

LIVE COURSE (LIVE LECTURES)

PH.D. COURSE WORK CLASS

★+2⁰¹⁵ ★+5^{,460} ♥^{-1,003}

COURSE OVERVIEW

To learn advanced methodology in the theoretical literatures that underpin modern planning and development studies. Class duration will be 6 months.

COURSE OBJECTIVE

The pre-Ph.D. course work prepares scholar to:

• Acquire the critical thinking and research skills

• Learn advanced methodology in the theoretical literatures that underpin modern planning and development studies

• Learn research methods ranging from quantitative and deductive methods to qualitative and inductive methods.

WHAT YOU WILL LEARN

Theory and Practical Knowledge of Research methodology

COURSE SKILL SET

To make the Ph.D. aspirants capable of understanding the practical part of Research methods & Techniques and to enable them to learn about the recent software's applied in research & Development activities.

PROGRAM HIGHLIGHTS

Instructor- Dr. Sangeeta Jauhari Duration- 6 months Eligibility- Ph.D. Scholars No. of Modules- 5 Units Placement training- No Language-English/Hindi Webinar- Yes



PROGRAM SYLLABUS

Paper I Research Methodology UNIT-I **Fundamental of Research**

> Definition and objective of research- types of research, quantitative vs. qualitative research, the scientific research process- Meaning of research problem, Sources of research problems, Characteristics of good research problem - Identification, selection and formulation of research problem, review of literature - Identification of sources for review of literature, formulation of hypothesis.



UNIT-II **Research Design, Sampling & Measurement**

Research design: Meaning, need and features of good research design, types of research design – basic principle of experimental design, sampling, Types of Sampling, census and sample surveys, characteristics of good sample designs, techniques of selecting a random sample Measurement – Introduction, Types of Measurement Scales.

UNIT –III: Data Collection, Analysis & Hypothesis Testing Primary and secondary data: method of collecting primary data: observation, interview, questionnaire and schedule, sources of secondary data, processing of data, editing, coding and classification of data,

> Data analysis: univariate analysis, bivariate analysis, Descriptive & Inferential Analysis, Socioeconomic Techniques, Qualitative Analysis, Association of attributes – factor analysis – cluster analysis, fundamentals of time series analysis – use of SPSS in data analysis.

Hypothesis testing and estimation: fundamental of hypothesis testing – parametric test: testing of significance mean, proportion, variance and correlation – testing for significance of difference





between means, proportions, variances and correlation coefficients- important non – parametric test: sign, run and Mann – Whiteny test – ANOVA and chi square test.

UNIT-IV: Ethics in Research

Ethics in research- ethical committees, informed consent, Commercialization, Copy right, IPR, Plagiarism, Citation, Reproducibility and accountability Guidelines about Publishing the research work, Indentifying reputed journals, indexing, etc. Guidelines about Writing the Thesis- Pre writing con siderations, Layout, structure and Language of typical reports- Illustrations and tables- Bibliography, referencing and footnotes



UNIT-V: Computer Skill & Document Writing

MS Word- Introduction, Page Setup, Formatting a page, Page Margin, Font & its types, line Spacing, Reference Citation, Indent (Left, Right, Hanging) Setting, Table, Format Painter, Mathematical Equation, Inserting Picture and Charts, Header, Footer, Page Number, Text Box, Drop Cap, Image and its types, Printing options, Macro, Converting File in PDF, APA Style formatting, Typing Skill, Research Paper & Thesis Formatting.

MS Excel-Introduction, Worksheet, Workbook, Cell, Cell Formatting, Applying Formula, Charts and its types.

Reference Books:

- > Research methodology by Dr. C.R. Kothari
- > Statistical methods by S.P. Gupta.
- Research Methodology by Deepak Chawala









