

RESEARCH METHODOLOGY

(Psychology)

UNIT 1: Research

- 1.1 Basic concepts-meaning and characteristics of scientific research-factors affecting, steps or stages in research.
- 1.2 Types of Research-Experimental and Non experimental, Laboratory experiments and field experiments, True experiments and quasi experiments, Quantitative and Qualitative Research, Expost Facto research, survey research and Types of experiments.
- 1.3 Ethical problems in Research.

UNIT 2: Problem, Hypothesis and Variables

- 1.1 Meaning and characteristics of a problem, sources of stating a problem, considerations in selecting the problem, formulation of the problem and types of problems.
- 1.2 Meaning and characteristics of a good hypothesis, Types of hypothesis, Errors in Hypothesis testing and formulation of Hypothesis.
- 1.3 Meaning and types of variables, Consideration in the selection of variables, Control of extraneous variables-Techniques.

UNIT 3: Review of Literature and Data Collection.

- 1.1 Review of literature- Purpose, source and preparation of Index Card.
- 1.2 Data collection-Observation, Interview, Questionnaires and Psychological tests and scales.

UNIT 4: Designs, Analysis and Report Writing

- 1.1 Meaning, Purpose and criteria of research design; basis principles in Experimental design-Types and their analysis techniques; Single subject and small N design-Pre, True and Quasi experimental designs and Expost Facto design.

- 1.2 Analysis of data: qualitative and quantitative analysis of the data purpose, conditions and interpretation of major parametric and non parametric statistical techniques.
- 1.3 General purpose of writing a report, structure and format of a report (API), Style of writing, Typing, Evaluating a report and Preparing a research proposal.
- 1.4 Computer Applications, Personal computers, Computer language, Data base, Computer simulations, laboratory experiments using computers.

References:

- Brekwell, G.M. et al. (2002) Research Methods in Psychology. London , Sage Publications
- Brrota, K.D.(2001) Experimental Designs in Behavioural Research. New Delhi, Wiley Easter Ltd.
- Goodwin, C.J. (2003)Research Psychology: Methods and Designs. New York, John Wiley and Sons, Inc.
- Kerlinger, F.N. (2007)Foundation of Behavioral Research.

Ph.D. Preliminary Qualifying Examination

PhD.

Paper 1: Research Methodology

Time: Three Hours

Maximum: 70 marks

- I. Write an essay on any two of the following. Each question carries 15 marks.
1. Which stage of the research process is a continuous part from the beginning to the conclusion of the research. Justify your answer along with explanation for the need for it to be so.
 2. Give a hypothetical research problem and hypothesis and clearly state the independent and dependent variable as well as the nature of the hypothesis. List out the possible extraneous variables and the technique you will follow for controlling them as justify your choice.
 3. What is data collection and data analysis? Is observation a quantitative or qualitative means of data collection and analysis? Justify your answer.
 4. Has computers become a necessity for carrying out psychological research in the present day? Elaborate on your answer

(2 x 15 = 30 marks)

- II. Write short essay on any two of the following. Each question carries 10 marks

5. What is the relevance of APA publication manual
6. When can single subject design be used?
7. Are field experiments and field research the same? Explain
8. What are the different types of interview?

(2 x 10 = 20 marks)

- III. Write short notes on any four of the following. Each question carries 5 marks

9. Errors in hypothesis testing
10. Ex-Post facto design and its use
11. SPSS and NVivo
12. Conditions for t-test
13. Non-maleficence
14. Meta analysis