

**CT PET 2020**  
**Syllabus for Ph.D. Entrance Examination**  
**Research Methodology**

**UNIT 1: Meaning of Research**

Meaning, aims, nature and scope of research  
Prerequisites of research  
Types of research.

**UNIT 2: Research Problem**

Meaning of research problem  
Sources of research problem  
Characteristics of a good research problem  
Hypothesis: Meaning and types of hypothesis.  
Research proposal or synopsis.

**UNIT 3: Methods of Research Studies**

Qualitative and Quantitative research methods.

**Unit 4: Review of Related Literature**

Purpose of the review.  
Identification of the related literature.  
Organizing the related literature.

**UNIT 5: Data Collection (Sampling)**

Population and sample, Characteristics of a good sample  
Techniques of sample Selection Types of data in  
research

**UNIT 6: Tools of Data Collection**

Characteristics of good research,  
Types of data collection tools.

**UNIT 7: Descriptive Statistics**

Tabulation, Organization, and Graphical Representation of Quantitative data  
Measures of Central Tendencies: Mean, Median, Mode  
Measures of Variability: Range, Quartile Deviation, Standard Deviation,

**UNIT 8: Research Report**

Format of the research report  
Style of writing the report