

**PH. D. PRE-REGISTRATION  
QUALIFYING ENTRANCE EXAMINATION**

**Research Methodology Syllabus for Social Sciences**

<b>Objectives</b>	➤ To provide basic knowledge on (1) the identification of research problem, (2) creating good research design, (3) the formulation of hypothesis, (4) the application statistical methods, and (5) writing good research report.
<b>Unit-I</b>	<b>Research Design:</b> Literature Review - Identification and Formulation of Research Problem – Types of Research Design; Exploratory, Descriptive and Experimental Research – Formulation of Hypothesis - Sample Design - Types of Data – Data Sources – Methods of Data Collection - Construction of Schedules and Questionnaire – Pilot Study.
<b>Unit-II</b>	<b>Descriptive Statistics:</b> Processing Data - Editing, Coding and Tabulating Presentation of Data; Diagrammatic and Graphic Representation of Data. Analysis of Data; Mean, Median, Mode Weighted Average and its Merits and Demerits – Dispersion; Range, Standard Deviation, Co-efficient of Variation, Lorenz Curve and Gini Ratio.
<b>Unit-III</b>	<b>Analytical Statistics:</b> Correlation; Simple, Partial and Multiple – Pearson’s Co-efficient of Correlation and Rank Correlation – Regression; Simple, Linear and Non-linear Regression – Multiple Regression; Probit Model and Logit Model - Time Series Analysis; Components and Uses – Methods of Estimating Trend and Seasonal Variations - Testing of Hypotheses; Large and Small Samples - Parametric and Non-Parametric Tests.
<b>Unit-IV</b>	<b>Computer Application and Data Analysis:</b> Data Mining and Processing – Model Building – Software Application in Economic Analysis - Interpretation of SPSS Package Output Relevant for Multivariate Analysis and Logit Model – Estimation of BCR, NPV and IRR.
<b>Unit-V</b>	<b>Report Writing and Related Techniques:</b> Ethics in Report Writing - Planning of a Research Report – Presenting Literature Review - Stages of Writing Report – Layout of the Research Report – Precaution for Writing Research Reports – Citations - Footnotes – Endnotes – Bibliography – Proof Correction – Finalisation of Thesis - h-index - i10-index - Impact Factor – Citation index of Journals.
<b>References and Textbooks</b>	
Bhandarkar, P.L. & Wilkinson, T.S. (2016). <i>Methodology and Techniques of Social Research</i> . Himalaya Publishing House, Mumbai.	
Elhance, D.N., Elhance V. & Aggarwal, B.M. (2018). <i>Fundamentals of Statistics</i> . Kitab Mahal, Mumbai.	
Ferber, R. & Verdoon, P.J. (1962). <i>Research Methods in Economics and Business</i> . Macmillan, New York.	
Ghosh, B.N. (2015). <i>Scientific Method and Social Research</i> . Sterling Publishers, New Delhi.	
Goode, W.J. & Hatt, P.K. (2022). <i>Methods in Social Research</i> . McGraw Hill, London.	
Gujarati, D., Porter, D.C. & Pal, M. (2017). <i>Basic Econometrics</i> . Tata McGraw Hill, New Delhi.	
Gupta, S.P. (2021). <i>Statistical Methods</i> . S. Chand & Company, New Delhi.	
Kothari, C.R. & Garg, G. (2019). <i>Research Methodology: Methods and Techniques</i> . New Age International Publishers, New Delhi.	
Kurien, C.T. (1973). <i>Research Methodology in Economics</i> . Sangam Publishers, Madras.	
Moser, C.A. & Kolton, C. (1979). <i>Survey Methods in Social Investigation</i> . Heinemann Educational Books, London.	
Wooldridge, J.M. (2019). <i>Introductory Econometrics: A Modern Approach</i> . South-Western Educational Publishing, Canada.	
<b>Outcomes</b>	➤ The students will be able to (1) formulate research problem, (2) construct testable hypotheses, (3) design survey, collect, process and analyse the data, (4) apply statistical tools such as regression in their research, and (5) write a decent research report.