## Class: XI

Department of Commerce
Topic: Organisation of data

1. Define the following:
a. Variable
b. Raw data
c. Qualitative classification.
d. Frequency
e. Chronological classification
f. Frequency distribution
(Refer notes)
2. Can there be any advantage in classifying things? Explain with an example from daily life (Refer notes)
3. Distinguish between a discrete and continuous variable. (Refer notes)
4. Explain the inclusive and exclusive method of classifying the data. (Refer notes)
5. The frequency distribution of two variables is known as:
a. Univariate distribution
b. Bivariate distribution
c. Multivariate distribution
d. None of the above.

A: b
6. The unclassified data which are highly disorganized are called $\qquad$ (Raw data)
7. To draw meaningful conclusions from raw data is a tedious task because:
a. They are highly disorganized
b. They are often very large and cumbersome to handle.
c. They do not yield to statistical methods easily
d. All of the above.

A: d
8. After collecting data the next step is to $\qquad$ and present them in a classified form.(organize)
9. The raw data can be grouped according to time. Such a classification is known as a $\qquad$
a. Chronological classification
b. Spatial classification
c. Qualitative classification
d. Quantitative classification

## A: a

10. A variable like the 'number of students in a class' is a $\qquad$ variable. (discrete)
11. $\qquad$ - is a graphic or diagrammatic representation of a frequency distribution. (frequency curve)
12. Both the upper and the lower-class limits are included in the $\qquad$ method of class intervals. (inclusive)
13. In the case of exclusive class intervals, upper limit is not included. True / False. (False)
14. The counting of class frequency is done by $\qquad$ Against the particular class. (Tally marks)
15. A $\qquad$ . can be defined as the frequency distribution of two variables. (Bivariate frequency distribution)
16. Distinguish between univariate and bivariate frequency distribution. (refer notes)
17. Calculate the range of the population of India from the following data:

| Year: | 1951 | 1961 | 1971 | 1981 | 1991 | 2001 | 2011 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population (cr): | 35.7 | 43.8 | 54.6 | 68.4 | 81.8 | 102.7 | 121.0 |

Ans: range of population of India $=$ largest population - smallest population

$$
\begin{gathered}
121.0-35.7 \\
\mathrm{R}=85.3 \mathrm{Cr}
\end{gathered}
$$

18. Prepare a frequency array of marks obtained by 25 students of a class in the Economics test: $20,15,20,30,40,25,25,30,40,20,35,35,50,15,50,25,40,40,30,50,25,30,30,15,45$

A: Marks: $\begin{array}{lllllllll}15 & 20 & 25 & 30 & 35 & 40 & 45 & 50\end{array}$
Tally marks:
Frequency: $\begin{array}{llllllllll}3 & 3 & 4 & 5 & 2 & 4 & 1 & 3\end{array}=\operatorname{Total} \sum \mathrm{f}=25$
19. Following are the marks obtained by 20 students in an English test:
$5,16,17,17,20,21,22,22,22,25,25,25,26,26,30,31,31,34,35,42,48$
Prepare a frequency distribution taking class interval of 10 using exclusive and inclusive method:
a. Exclusive Method:

C-I: $\quad 0-10 \quad 10-20 \quad 20-30 \quad 30-40 \quad 40-50$

Tally bars:
Frequency: $\begin{array}{llllll}1 & 3 & 9 & 5 & 2\end{array}=\operatorname{Total} \sum \mathrm{f}=20$
b. Inclusive Method:
C-I:
0-9
10-19
20-29 30-39 40-49

Tally bars:
Frequency: $\begin{array}{llllll}1 & 3 & 9 & 5 & 2= & \operatorname{Total} \sum \mathrm{f}=20\end{array}$
20. Change the following into continuous series:

Mid - value: $\begin{array}{lllllll}5 & 15 & 25 & 35 & 45 & 55\end{array}$
Frequency: $\begin{array}{lllllll}16 & 24 & 30 & 18 & 8 & 4\end{array}$
A: $\mathrm{C}-\mathrm{I}$ : 0-10 10-20 20-30 $30-40$ 40-50 50-60

Frequency: | 16 | 24 | 30 | 18 | 8 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

