

# STATISTICS IN EDUCATION

Course No EDU18303CP

(80+20) 4 Credit

## Objectives:-

- To develop understanding about the concept of Inferential and Differential statistics.
- To develop understanding about the concept and application of Central Tendency, Variability.
- To develop understanding about the concept of normal Probability Distribution.
- To develop understanding about the concept and application of Parametric and Non Parametric test.
- To develop understanding about the concept and application of Correlation and Co-efficient of Correlation.

## Unit I: Measures of Central Tendency:

- Concept of Inferential & Descriptive Statistics
- Concept and computation of measures of central tendency
- Concept of Variability: Range, S.D & Q.D
- Computations of Percentiles and Percentile Ranks.  
Graphic methods: Bar graph, Pie Chart, O give, Line graph, their application & use.

## Unit II: The Normal Distribution Curve:

- The meaning and properties of the normal distribution
- Measures of divergence from normality-skewness and Kurtosis
- Applications of the normal probability curve
  - a) Raw scores into standard scores
  - b) Cases falling above and below mean
  - c) % of cases between givers percentage

## Unit III: Parametric & Non- Parametric Statistics:

- Parametric
  - a) Meaning and advantages
  - b) Critical ratio & T-test (for correlated and un correlated)
  - c) ANOVA-One way
- Non- parametric
  - a) Meaning and advantages
  - b) Chi-square & contingency tables

## Unit IV: Correlation:

- Meaning of correlation and co-efficient of correlation
- Uses of correlation
- Calculation of Co-efficient of correlation
  - a) Product Moment Coefficient of Correlation including Scattergram
  - b) Rank order

c) Tetrachoric

**Suggested Readings:-**

1. Best. J. w. educational research boston A. pearson
2. David tabber using statistics to make educational decisions
3. Educational Statistics by -N.A. Nadeem
4. H. Mulholland, collin reeves, jones fundamentals of statistics
5. Henery E.Garette (2005) Statistics in psychology and education Paragon international publishers
6. John A kauf Basic statistics in educational research
7. Kulbirsinghsidhu statistics in education and psychology sterling publications
8. Lokeshkoul Educational Research vikas publishing house new Delhi
9. Moris (2001) statistics
10. R. P. Pathak statistics in education and psychology pearson education India 2011
11. S. K. Mangal statistics in education and psychology printice hall India learning private limited.
12. Sharma fundamentals of statistics