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- (f) The Research Report - Writing and Evaluation.

### *Second Half : Educational Statistics*

#### **Unit-IV : Educational Data and Descriptive Statistics**

- (a) Nature of educational data - Qualitative and Quantitative ;
- (b) Qualitative data - its analysis with emphasis on Content Analysis, Analyses of Interview-based and Observation-based data ;
- (c) Quantitative data - Scales of measurement — Nominal, Ordinal, Interval and Ratio ;
- (d) Organization and Graphical Representation of Data — Frequency distribution, Frequency Polygon, Histogram, Ogive and Pie-chart ;
- (e) Measures of Central Tendencies — Mean, Median and Mode ;
- (f) Measures of Variability — Range, Mean Deviation, Quartile Deviation and Standard Deviation ;
- (g) Measures of relative position - Percentile, Percentile Rank, and Standard Scores.

#### **Unit-V : Probability Distribution**

- (a) Concept, Characteristics and uses of Normal Distribution ;

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- (b) Measures of Relationship — Concept and uses of Correlation — Product Moment, Rank Difference and Scatter Diagram Methods ;
- (c) Further Methods of Correlation — Biserial, Point-Biserial, Tetrachoric and Phi-Coefficient of Correlations ;
- (d) Concept of Partial and Multiple Correlations, Concept of Regression and Prediction, and Regression Equation.

#### **Unit-VI : Inferential Statistics**

- (a) Parametric Statistics — Tests of significance — One-tailed and Two-tailed tests, Type-I and Type-II Errors, Analyses of Variance and Analyses of Co-variance ;
- (b) Non-Parametric Statistics — Chi-square test and Median Test.

### **PART - II**

#### **Paper V : Comparative Education**

##### **Objectives :**

- To help the students to understand comparative education as an emerging discipline of Education ;
- To acquaint the students with educational systems in terms of factors and approaches of Comparative Education ;