

DURATION: - 2½ hrs

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MARKS:- 75

Note: - (1) All questions are compulsory.

(2) All questions carry equal marks.

(3) Figures to the right indicates full marks

- Q.1 Attempt any 4 20M
- A) Explain and classify different type of data CO1-C/U
- B) Give the relation between mean, median & mode with its char curve. CO1-C/U
- C) Draw histogram to represent the following data. CO1-R/C
- | Family Income | 20K-30K | 30K-40K | 40K-50K | 50K-60K | 60K-70K |
|-----------------|---------|---------|---------|---------|---------|
| No. of Families | 17 | 35 | 50 | 25 | 38 |
- D) Find the median of the following. CO1-R
3, 9, 6, 10, 5, 8, 4, 7
- E) Find the mode for the following distribution. CO1U/E
- | Marks | 0-10 | 10-30 | 30-60 | 60-80 | 80-90 |
|-----------------|------|-------|-------|-------|-------|
| No. of Students | 8 | 20 | 36 | 24 | 12 |
- F) Define range, list its merit & demerit CO2-U
- Q.2 Attempt any 4 20M
- A) What is measure of dispersion explain its type enlist the char of good measure of dispersion CO2-R
- B) Find range and coefficient of range for the following data. CO2-U
i) 63, 89, 98, 125, 79, 108, 117, 68,
63, 68, 79, 89, 98, 108, 117, 125
ii) 43.5, 13.6, 18.9 38.4 61.4 29.8
- C) Consider a dataset of following number 22, 12, 14, 7, 18, 16, 11, 15. 13. you are required to calculate the quartile deviation. CO2-U
- D) What is moment, explain type of moment with formula CO2-R
- E) What is std. deviation list merit & demerit? CO2-U
- F) Write a short notes on 'Kurtosis' CO2-R
- Q.3 Attempt any 4 20M
- A) Define the term: CO2-U
- 1) Absolute measure of dispersion
 - 2) Quartile deviation
 - 3) Std. deviation
 - 4) Raw moment
 - 5) Central moment
- B) Explain pearson correlation coefficient CO3-R
- C) Calculate correlation coefficient for the following height (in inches) of father (x) and their son (y) CO3-R
- | | | | | | | | | |
|---|----|----|----|----|----|----|----|----|
| X | 65 | 66 | 67 | 67 | 68 | 69 | 70 | 72 |
| Y | 67 | 68 | 65 | 68 | 72 | 72 | 69 | 71 |
- D) Compare correlation and regression CO3-U