

P. G. Department of Population Studies

Revised Syllabus: 2020-21

Ph. D. Coursework in Economics/Population Studies



Fakir Mohan University

Vyasa Vihar, Nuapadhi

Balasore - 756 089, Odisha

COURSE STRUCTURE

SEMESTER-WISE LIST OF PAPERS FOR PH. D COURSEWORK IN ECONOMICS/ POPULATION STUDIES						
Paper	Title	Paper Type	Credit	Mark Distribution		
				Mid-Term	End-Term	Total
One Semester						
EC/PS-701	Research Methodology and Computer Applications	Theory	6	40	60	100
EC/PS-702	Recent Advances in Development Studies/ Recent Advances in Migration and Urban Studies/ Recent Advances in Public Health and Nutrition	Theory	6	40	60	100
EC/PS-703	Research and Publication Ethics	Theory & Practical	2	20	30	50
EC/PS-704	Literature Review (Specialization)	Project	6	--	100	100
EC/PS-705	Preparation of Research Proposal/ Synopsis (Specialization)	Project	4	--	50	50
Total Marks/ Credit Hours			24	100	300	400

OBJECTIVES AND OUTCOMES OF THE PROGRAMME:

The objective of program is to understand the characteristics and dynamics of human populations, including their size, distribution, composition, growth, and movement over time. This involves examining patterns of fertility, mortality, migration, and population aging, as well as social, economic, and environmental factors that influence population dynamics. Population studies use a range of methods to collect and analyze data, including surveys, censuses, vital registration systems, and demographic models. By studying population dynamics, researchers and policymakers can gain insights into important issues such as health, education, economic development, social inequality, and environmental sustainability, and develop strategies to address these issues at local, national, and global levels. The ultimate goal of population studies is to promote the well-being of individuals and societies by generating knowledge that can inform policies and programs that improve the lives of people around the world.

The opportunities are not limited to various educational institutions like universities and research institutes. But there are opportunities at UN organisations, Philanthropic

foundations, market research agencies, survey organizations and NGO/ Development sectors, etc. With the expansion of research institutes and CSR funds, more number of job opportunities opens for the population studies students. The curriculum and pedagogic structure of this program is designed in line with the emerging needs of population scientist profession for research, monitoring and evaluation. At the end of the course, students will be able to demonstrate an understanding of the essential principles of modern demographic methods and statistical software and how to apply them also research scholar will be able to analyse, interpret and criticise demographic, health and public health research.

EC/PS-701: RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS

Learning objectives: The primary objective of research methodology is to provide a systematic and structured approach to conducting research in a way that ensures that the findings are valid, reliable, and generalizable. Research methodology refers to the strategies, techniques, and tools used to collect, analyze, and interpret data in order to answer research questions or test hypotheses.

Course outcomes: At the end of this course, including lectures and assignments, the students are expected to get complete skill on Schedule and questionnaire developing. With this student will get to use statistics methods like regression and coefficients which will help them in validating the research. Then student will get hands on practice of analysis software SPSS, it will help them to analyze small data as well as large scale data like NFHS, LASI etc.

Unit I

Meaning of Research, Objectives of Research, Different Types of Research; Research Steps; Formulation of Research Problem; Research Design; Sampling: Concept and Types, Sampling and Non-Sampling Errors and Sample Size Determination; Types of Scales: Nominal and Ordinal, Likert, Semantic differential, Thurstone, Bogardus Social Distance Scale ; Report Writing: Content and References/Bibliography; Ethics in Social Research; Plagiarism.

Unit II

Data Collection Methods-Quantitative and Qualitative: Direct Interview, Observation and Focus Group Discussion; Data: Concept, Types, Validity and Reliability; Variable: Meaning and Types; Construction of Interview Schedule/Questionnaire; Construction of Indices; Presentation of Data: Tabular and Graphic.

Unit III

Statistical Measures: Mean, Median, Mode, Standard Deviation, Variance; Bi -variate Analysis: Cross-Tabulation, Pearson Correlation Coefficient, Linear Regression ; Theoretical Aspects of Multiple and Binary Logistic Regressions; Test of Significance: Parametric ('t' and 'F') and Non-parametric (Chi-square and Kruskal-Wallis) Tests.

