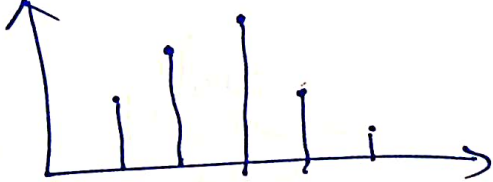


Anna Adarsh College for Women

BSc. Computer Science with Data Science.

STATISTICS - I

Section - A

1. Secondary Data: The data which has been already collected. All published data are Secondary Data. (eg) Data found Internet, Magazine, Newspaper, Journals etc. . . .
2. The data which is in order is called Ordinal Data. eg: Low, Moderate, High.
3. (i) Easy to remember.
(ii) Easy to understand.
(iii) It facilitates comparison.
4. Line Diagram is drawn by lines, in a graph. (eg)

5. (i) Mean
(ii) Median
(iii) Mode
(iv) Q.M
(v) H.M

$$6. H.M = \frac{n}{\sum(\frac{1}{x})}$$

$$a.M = A.L. \left(\frac{\log x}{n} \right)$$

$$7. Q.D = \frac{Q_3 - Q_1}{2}$$

$$Q_1 = \text{Size of } \left(\frac{n+1}{4} \right)^{\text{th}} \text{ value}$$

$$Q_3 = \text{Size of } \left(3 \frac{n+1}{4} \right)^{\text{th}} \text{ value.}$$

$$8. S.D = \sqrt{\frac{\sum(x - \bar{x})^2}{n}}$$

$$\bar{x} = \frac{\sum x}{n}$$

9. Rank Correlation: Finding the relationships between two variables when their ranks are

given $R = 1 - \frac{6 \sum D^2}{n(n^2 - 1)}$.

10. Association of Attributes:

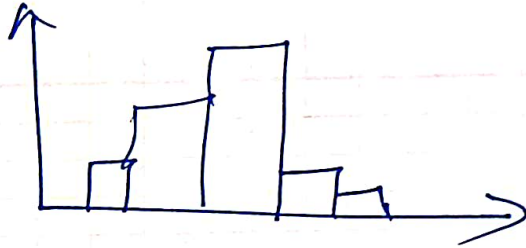
11. Nominal Data: Suppose we have count no of Boys and girls in a class, we can count by

1. Boys 2. Girls.

(or)

Gender: 1. Male, 2. Female.

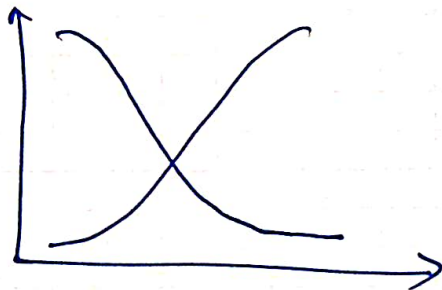
12. Histogram: It is a continuous Bar Diagram drawn ~~for~~ ^{for} a given data.



13. Complete Section-B Enumeration: $5 \times 5 = 25$

Sample Survey:

14. Ogive Curve.



15. $\Sigma f = 30$ $\Sigma fx = 1848$

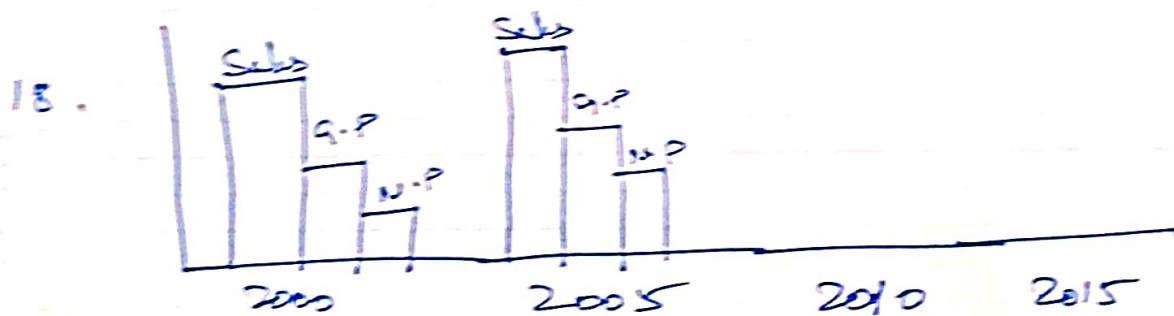
$$\bar{x} = 61.6$$

16. Q.D $Q_1 = 40$, $Q_3 = 60$

$$Q_3 = \frac{Q_3 - Q_1}{2} = 10$$

17. $\Sigma D^2 = 90$

$$R = 0.455$$



19. M.D $|d| = 30$

$$M.D = 3.455$$

Sec - C Any three $3 \times 10 = 30$

20. Different Methods of Collecting Primary Data.

21. Different types of diagrams and graphs to Represent Data.

22. Mean = 153.45

Median = 153.39

23. S.D

$$\sum fd = -25$$

$$\sum fd^2 = 205$$

$$A = 35$$

$$S.D = 19.62$$

24. $r = 0.575$