class	20 ----29	30 ------39	40 --------49	50 --------59
Class Boundaries	19.5 ------29.5	29.5 -------39.5	39.5 ------- 49.5	49.5 ---------59.5

6. What is meant by relative frequency of a class?

Ans: The frequency of a class divided by total frequency of the class is called relative frequency.

7. Define frequency distribution.

Ans: A frequency distribution is a tabular arrangement of data in which various items are arranged into classes and the number of items falling in each class (Called class frequency).

8. Define class mark.

Ans: The class mark or the midpoint is that value which divides a class into two equal parts. It is obtained by adding the lower and upper class limits or class boundaries of a class and dividing the resulting total by 2.

9. Define histogram.

Ans: A histogram consists of a set of adjacent rectangles having class boundaries along the x-axis and frequencies along y-axis.

10. What is the table?

Ans: A systematic arrangement of data into rows and columns is called table.

11. What is grouped data?

Ans: Data presented in the form of a frequency distribution is called grouped data.

12. Write down the main parts of the table.

Ans: Following are the different parts of a table out of which first four are main part:

i. Title
ii. Column caption & box head
iii. Row caption & stub
iv. Body of the table
v. Prefatory note

vi. Foot note
vii. Source note

(..... Title .....)
Prefatory Note

Box-Head → / Stub ↓	Column Captions				
Row Captions					
			Body		

●●Footnote
●●Sourcenote

13. What is simple classification?

Ans: When the data is classify according to one characteristic and then it is known as simple classification.