

B.Sc. Sem.-1 Examination

DSC-C-111

Statistics

January-2024

Time : 2-00 Hours]

[Max. Marks : 50

- Q.1 (a) What are primary data and secondary data? Which of the two is more reliable and why? 5
- (b) Explain the following terms (i) Variable (ii) Attributes (iii) Qualitative data 5
- the procedure of* **OR**
- (a) Explain construction of frequency and cumulative frequency distribution. 5
- (b) Explain different methods of collecting primary data. 5
- Q.2 (a) Explain the importance of graph in statistics. State the limitations of graphs. 5
- (b) Write a short note on two dimensional diagrams. 5
- OR**
- (a) Define (i) Bivariate frequency distribution (ii) Marginal frequency distribution (iii) Conditional frequency distribution. 5
- (b) Write a short note on stem and leaf plot. 5
- Q.3 (a) What do you mean by the measures of central tendency? Explain them in detail. 5
- (b) Show that Sum of deviations about arithmetic mean is zero. 5
- OR**
- (a) What are the properties of a good average? Give examples where arithmetic mean, harmonic mean and geometric mean are appropriate measure for the average. 5
- (b) What are partition values? Give details with notations used to denote them. 5
- Q.4 (a) Define standard deviation. Discuss merits and demerits of standard deviation. 5
- (b) Show the relation between raw and central moments. 5
- OR**
- (a) Explain the concept of dispersion and write the characteristics of an ideal measure of dispersion. 5
- (b) Explain kurtosis 5
- Q.5 Attempt any **ten** out of twelve. 10
- 1 Give one example of Nominal scale.
 - 2 Give one example of Ordinal scale.
 - 3 Give one example of Interval scale.
 - 4 What does a straight line in graph indicates?
 - 5 Which type of frequency distribution is required to draw Histogram?
 - 6 What is the other name of a Pie diagram?
 - 7 State one merits of median of the data.
 - 8 Give formula of harmonic mean?
 - 9 Give empirical relationship between mean, median and mode.
 - 10 Write the formula to calculate coefficient of Quartile Deviation.
 - 11 What is the formula of Percentile?
 - 12 What is the formula of skwewness?