

PET Examination Syllabus for Paper-I Research Methodology (Computer Science)

Introduction to Research Methodology

Objectives of Research, Types of Research, Research Methods and Methodology, defining a Research Problem, Techniques involved in Defining a Problem.

Research Design Need for Research Design, Features of Good Design, Different Research Designs, Basic Principles of Experimental Designs, Sampling Design, Types of Sampling Design, Sample size Determination, Random sampling.

Measurement and Scaling Techniques Measurement in Research, Measurement Scales, Sources in Error, Scaling, Meaning of Scale, Scale Construction Techniques.

Methods of Data Collection and Analysis Collection of Primary and Secondary Data, Selection of appropriate method Data Processing Operations, Elements of Analysis, Statistics in Research, Measures of Central Tendency and Dispersion, Measures of skewness, Regression Analysis, Correlation

Construction of hypothesis and Hypothesis testing, Analysis of Variance and Co-Variance

Reference Books:

1. "Research Methodology", C.R. Kothari, Wiley Eastern.
2. "Research in Education", John W Best and V. Kahn, PHI Publication.
3. "Research Methodology- A step by step guide for beginners", Ranjit Kumar, Pearson
4. "Management Research Methodology-Integration of principles, methods and
5. Techniques", K.N. Krishna swami and others, Pearson Education