SEMESTER II MPD-C201 APPLIED STATICTICS IN PHYSICAL EDUCATION

The Course learning outcomes (COs):On completion of the two years M.P.Ed., program, the students will be learning and able to do/perform the following......

CO-1.Defining the concepts of statistics.

CO-2.Identifying the tools of statics in research.

CO-3.Describing the research problem, literature sources and research ethics.

CO-4. Estimating the research situation & tools and selecting appropriate tools for research.

CO-5.Developing the concept of applying statistics in research.

UNIT I – Introduction

Meaning and Definition of Statistics.

Need and importance of Statistics and Types of Statistics.

Meaning of the terms, Population, Sample, Data, types of data.Group and non-grouped, Variables.

UNIT II – Data Classification, Tabulation and Measures of Central Tendency and Measures of Dispersions and Scales

Meaning, uses and construction of frequency table.

Calculation and advantages of Measures of central tendency - Mean, median and mode.

Calculation and advances of Range, Quartile Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose

Calculation and advantages of scoring scales; Sigma scale, Z Scale, Hull scale

UNIT III – Probability Distributions and Graphs

Normal Curve.

Meaning of probability- Principles of normal curve- Properties of normal curve.

Divergence form normality - Skewness and Kurtosis.

Graphical Representation in Statistics; Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve.

UNIT IV – Inferential and Comparative Statistics

Tests of significance; "t" test, chi – square test, level of confidence and interpretation of data.

Meaning of correlation – co-efficient of correlation – calculation of co- efficient of correlation by the product moment method and rank difference method.

Concept of ANOVA and ANCOVA.

References: Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc

Clark D.H. (1999) Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.

Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illinois; Human Kinetics;

Kamlesh, M. L. (1999) Research Methodology in Physical Education and Sports, New Delhi

Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs:Prentice Hall, Inc

Sivaramakrishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO 1								
CO 2								
CO 3								
CO 4								
CO 5								