Unit IV

Probability: Concept and Basic Properties, Distribution: Normal and Abnormal; Moving Average and Exponential Growth Rates; Interpolation and Extrapolation; Dependent and Independent Variables; Bi-variate and Multivariate Association between Different Variables/Factors ; Hypothesis Testing in Research.

Unit V

Components of Personal Computer: Central Processing Unit (CPU), Storage Device, Input Output Device, Other Accessories and Ports; Software: Language, Utility and Application Software; Windows: Basic Operations - File Management, System Maintenance, Protection from virus, worms, malware and spyware ; Functions of MS-Office: Basic functions of Word, Excel and Power Point.

Suggested Readings:

Ahuja, Ram (2001), *Research Methods* , Rawat Publications, Jaipur. Blalock (Jr.), Hubert M. (1979), *Social Statistics* , McGraw -Hill, New York.

Croxton, F. E., D. J. Cowden and S. Klein (1982), *Applied General Statistics* , Prentice-Hall of India, New Delhi.

Goel, A. (2010), *Computer Fundamentals* , Pearson Education India, Delhi.

Goode, William J. and Paul K. Hatt (1952), *Methods in Social Research* , McGraw -Hill, New York.

Goon, A. M., M. K. Gupta and D. Dasgupta (1985), *Basic Statistics* , World Press, Calcutta. Kothari, C.

R. (2004), *Research Methodology: Methods and Techniques* , New Age International Publishers, New Delhi.

Norton, Peter (2017), *Introduction to Computers* , Sixth Edition, Tata McGraw Hill, Noida. Rajaraman,

V. (2014), *Fundamentals of Computers* , 6th Edition, PHI Publications, Delhi.

Sinha, Pradeep K. and Priti Sinha (2004), *Computer Fundamentals* , 8th Edition, BPB Publications, Kolkata.

Summer M, Englewood and Cliffs (1988), *Computers: Concepts and Uses* 2nd ed., Prentice Hall Inc., New Jersey.

Weiss, Robert S. (1968), *Statistics in Social Research: Introduction* , John Wiley and Sons, New York.

Young, V. P. and F. C. Schmid (1973), *Scientific Social Survey and Research: An Introduction to the Background, Contents, Methods, Principles and Analysis of Social Studies* , Prentice- Hall of India.

Elective Paper offered by Moatula Ao

EC/PS-702MA: RECENT ADVANCES IN DEVELOPMENT STUDIES

Learning objectives:

This elective paper is intended to provide students with basic knowledge about the basic and recent advances in developmental studies such as human development, economic theories related to growth. Through this paper the student can explore the population issues such as poverty, unemployment, food security etc.

Outcomes:

This course will help the students to understand to have an idea about the Indian economy at macro level. It will further help them to explore inequality in development prevalent in the Indian society.

Unit I

Development: Concepts, Determinants: Economic, Non-economic; Poverty: Concept, Measures, Types - Absolute and Relative, Economic and Social, Income and Expenditure; Unemployment: Concept, Types; Role of Non-farm Sector in Reducing Unemployment and Poverty.

Unit II

Strategies of Development: Growth, Employment-oriented and Anti-poverty Approaches; Changing Emphasis from Growth to Basic Needs; Assumptions, Features and Reasons of Failure of Growth and Basic Needs Strategies; Adjusted Measures of Development: Need, Relevance; Human Development Measures: PQLI, HDI.

Unit III

State of Indian Agriculture: Agricultural Production, Food Security, Role in National Economy; Rural Credit and Rural Banks: Institutional Structure, Channels of Operation, Hurdles; Agricultural Marketing: Regulated Markets and Cooperative Marketing ; Cottage Industries.

Unit IV

Economic Reforms: Liberalization: Meaning, Scope and Characteristics; Privatization:

Meaning and Scope; Comparison of Public and Private Sectors; Privatization Wave in the World; Globalization: Meaning and Scope . Globalization and its Advocacy, Impact of Globalization on the Indian Economy.

Unit V

Infrastructure in the Indian Economy: Energy, Power and Transport in India's Economic Development, Growth of Indian Railways, Rail -Road Co-ordination. Water Transport in India, Civil Aviation in India; Communication System in India .

