# **RESEARCH METHODOLOGY**

### **Total Lectures Required –25**

## **Total Tutorials Required - 5**

## **Course Objectives:**

At the end of the course students will be able to conceive and execute research in an efficient manner.

### **Learning outcomes:**

At the end of the course, the student will be able to-

- Know about the research process
- Have knowledge about the scaling and measurement techniques used in the questionnaire
- Apply the statistical tools in the analysis of the research

Concept of Research and Research Process	5 Lectures
TOPICS	
Meaning and definitions of Research, Relevance and significance of research. Why there is need to do research?	1
	2
Process in research report writing and dissemination of research findings.	2
Research Problem and Research Design	5 Lectures
TOPICS	
Reviewing of Literature	1
Importance and steps in formulating a research problem	1
Formulation of research objectives	1
Identifying variables and formulating hypothesis	1
Nature and classification of research design	1
<b>Data Collection Methods</b>	4 Lectures
TOPICS	
Primary Data Collection Methods- Questionnaire, Schedule, Interview, Observation	2
Secondary Data Collection Methods- Journals, Government Reports, etc.	1
Selection of appropriate data collection method	1
Scaling Techniques and Sampling Methods	4 Lectures
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	TOPICS  Meaning and definitions of Research, Relevance and significance of research. Why there is need to do research?  Types of Research Process in research report writing and dissemination of research findings.  Research Problem and Research Design  TOPICS  Reviewing of Literature  Importance and steps in formulating a research problem  Formulation of research objectives  Identifying variables and formulating hypothesis  Nature and classification of research design  Data Collection Methods  TOPICS  Primary Data Collection Methods- Questionnaire, Schedule, Interview, Observation Secondary Data Collection Methods- Journals, Government Reports, etc.

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## Pre-Ph.D Coursework Syllabus

	Types of measurement scales, Sources of error in measurement	
2	Classification of scales – Rating Scales – Attitude Scales – Likert scale	1
3	Sample and Population	1
4	Types of Sampling: Probability and Non-Probability Sampling techniques	1
Module 5	Applications of Statistical Tools in Research	7 Lectures
	TOPICS	
1	Measures of Central tendency and Dispersion	2
2	Correlation and regression	2

#### **Text Book:**

• Kumar, Ranjit (2013), Research Methodology: A Step by Step guide for Beginners, Sage Publications Ltd.

### **Reference Books:**

- Goodde and Hatte. Methods in Social Research, New York: McGraw -Hill, 1952
- Gopal, M. H. An Introduction to Research Procedures in Social Sciences, Bombay: Asia Publishing House, 1970
- Henn, Matt; Mark Weinstein and Nick Foard, A Short Introduction to Social Research, New Delhi: Vistaar Publications, 2006
- Krishnaswami, O.R. Research Methodology in Social Sciences, Delhi: Himalaya Publications, 2000
- Kumar, Renjith, Research Methodology: A Step by Step Guide for Research, Delhi: Pearson Education, 2009
- MLA Style Sheet, Latest Edition

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## Syllabus of Pre - Ph.D Course Work

## **Computer Applications**

**Total Hours: 30** 

### **UNIT I: COMPUTER FUNDAMENTALS**

Lectures - 5

Introduction and need of Computers, Computer memory, computer generations, Basic computer organization; System software, Application software.

Operating system – DOS, Windows, UNIX, Linux. Basics of Windows, User Interface, File Management, File Transfer (ftp, WSftp). Difference between presentation and document. Application of computer for business and research

### UNIT II: DATA COMMUNICATION AND NETWORKS

Lectures - 5

Data communication concepts, local area network, wide area network, internet, intranet, extranet, website. E-mail, search engines-enterprise E-communication and E-collaboration

### UNIT III: USING INTERNET FOR RESEARCH

Lectures - 7

The Internet: Introduction, Use of Internet, major internet services. WORLD WIDE WEB, e-Mail, File Sharing, Blogging, Web Feeds, IP, DNS, ICANN. Downloading super tools for better computing Internet and the society, Use of E-Journals, Use of E-library, searching the keyword search engines, News and multimedia, governments, archives and statistics.

INFLIBNET - SOUL, UGC-Infonet, OJAS, Shodhganga, Shodhgangotri, e-PG PATHSHALA.

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#### UNIT IV: INTRODUCTION TO RESEARCH RELATED SOFTWARES

Lectures - 7

Introduction to Data analysis software-SPSS: Definition, objectives and features, data analysis using SPSS: Data entry creating variables, switching to data labels, data analysis: Frequencies, recording into different variables, cross tabulations and layers. Core calculation software, developing utility programs for research, Introduction to C programming. Other Data Analysis softwares - DataMelt, MATLAB, SCILAB, Maple.

### UNIT V: TOOLS AND UTILITIES RELATED WITH RESEARCH

Lectures - 6

MS-Office and its application, Research publishing tool - Microsoft Word, Adobe Acrobat, Graphics tool - Microsoft Excel, Microsoft Power Point: Creating presentations and adding effects

#### **Recommended Books:**

- 1. P.K Sinha, Computer Fundamentals, BPB Publications, 1992.
- 2. Guy Hart-Davis, The ABCs of Microsoft Office 97 Professional edition, BPB Publications, 1998.
- 3. Karl Schwartz, Microsoft Windows 98 Training Guide, 1998.

