

# Tantia University

Sri Ganganagar  
Ph.D. Course Work Syllabus (2016-17)  
Education

Maximum Marks-100

Minimum Marks-55

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## PART-A

**Part A- 40 Marks**

**Total Credits = 4**

**Total Hours=4x45= 180 Hours**

### Introduction to Research

Introduction of Research, Research methodology, Defining Research problem and formulation of hypothesis, research design, sampling design, measuring and scaling techniques, methods of data collection.

Pure and Applied Research, Exploring or Formulative Research, Descriptive Research, Diagnostic Research/Study, Evaluation Research/Studies, Action Research, Experimental Research, Historical Research, Surveys, Case Study, Field Studies

Research Ethics: Characteristics and format of research paper, article, thesis writing, review of Related Literature, Purpose of the review, Identification of the related literature. Organizing the related literature.

### Statistics

Concept of statistics, relevance in research, parametric and non-parametric data; graphical representation of data: histogram, frequency polygon, ogive and pie chart; Measures of Central Tendency, Correlation, t-test chi square test

### Computer Application

Basic and fundamental knowledge of Computer and its Applications. Introduction, Application Area, Operating System, Windows, Office, Internet.

## PART-B

**Part B- 60 Marks (Subject based)**

**Total Credits = 6**

**Total Hours=6x45= 270 Hours**

1. Conducting Action Research
2. Writing Research Articles
3. Writing of references as per the format of APA Styles & MLA
4. Computerized Graphics presentation of data

5. Communication Skills: verbal and non verbal communication and presentation skills
6. Identify and define a research problem in the educational setting (one each in qualitative and quantitative type of situations)
7. Write hypothesis based on the purpose and objective of the research situation. (One each in qualitative and quantitative type situation.)
8. Select research designs for the research objectives (one each in qualitative and quantitative type situations)
9. Identify appropriate measuring instruments for the research objectives/hypothesis (one each in qualitative and quantitative type situation).
10. Identify appropriate statistical methods of analysis for research problems (one each in qualitative and quantitative type situations)
11. Development and validation of any one tool (review of literature, existing tool's review, operational definitions of tool, item selections, item analysis, validity, reliability)
12. Critically analyse research reports on various aspects such as hypothesis, design, measuring tools, statistical analysis, interpretation etc, to identify gaps/ weaknesses/ strengths in the study. (One each in qualitative and quantitative type situations).
13. Prepare a research proposal (synopsis) based on the experimental research.