



Learning Outcomes

Chapter - 1 Statistics - Scope and Development

- 1.1 Explains the history, definition and scope of Statistics.
- 1.2 Recognizes the importance of Statistics in various fields.
- 1.3 Compares different branches of Statistics.
- 1.4 Illustrates the functions of MOSPI, CSO, NSSO, ISI and Department of Economics and Statistics in Kerala.

Chapter - 2 Collection of Data

- 2.1 Differentiates population and sample.
- 2.2 Recognizes investigator, investigation, enumerator and enumeration.
- 2.3 Classifies variables and constants.
- 2.4 Distinguishes qualitative variables and quantitative variables.
- 2.5 Differentiates discrete and continuous variables.
- 2.6 Compares primary and secondary data.
- 2.7 Identifies questionnaire and schedule.
- 2.8 Constructs/drafts questionnaire.
- 2.9 Explains different methods of data collection.
- 2.10 Recognizes the sources of secondary data.

Chapter - 3 Classification and Tabulation

- 3.1. Identifies the need of Classification and Tabulation.
- 3.2. Recognises the different methods of Classification and Tabulation.
- 3.3. Classifies raw data to useful information.
- 3.4. Constructs frequency tables.
- 3.5. Interprets the data.

Chapter - 4 Diagrams and Graphs

- 4.1 Identifies the importance of diagrammatic presentation of data.

- 4.2 Explains different types of diagrams and graphs.
- 4.3 Creates different types of diagrams and graphs.
- 4.4 Interprets the diagrams and graphs.

Chapter - 5 Central Tendency

- 5.1 Recognises central tendency and various measures of central tendency.
- 5.2 Explains and evaluates various measures of central tendency.
- 5.3 Evaluates and interprets partition values – Quartiles, Deciles and Percentiles.
- 5.4 Designs Box plot.

Chapter - 6 Dispersion

- 6.1 Recognizes the importance of measuring dispersion.
- 6.2 Explains and evaluates the measures of dispersion-Range, Quartile deviation, Mean deviation, Standard deviation.
- 6.3 Distinguishes absolute and relative measures of dispersion.

Chapter - 7 Skewness and Kurtosis

- 7.1 Distinguishes symmetric and asymmetric distributions.
- 7.2 Recognises skewness of distributions.
- 7.3 Evaluates and interprets the nature of skewness.
- 7.4 Recognises kurtosis of distributions.
- 7.5 Evaluates and interprets types of kurtosis.

Chapter - 8 Probability

- 8.1 Recognises the degree of uncertainty that is involved before making important decisions.
- 8.2 Identifies random experiment, sample space, sample point, events.
- 8.3 Illustrates different approaches to probability.
- 8.4 Evaluates probability of events using classical definition of probability.
- 8.5 Evaluates joint probability of two events using addition rule.

Chapter - 9 Conditional Probability

- 9.1 Explains the meaning & concept of conditional probability.
- 9.2 Recognises conditional probability and solves its application level problems.
- 9.3 Differentiates between independent and dependent events.
- 9.4 Identifies the concept of total probability theorem on dependent events.
- 9.5 Illustrates Baye's Theorem and solves its application level problems.

Chapter - 10 Sampling Techniques

- 10.1 Illustrates Census and sampling and their advantages and disadvantages.
- 10.2 Recognises probability and non probability sampling.
- 10.3 Identifies sampling and non sampling errors.
- 10.4 Differentiates the SRSWOR, SRSWR, methods of SRS - lottery method and random number table method.
- 10.5 Describes different kinds of sampling- simple random sampling, systematic sampling, stratified sampling, cluster sampling and multistage sampling.