

## Long Answer Type Question

Q1. What are the Characteristics of an Idle Measure of central tendency? Prove that sum of deviations taken from mean is zero.

OR

From the following data relating to wages & workers in a factory, find the modal wage.

Wages (Rs):	120	140	200	250	270	300
No of Workers:	05	20	25	23	26	15

**05 x 01 = 05**

Q2. Give the concept of partition values, other than Median. How to determine Quartiles, Deciles & percentiles in a case of a Discrete series ?

OR

Calculate the lower & upper Quartiles, third deciles and 20<sup>th</sup> Percentile from the following data.

Central Value:-	2.5	7.5	12.5	17.5	22.5
Frequency:-	07	18	25	30	20

**05 x 01 = 05**

Q3. Show that variance & consequently S.D is independent of change of origin, but not of scale.

OR

The mean of two samples of sizes 50 & 100 respectively are 54.1 and 50.3 & their respective S.D's are 08 & 07 obtain the S.D of the sample obtained by combining the two samples. **05 x 01 = 05**

Q4. What do you understand by the term "correlation" What are different used for calculation of C co- efficient?

OR

Find the correlation co- efficient between size and defects in quality from the following data:

Group Size	No of items	No. Of Defective items
13-16	200	150
16-17	270	162
17-18	340	170
18-19	360	180
19-20	400	180
20-21	300	114

**05 x 01 = 05**

### VERY SHORT TYPE QUESTIONS (Note: - Each question carries 02 Marks 08 x 02=16)

- Q5. Enunciate the law of statistical Regularity.
- Q6. What are the requisites of friable data?
- Q7. Give (03) advantages of diagrammatic representation of data.
- Q8. Define Quartiles & give their importance.
- Q9. What are the different uses of Dispersion?
- Q10. Write the relations of the first four moments about the arbitrary mean "a" and raw moments.
- Q11. What is the purpose of measuring Skewness & kurtosis?
- Q12. Write a short note on Microsoft Office.