

M.P.E – 302. – STATISTICS IN PHYSICAL EDUCATION

Unit –I: Definition, need Importance of Statistics – Types of Statistical Process – Descriptive, Comparative, Relationship Inferential and Predictive. Quantitative Data – Attributes and Variables – and Continuous and Discontinues – Role of Statistics in research

Unit –II: Measures of Central Tendency – (Ungrouped And Grouped) – Mean Median and Mode – Computation, Merits and Demerits and Uses of Measure of Central Tendency – Measures of Variability – (Ungrouped and Grouped) - Range, Standard Deviation Quartile Deviation and Mean Deviation Computation, Merits Demerits and Uses of Measures of Variability Percentiles Deciles Meaning uses And Computation

Unit –III: Normal Curve – Meaning and Definition – Binomial Expansion Properties of Normal Curve – Skew Ness Kurtosis- Correlation – Meaning, Computation and Uses Pearson's Product. Moment Correlation, Rank – Order Correlation.

Unit –IV: **Standard Scales:** T- Scale 6 – Sigma Scale Hull Scale Z-Scale – Purpose, Uses and Computation. T –ratio Level Of Significance Type –I Error Null – Hypothesis- Sampling Theory, Different Sampling Procedures, reliability and factors affecting Reliability.

Unit – V: Line Diagram, Bar Diagram – Simple , Comparative , Composite and Percentile Diagram – Pie diagram : Simple , comparative , composite and percentile diagram : Histogram, Frequency Polygon, ogive Curve, Concept of Analysis of Variance, and Co- Variance.

Reference

- Best J. W. Research In Education, Englewood Cliffs, Printice Hall New Jersey 1971.
- Clark, D. H .and Clark, H. H, Research Problem In Physical Education, 2nd Englewood Cliffs, Prentics Hall Inc.
- Rothstain, A. Research Design and Statistics for Physical Education, Englewood Cliffs, Prentice Halls Inc., New Jersey, 1985.
- Thirumalaisamy (1998), Statistics In Physical Education, Karaikudi : Senthilkumar Publishers.
- Sivaramakrishnan. S., Statistics for Physical Education, Delhi: Friends Publications,2006.