

Department of Economics

Value Added Course on-

STATISTICAL APPLICATION IN RESEARCH METHODOLOGY

Academic year- 2021-22

45 Hrs.

Unit-1 Introduction of Research

7

1.1 Meaning and Definition of Research

1.2 Types of Research

- i. Basic or Pure or Fundamental Research
- ii. Applied Research
- iii. Action Research

1.3 Importance of Research

Unit 2. Data Collection and Data Analysis

10

2.1 Meanings and Definition of Data Collection

I. Primary Data,

II. Secondary Data Sources

2.2 Meaning and Definition of Data Analysis

I. Graphs

II. Tabulations

2.3 Statistical Series

- I. Geographical Series,
- II. Time Series,
- III. Qualitative Series,
- IV. Quantities Series

2.4 Frequency

i. Frequency Distribution

- ii. Cumulative Frequency
- iii. Class Boundaries
- iv. Midpoint Frequency
- v. Class Width

Unit 3. Measures of Central Tendencies and Dispersion 8

- 3.1 Definition of Mean
- 3.2 Definition of Medium
- 3.3 Definition of Mode
- 3.4 Meaning of Dispersion
- 3.5 Definition -Range,
- 3.6 Median Deviation,
- 3.7 Standard Derivation and Standard Error

Unit 4 Correlation Analysis 8

- 4.1 Meaning and Definition
- 4.2 Types of Correlation
- 4.3 Correlation Coefficient;
 - I. Karl Pearson Method,
 - II. Spearman Method

Unit 5 Testing and Hypothesis 12

- I. Null Hypothesis
- II. Alternative Hypothesis
- III. Tests Analysis
 - i. t -tests
 - ii. f- test
 - iii. z- test
 - iv. Chi – Square test
- IV. Table Values



Head

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