# Pre Ph.D. Entrance Examination- Syllabus Management - Research Methodology

# Unit:1

Research – Meaning – Purpose – Types of Research – Significance of Research in Social and Business Sciences- Steps in Research: Identification, Selection and Formulation of Research Problem – Research Questions – Research Design – Formulation of Hypothesis – Review of Literature.

# Unit: 2

Sampling Technique: Sampling Theory – Types of Sampling – Steps in Sampling – Sampling and Non-sampling Error – Sample Size – Advantages and Limitations of Sampling- Data for Research: Primary data – Meaning – Collection Methods – Observation – Interview – Questionnaire- Schedule – Pre-test – Pilot study – Secondary data – Meaning, Relevance, Limitations and Cautions.

#### Unit: 3

Processing of data: Checking – Editing – Coding – Transcription and Tabulation – Data analysis – Meaning and Methods – Quantitative and Qualitative analysis- Measurement in Research: Scale, Sources and Tests of Sound Measurement – Technique of developing Measurement tools – Scaling: Meaning and Scale Construction Techniques.

# Unit: 4

Statistics in Research: Measures of Central Tendency, Measures of Dispersion, Measures of Relationship: Correlation, Regression, Association of Attributes – Testing of Hypotheses – Chisquare Test – Analysis of Variance (ANOVA and ANOCOVA).

# Unit: 5

Report Writing: Meaning, Types and Contents of Research Reports –Principles of good report writing- Structuring the Report: Chapter format – Pagination – Using quotations – Presenting Footnotes – Abbreviations – Presentation of tables and figures – Referencing – Documentation – Use and format of Appendices – Indexing.

# **References:**

Goode, W. J., & Hatt, P. K. (2017). Methods in Social Research (1st ed.). Asia Law House.

Gupta, S. P. (2019). Statistical Methods. Sultan Chand and Sons.

Kothari, C. R., & Garg, G. (2019). Research Methodology Methods and Techniques (4th ed.). New Age International Publishers.

Krishnaswami, O. R., & Ranganatham, M. (2016). *Methodology of Research in Social Sciences*. Himalaya Publishing House.