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### PhD Course work

**Economics** 

50 lectures

### MODULE I

Research Methods in Economics 9 lectures

Nature of Inquiry and Truth: Ontology and Epistemology of Economic

- I. Nature of Inquiry and Truth: Ontology and Epistemology of Economic Events. Methodological Approaches of Economics: Individualism, Socialism and Existentialism (Schumpeter, Weber, Hayek, Popper, Elester), the Methodology of Positive Economics, 2 lectures
- II. Approaches to Research: Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical. The Time Consideration: Historical, Experimental and Ex Post Facto.

2 lectures

- III. The Scientific Method: Positivism and Post Positivism, Introduction to Indian System of Logic and Method of Knowing Things, Empiricism, Nature of Reality.

  2 lectures
- V. Qualitative Research: The Contextual Understanding, Multiple Sources of Influences and Data, Role of Researcher as primary Tool for Data,

1 lecture

VI. Action Research and Innovative Methods: The participatory research,
Cooperative Enquiry, Participatory Action Research, Emancipatory
Action Research
2 lectures

Module II

Issues in Social Sector

12 lectures

Social Sector – Social Exclusion & Inclusion, Social Development Index , Human Resource Development & Human Development , Measurement of Various Forms of Human Development 3lectures

Economics of Education: Formal and Non-Formal Education, Education for All in India: Primary Education, Quality concerns in Elementary education. Education of Urban and Rural Disadvantaged Children, Education among SC's & ST's. Decentralization of Education. Contribution of NGOs in Basic education. Union

8. Days

and State Governments – Special Programmes for Education, Educational Financing: Financing of Elementary, Secondary & Higher Education in India.

5 lectures

Economics of Health: Role of State in Health, Role of Central Govt .& State Govts. Economic Growth, Poverty and Health. Communicable and Non-Communicable Diseases. Maternal and Child Survival. HIV / AIDS in India. Health Finance. Drug Policy and Regulation. Indian Systems of Medicine. 4 lectures

Module III

Issues in Public Policy

5 lectures

Social Sector Policies: Policy Framework in Five-Year Plans – Plans & Progress, Economic Reforms and Social Sectors, Typology of Economic Growth and Human Development in Indian States – Trends and Disparities in Social Sector Development, Role of Public and Private Sectors, Financing of Social Sectors, Limitations of Policy, Social Security – Special Policy Issues. 5 lectures

Module IV

Applied Environmental Economics

10 lectures

- I. Consumer Welfare Measurement in Environmental Economics Framework
- i. Consumer demand theory: Utility maximization
- ii. Measuring changes in the well being of consumers; consumer surplus,
- iii. Public goods and welfare change
- iv. General equilibrium considerations
- v. The Quest for Sustainable Development:

Module VI

Globalisation and Its Challenges

14 Lectures

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Understanding Globalisation: Historical development of Capitalism and the idea of free market.

5 lectures

Poverty, Inequality and Unemployment: Trends and patterns in post reform period, Issues in measurement and measuring techniques, interrelationship with globalisation.

2 lectures

Trade: Trade liberalisation and its effect, WTO and new patent regime, Inclusive Growth:

2 lectures

Rural Economy: Crisis in agriculture vs. agrarian crisis, Diagnosis of Agrarian Crisis in India, Crisis in livelihood in India, Rural non-farm sector. 5 lectures

## Reading List:

- Arvind (2002): "Globalisation an Attack on India's Sovereignty" New Vistas Publication, New Delhi.
- Bhaduri Amit (2006): "Employment and Development; Essays from an Unorthodox Perspective", Oxford University Press.
- Chandrasekhar CP and Ghosh Jayati (2002): "The Market that Failed" Left Word Books, New Delhi.
- Hejidra, B.J. and F.V. Ploeg (2001), Foundations of Modern Macroeconomics, Oxford University Press, Oxford.
- Blanchard Olivier & Fischer Stanley. Lectures on Macroeconomics. Cambridge: MIT Press
- Frisch, H: Theories of Inflation, Cambridge University Press
- Salvatore, Dominick, International Economics, John Wiley
- K.Seeta Prabhu(2001): Economic Reform and Social Sector Development, (N. Delhi: Sage Publications)
- K.Seeta Prabhu & R. Sudarshan(2002):Reforming India's Social Sector,(N. Delhi: Social Science Press)

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- Parikh, K.S.(1999):India Development Report(1999-2000),(N. Delhi: Oxford University Press)
- Parikh, K.S. & Radha Krishna, R. (2005): India Development Report (2004-05), (N. Delhi: Oxford University Press
- Kundu, Amitabh(2006): India Social Development Report,(N. Delhi: Oxford University Press )
- R. Govinda(2002): India Education Report, (N. Delhi: Oxford University Press)
- Misra, Rajiv(2003): India Health Report, (N. Delhi: Oxford University Press)
- Adams, W.M. 1991. Green Development: Environment and Sustainability in the Third World. Routledge Press.
- Anderson, T. and J. Bojo (1992), "The economic value of forests," in: A. Agarwal (ed), The Price of Forests, New Delhi, Centre for Science and Environment, pp.32-42.
- Baumol, W. J. and W. E. Oates (1975) The Theory of Environmental Policy: Externalities, Public Goods and the Quality of Life, Englewood Cliffs, Prentice Hall.
- Berry, J. L. and F. E. Horton (1974), Urban Environmental Management, New Jersey, Prentice Hall Inc
- Braden, J. and C. Kolstad (1991). Measuring the Demand for Environmental Quality, Amsterdam, North Holland.

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