

BA III- Psychology 2016-17 Semester V

Course code- 545120 **DC Title- Research Methods and Statistics**

No. of Credits-4,

Marks 100 (25 internal, 75 external)

Course Objectives:

The learner will be able to:

- describe research process in Psychology
- explain basic concepts in Statistics and the various measures of Descriptive Statistics
- explain characteristics, uses, applications and methods of calculation of the various measures

Module I – Introduction to Research Methods

Objectives: After studying the module, you will be able to

- explain research process in Psychology
- describe the process, types and methods used in research

- 1.1 Introduction to Research Process
- 1.2 Types of research – Experimental, Quasi- Experimental & Exploratory Research
- 1.3 Methods of data collection
 - Interview
 - Survey
 - Secondary sources
- 1.4 Sampling techniques used in research
 - Probabilistic and Non probabilistic sampling techniques
- 1.5 Report Writing

Module II- Introduction to Statistics

Objectives: After studying the module, the learner will be able to

- explain the basic concepts in statistics
- 2.1 Importance, Need, Uses and limitations of Statistics
 - 2.2 Concepts of Parametric and Non Parametric Statistics
 - 2.3 Graphical representation of data
 - 2.4 Concept of Normality and Measures of divergence

Module III- Measures of Central tendency and Measures of Dispersion and Percentile

- explain concepts of central tendency percentile and variability
 - compute and use measures of central tendency percentile and variability
- 3.1 Measures of Central Tendency- Concept, Calculations, Merits & Demerits, & Uses
 - 3.2 Measures of Variability - Concept, , Merits & Demerits, & Uses -Average Deviation, Quartile Deviation , Standard Deviation (Computation only Standard Deviation)
 - 3.3 Concept, Merits and demerits of Percentile& Percentile Rank

Module IV - Measures of Association

Objectives

- explain the concept of association
- compute co-efficient of correlation
- interpret the findings

4.1 Assumption for calculation of coefficient of correlation

4.2 Meaning of positive , negative and zero correlation

4.3 Uses and limitations of coefficient of correlation

4.4 Computation and interpretation of coefficient of correlation by product moment and rank order correlation

Internals:

1. Class Test
2. Small Research study using statistics.

Books for Study

Garrett H E, (2009) "Statistics in Psychology and Education" ,(6th Edition), Paragon International Publishers.

Guilford, J.P., &Fructore, B (1978).Fundamental Statistics for Psychology & Education. N.Y: McGraw –Hill

Kumar, R (2011) " Research Methodology: A Step-By-Step Guide For Beginners" (3rd Edition),Sage Publications India Pvt Ltd.

References:

Howell D.C (2007) Statistical Methods for Psychology (7th Ed.) Thomson Wadsworth

McBurney, D.H (2001) Research Methods (5thed) Bangalore: Thomson Learning India