11/5/2022

VCD.....FYEME SEM II BUSINESS STATISTICS TIME : 2 HRS 30 MIN MARKS 75

Q. 1 Multiple Choice Questions (40 MARKS)

1) The measurement based on two values of the data is _____
   (i) Range (ii) Standard Deviation (iv) Mean (iv) percentile
2) Which average is affected most by extreme values?
   (i) Range (ii) Mode (iii) Arithmetic Mean (iv) Median
3) Correlation coefficient lies between_____
   (i) More than 1 (ii) less than -1 (iii) -1 & +1 (iv) more than 0
4) The two regression coefficients are 2 & 0.45, hence correlation coefficient is _____
   (i) 0.90 (ii) 0.30 (iii) 0.95 (iv) 0.03
5) If regression lines intersect each other at right angles, the correlation shall be_____
   (i) Positive (ii) Negative (iii) Zero (iv) Normal
6) Coefficient of correlation is denoted by_____
   (i) r (ii) R (iii) S (d) Z
7) income & expenditure will show_____
   (i) Positive correlation (ii) Negative correlation (iii) no correlation (iv) none
8) Coefficient of correlation is _____of units of measurement.
   (i) Dependent (ii) Independent (iii) Both (a) & (b) (iv) none
9) Coefficient of variation is calculated by the formula_____
   (i) $\frac{\bar{X}}{\sigma} \times 100$ (ii) $\frac{\bar{X}}{\sigma}$ (iii) $\frac{\sigma}{\bar{X}}$ (iv) $\frac{\sigma}{\bar{X}} \times 100$
10) Quartile divides the data in _____ parts.
   (i) 2 (ii) 4 (iii) 3 (iv) 10
11) The value which occurs with the maximum frequency is called_____
   (i) Median (ii) Mode (iii) Mean (iv) None
12) The sources of data are_____
   (i) Primary only (ii) Secondary only (iii) Primary & Secondary both (iv) Census
13) The data obtained from a newspaper are _____
   (i) Primary data (ii) Secondary data (iii) Both primary & secondary (iv) Census
14) Mean is a measure of _____
   (i) Central value (ii) Dispersion (iii) Correlation (iv) regression
15) Price and demand of goods will show_____
   (i) Positive correlation (ii) Negative correlation (iii) no correlation (iv) none
16) Coefficient of correlation is _____of units of measurement.
   (i) Dependent (ii) Independent (iii) Both (a) & (b) (iv) none
17) By graphs and diagrams _____
   (i) Data are surveyed (ii) Data are edited (iii) Data are presented (iv) Data are analysed

P.T.O

18) The objective of diagrammatic representation of data is_____
(i) Condensation (ii) Summarization (iii) Presentation (iv) analysis

19) In 1904,the rank correlation method was developed by_____
(i) Karl Pearson (ii) C.E. Spearman (iii) Bowlay (d) kelly

20) Median means_____
(i) 53^{th} percentile (ii) 5^{th} decile (iii) 6^{th} octile (iv) None of these

Q. 2) Attempt ANY ONE (07 MARKS)

A) Write Primary & Secondary data

B) Find median for the following data of 30 students.
21, 25, 36, 27, 44, 58, 57, 66, 72, 81, 23, 37, 85, 86, 55, 54, 62, 71, 30, 25, 40, 46, 57, 67, 53, 43, 40, 75, 89, 80.

Q. 3) Attempt ANY ONE (07 MARKS)

A) Find mode for the following data:

Class Interval	60-75	75-90	90-105	105-120	120-135	135-150
frequency	3	3	6	15	7	6

B) Find Arithmetic mean for the following data:

C.I	10-20	20-30	30-40	40-50	50-60
frequency	5	15	10	12	25

Q. 4) Attempt ANY ONE (07 MARKS)

A) Calculate standard deviation for the given data:

X	1	2	3	4	5
f	3	4	6	2	5

B) Write Merits and demerits of range

Q. 5) Attempt ANY ONE (07 MARKS)

A) For the following data calculate Pearson's coefficient of correlation.
$n = 12, \sum x = 45, \sum y = 44, \sum xy = 200, \sum x^2 = 128, \sum y^2 = 380.$

B) Find the regression equation of y on x when
$\sum x = 10, \sum y = 30, \sum xy = 300, \sum x^2 = 700,\ n = 5.$

Q. 6) Short notes (ANY TWO) (07 MARKS)

A) Demerits of Mean
B) Properties of a good measure of Dispersion.
C) Explain correlation by Diagram
D) What is sampling explain
E) Merits of mean Standard deviation.