## INDIAN SCHOOL AL WADI AL KABIR

## Class: XI

 Department: CommerceWorksheet No :1 Topic: Presentation of Data

1. Is Pie diagram a bar diagram?

A: No. It is a circular diagram which draws percentage breakdown by portioning a circle into various parts.
2. Distinguish between classification and tabulation. (refer notes)
3. Distinguish between simple bar diagram and component bar diagram. (refer notes)
4. Which of the following is a diagrammatic presentation of data?
a. geometric diagram
b. frequency diagram
c. arithmetic line graph
d. all of these

A: d
5. A histogram is never drawn for a ------- variable. (discrete)
6. We can have a ------- (bar diagram/Histogram) both for discrete and continuous variables. (bar diagram)
7. Ogives can be helpful in locating graphically the:
a. mode
b. mean
c median
d. None of these

A:c
8. Width of bars in a bar diagram need not be equal. (True/False)

False, Bar diagram comprises a group of equi spaced and equi width rectangular bars for each class or category of data.
9. Width of rectangles in a histogram should essentially be equal. (True/False) False
If the class intervals are of equal width, the area of the rectangles are proportional to their respective frequencies and width of rectangles will be equal. However, sometimes it is convenient or necessary to use varying width of class intervals and hence unequal width of rectangles.
10. What kind of diagrams are more effective in representing the following?
(a) Monthly rainfall in a year
(b) Composition of the population of Delhi by religion
(c) Components of cost in a factory

Answer:
(a) The monthly rainfall in a year can be best represented by a bar diagram as only one variable i.e., monthly rainfall is to be presented diagrammatically. The rainfall is plotted on Y -axis in the corresponding month that is plotted on the X -axis.
(b) Composition of the population of Delhi by religion can be represented by a component bar diagram. A component bar diagram shows the bar and its sub-divisions into two or more components. Thus, the total population can be sub divided in terms of religion and presented through a component bar diagram.
(c) Different components of cost in a factory can most effectively be depicted through a pie chart. The circle represents the total cost and various components of costs are shown by different portions of the circle drawn according to percentage of total cost each component covers.
11. Data represented through a histogram can help in finding graphically the a. mean
b. mode
c. median
d. All of these

A: b
12. Bar diagram is a:
a. one-dimensional diagram
b. two -dimensional diagram
c. diagram with no dimension
d. none of the above

A: a
13. Histogram is prepared in case of:
a. individual series
b. discrete series
c. continuous series
d. none of the above

A: c
14. While preparing Arithmetic line graph, we show ------- on the $\mathrm{X}-$ axis.
a. time
b. expense
c. income
d. all of the above

A: a
15. Diagrammatic representation of the cumulative frequency distribution is:
a. frequency polygon
b. ogive
c. histogram
d. none of the above

A: b
16. Ogives can be used to calculate
a. Range
b. AM
c. Mode
d. Median

A: d
17. In a ---- presentation, data are presented in rows (read horizontally) and columns (read vertically).
a. tabular
b. diagrammatic
c. graphic
d. all of these

A: a
18. Arithmetic line graphs are also known as:
a. Linear graphs
b. Non-linear graphs
c. Time-Series graphs
d. None of these

A: c
19. In this classification time becomes the classifying variable and data are categorised according to time:
a. qualitative
b. quantitative
c. temporal
d. spatial

A: c
20.

Prepare histogram and frequency polygon from the following data:

| Marks | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Students | 5 | 8 | 15 | 11 | 6 | 4 |

21. 

From the following data, construct frequency histogram, frequency polygon and frequency curve.

| Wages (₹) | $0-10$ | $10-20$ | $20-30$ | $30-40$ | $40-50$ | $50-60$ | $60-70$ | $70-80$ | $80-90$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> Workers | 2 | 4 | 11 | 15 | 25 | 18 | 15 | 4 | 1 |

22. 

Draw the 'less than' and 'more than' ogive on the same graph paper from the following data:

| Marks | $0-20$ | $20-40$ | $40-60$ | $60-80$ | $80-100$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Number of Students | 40 | 51 | 64 | 38 | 7 |

23. 

Following table gives hypothetical figures of exports from India during the years 2014-15 to 2018-19. Present the information in the form of a suitable graph.

| Year | $2014-15$ | $2015-16$ | $2016-17$ | $2017-18$ | $2018-19$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Exports $(₹$ crore $)$ | 600 | 640 | 670 | 780 | 900 |

24. 

Represent the following data related to population (in thousands) of men and women in a village in different years graphically:

| Year | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Men | 10 | 13 | 15 | 14 | 17 | 18 | 21 |
| Number of Women | 12 | 18 | 16 | 17 | 20 | 22 | 24 |

(Refer notes for drawing graphs. Graphs to be done in the graph paper and stick it in your note books)