Suggested Readings:

Coale, A. J. and E. M. Hoover (1958), Population Growth and Economic Development in Low Income Countries , Princeton University Press, New Jersey.

Das Gupta, Monica, Lincoln C. Chen and T. N. Krishnan (eds.) (1996), Health, Poverty and Development in India , Oxford University Press, Delhi.

Dogra, Balram and Karminder Ghuman (2010), Rural Marketing: Concepts and Practices , Tata McGraw -Hill, New Delhi.

Dreze, Jean and Amartya Kumar Sen (eds.) (2004), Indian Development: Selected Regional Perspectives, Oxford University Press, Delhi.

Harriss, Barbara, S. Guhan and R. H. Cassen (eds.) (1992), Poverty in India: Research and Policy, Oxford University Press, Bombay.

Jain, Gopal Lal (2000), Rural Economy and Society: Towards Development , Mangal Deep Publications, Jaipur.

Kalkundrikar, A. B. (1990), Regional Rural Banks and Economic Development , Daya Publishing House, New Delhi.

Kulkarni P. D. and Meher C. Nanavatti (1997), Social Issues in Development , Uppal Publishing House, New Delhi.

Kuznets, Simon (1966), Modern Economic Growth: Rate, Structure and Spread , Yale University Press, New Haven.

Simon, Julian (1981), The Ultimate Resource , Princeton University Press, New Jersey.

Singh, Awadhesh Kumar (2007), Rural Marketing: Indian Perspective , New Age International Publishers, New Delhi.

Watson, David and Richard Holloway (eds.) (1989), *Changing Focus: Involving the Rural Poor in Development Planning*, Oxford and IBH Publishing Company, New Delhi.

Zimmermann, Klaus F. (ed.) (1989), *Economic Theory of Optimal Population*.

Elective Paper offered by G. B. Mundu

PS-702GM: RECENT ADVANCES IN MIGRATION AND URBAN STUDIES

Learning objectives: The objective of offering this elective paper is to acquaint the students about the theoretical aspects of migration, spatial distribution and urbanization which will be helpful for their further research.

Course Outcomes: On completion of this course students are expected to learn about the dynamics of migration, urbanization and spatial distribution. It will also enable them to be more curious about the changes in population components- migration and mobility. It will help the students to explore the various research areas in migration studies and various data sources available. Through the various migration and urbanization techniques it will help the students for further research.

Unit I

Basic Concepts of Migration; Sources of Data; Types of Migration; Migration Differentials; Pre- and Post-Independence Migration Patterns in India; Concepts of Seasonal Migration and Commuters; Determinants and Consequences of Internal Migration.

Unit II`

Theories/Models of Migration: Ravenstein's Laws of Migration, Everett Lee's, Todaro's Model; Problems of Left Behinds; Issues of Social Networking and Health of Migrant ; Push and Pull Factors in Migration.

Unit III

Concepts and Definitions of Urbanisation; History of Urbanisation; Sources of Data;

Functional Classification of Cities: Quantitative and Qualitative; Level and Tempo of Urbanization; Pattern of Urbanization in Developed and Developing Countries; Patterns of Urbanization in India.

Unit IV

Theories/Models: Concentric Zone, Hoyt's Sector Model, Harris and Ullman's Multiple Nuclei, Rank-Size Rule, Primate City Rule, Kingsley Davis Model of Urbanization; Urbanization Related Problems in Developing Countries with Focus on India: Land Use, Housing, Slums, Water Supply and Sanitation, Transport, Urban Health Issues and Other Social Problems.

Unit V

Direct Measures of Internal Migration: Estimation of Lifetime and Inter-censal Migration from Place of Birth; Duration of Residence and Place of Last Residence Data; Indirect Measures of Internal Migration: National Growth Rate Method; Vital Statistics Method; Survival Ratio Methods.

Suggested Readings:

Bhende, A. and T. Kanitkar (2010), Principles of Population Studies , Himalaya Publishing House, Mumbai.

Bose, Ashish and Jatinder Bhatia (1978), India's Urbanization: 1901 -2001, Tata McGraw -Hill, New Delhi.

Bouge, Donald Joseph (1969), Principles of Demography , John Wiley and Sons, New York.

Chandana, R. C. (2002), Geography of Population: Concepts, Determinants and Patterns , Kalyani Publishers, New Delhi.

Chopra, Kanchan (2001), Migration, Common Property, Resources and Environmental Degradation , Sage Publications, New Delhi.

Davis, Kingsley (1965), "The Urbanization of the Human Population", Scientific American , Vol. 213, No. 3 (September), pp. 41-53.

Desai, A. R. and S. Devidas Pillai (eds.) (1990), Slums and Urbanisation , Popular Prakashan, Bombay.

Halton, T. J. and J. G. Willianson (1998), The Age of Mass Migration: Causes and Economic

Impact , Oxford University Press, New York.

Mangalam, J. J. (1968), *Human Migration: A Guide to Migration Literature* , University of Kentucky Press, Lexington.

Pathak, K. B. and F. Ram (1992), *Techniques of Demographic Analysis* , Himalaya Publishing House, Bombay.

Patel, V. et. al (1987) (eds), *Women in Politics: Forms and Processes*. Friedich Ebert Stiftung, New Delhi.

Ramchandran, R. (1989), *Urbanisation and Urban Systems in India* , Oxford University Press, Delhi.

Safa, Helen J. (ed.) (1982), *Towards a Political Economy of Urbanisation in the Third World Countries*, Oxford University Press, Delhi.

Siegel, Jacob S. and David A. Swanson (eds.) (2004), *The Methods and Materials of Demography*, Elsevier Academic Press, San Diego.

Yadava, K. N. S. (1989), *Rural-Urban Migration in India: Determinants, Patterns and Consequences*, Independent Publishing Company, Delhi.

Elective Paper offered by J. Behera

PS-702JB: RECENT ADVANCES IN PUBLIC HEALTH AND NUTRITION

Learning objectives: The main objective of this course is to equip the students with the basic knowledge about public health research. At the same time, the course aims to equip the students with recent advances in the fields of public health system in India. This paper intends to familiarize the students about the morbidity situation prevalent in India.

Course outcomes: The students are expected to understand various Public Health issues such as the reproductive and child health and emerging non-communicable diseases etc. It will help the students to understand various health policies which can be helpful in their research.

Unit I

Health, its determinants and public health; History of public health; Disease, its measures and prevention; Measures of disease in population; Global health and epidemiological transition; Communicable and non-communicable diseases; Adolescent Health; Sources of global health data; Functional Organisation of the public health system in India ; NRHM, NUHM, NHM.

Unit II

Introduction to Population and Health: Definition, Scope, Concept of Demography, Population components, Demographic Transition Theory; Sources of Demographic and Health data: Population Census, Vital Registration System, Sample Registration System, National Family Health Survey (NFHS), District Level Health Survey (DLHS), Annual Health Survey(AHS) , National Sample Survey Organization (NSSO) .

Unit III

Introduction to Nutrition; Interrelationship between Food, Nutrition and Health; Nutritional Problems in Public Health: Low Birth Weight, Protein Energy Malnutrition , Nutritional Anaemia, Iodine Deficiency Disorders, Endemic fluorosis; Nutrition Transition: Demographic, Economic Transition, Poverty Alleviation, Food Consumption Patterns.

Unit IV

Problems of Malnutrition – Over Nutrition, Under-nutrition, Imbalance and Specific Deficiency; Under-nutrition: Global and Indian Prevalence of Under-nutrition, Risk Factors, Consequences; Obesity: Prevalence and Risk Factors: Physical Activity and Inactivity, Screening of those at

Nutritional Risk, Life Style Diseases.

Unit V

Assessment of Nutritional Status: Clinical Examination, Anthropometry, Biochemical Evaluation, Functional Assessment, Assessment of Dietary Intake, Micronutrient Deficiency Disorders: Prevalence, Risk Factors; Community Nutrition Programmes: Vitamin A Prophylaxis Programme, Prophylaxis against Nutritional Anaemia, Special Nutrition Programme, Mid-Day-Meal Programme, Integrated Child Development Services (ICDS); Food Security Bill, Nutrition Surveys in India.

Suggested Readings:

Bisht Prabha. (2017). Community Nutrition in India. Star Publications, Agra

Bamji M. S. et. al. (2017). Textbook Of Human Nutrition, 4Th Edition, Oxford & IBH Publishing.

Bhende, A. and T. Kanitkar (2010), Principles of Population Studies, Himalaya Publishing House, Mumbai.

Das Gupta, Monica, Lincoln C. Chen and T. N. Krishnan (eds.) (1996), Health, Poverty and Development in India , Oxford University Press, Delhi.

Das Suryatapa. (2016). TEXTBOOK OF COMMUNITY NUTRITION, Academic Publishers, Kolkata

Eilender Elizabeth. (2016). Public Health and Community Nutrition. Momentum Press
International Institute for Population Science and ORC Macro. (2000). 'National Family Health Survey (NFHS -2), 1998-99, India', Mumbai.

International Institute for Population Science. (2017). National Family Health Survey (NFHS-4), 2015-16, India; Mumbai.

Mahadevan, K. (ed.) (1992), Health Education for Quality of Life, B. R. Publishing Corporation, New Delhi.

Muthu V.K. (2014). A Short Book of Public Health (2nd Edition) , Jaypee Brothers Medical Publishers.

NITI Aayog. (2015). A Quick Evaluation Study of Anganwadis Under ICDS, Programme Evaluation Organisation Government of India, New Delhi

Park, K. (2009), Text Book of Preventive and Social Medicine , Banarsidas Bhanot Publishers, Jabalpur.

EC/PS-703: RESEARCH AND PUBLICATION ETHICS

Learning Objective: The primary objective of the paper is to promote the responsible conduct of research and ensure the integrity of the scientific record. This involves upholding certain ethical principles and standards of conduct throughout the entire research process, from the design and implementation of a study to the reporting and dissemination of the results.

Course outcomes: At the end of the paper research scholar will be trained by upholding ethical principles and standards of conduct throughout the entire research process, researchers can help to ensure the accuracy, transparency, and validity of their findings, and ensure that they are reported in a manner that is consistent with established ethical and legal standards and guidelines.

Unit I

Philosophy and ethics and Scientific Conduct: Introduction to philosophy: definition, nature and scope, concepts and branches, Ethics: Definition, Moral Philosophy, Nature of moral judgments and reactions. Ethics with respect to science and research, Intellectual honesty and research integrity, scientific misconducts: Falsification, Fabrication, and Plagiarism (FFP).

Unit II

Publication Ethics: Definition, Introduction and Importance. Redundant Publication: duplicate and overlapping publications, salami slicing, Conflicts of interest, Predatory Publishers and Journals.

Unit III

Open Access Publishing: Open access publications and initiatives, SHERPA/RoMEO online resource to check publisher copyright and self-archiving policies, Journal finders, journal suggestion tools.

Unit IV

Publication Misconduct: Subject specific ethical issues, FFP, authorship, conflicts of interest, use of plagiarism software tools like Turnitin and other open source software tools.

Unit V

Database and Research Metrics: Indexing databases, Citation databases-WoS, Scopus, DBLP, IF, SNIP, SJR, Cite Score, h-index, i10 index, g-index, altmetrics.

Suggested Readings:

Academic Integrity and Research Quality, <https://www.ugc.ac.in/e-book/Academic> and

Chaddah, P. Ethics in Competitive Research: Do not get scooped: do not get plagiarized, 2018 ISBN:978-9387480865

Consortium for Academic Research and Ethics CARE, source: <https://www.ugc.ac.in/e-book>

Indian National Science Academy (INSA), Ethics in Science Education, Research and Governance (2019), ISBN:978-81-939482-1-7. http://insaindia.res.in/pdf/Ethics_Book.pdf.

Patwardhan B., Desai A., Chourasia A, Nag S., Bhatnagar R. 2020. Guidance Document: Good Academic Research Practices. New Delhi: University Grants Commission.

<Research/mobile/index.html>

Resnik, D. B. what is ethics in research & why is it important. National Institute of Environmental Health Sciences, 1-10, 2011. Retrieved from

<https://www.niehs.nih.gov/research/resources/bioethics/whatis/index.cfm>

EC/PS-704: LITERATURE REVIEW (Specialization)

EC/PS-705: PREPARATION OF RESEARCH PROPOSAL/ SYNOPSIS (Specialization)

*Bold-marked bit(s) in each unit of the paper is/are for self -study by the students under the guidance of concerned teacher.
