

P. G. Department of Population Studies

Syllabus: 2019 – 20

M. A. in Population Studies



Fakir Mohan University
Nuapadhi, Balasore – 756 020, Odisha

M. A. (Population Studies) syllabus from the session 2014-2015 onwards

COURSE STRUCTURE

Paper Code	Paper Name	Marks	Credit
Semester I			
PS-101	Society and Regional Problems	40 + 10	4
PS-102	Social Development	40 + 10	4
PS-103	Environment and Disaster Management	40 + 10	4
PS-104	Statistical Methods	40 + 10	4
PS-105	Statistical Applications (Practical)	100	8
	Thematic Discussion	Presentation	Intl. Eval.
Semester II			
PS-201	Research Methodology	40 + 10	4
PS-202	Epidemiology and Public Health	40 + 10	4
PS-203	Maternal and Child Health	40 + 10	4
PS-204	HIV/AIDS and Counselling	40 + 10	4
PS-205	Statistical Applications in Health (Practical)	100	8
	Guided Reading	Presentation	Intl. Eval.
Semester III			
PS-300	Fakir Mohan Studies	40 + 10	4
PS-301	Data Structure and Fertility	40 + 10	4
PS-302	Morbidity and Mortality	40 + 10	4
PS-303	Mobility and Migration	40 + 10	4
PS-304	Rudiments of Population Studies (Choice based)	100	8
PS-305	SPSS and Demographic Techniques	40 + 10	
	Group Discussion	Presentation	Intl. Eval.
Semester IV			
PS-401	Spatial Distribution and Urbanization	40 + 10	4
PS-402	Special Paper – I	40 + 10	4
PS-403	Special Paper - II	40 + 10	4
PS-404	Special Paper – III	40 + 10	4
PS-405	Project Work	100	8
	Personality Development	Presentation	Intl. Eval.
Total		1200	96

First Semester: Mark Distribution	
<u>Theory</u>	<u>Practical</u>
Semester Examination - 40	Practical Test – 80
Internal – 10	Practical Record – 05
-----	Presentation (TD) - 05
Total – 50	Viva-voce – 10

	Total – 100

PS-101 SOCIETY AND REGIONAL PROBLEMS

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Society: Stratification of Indian Society; Culture: Concept and Characteristics, Culture and Civilization, Acculturation, Assimilation, Integration, Diffusion, Sanskritization, Westernization and Modernization; Cultural Conflicts; Disadvantaged Groups: Differently-abled, Aged, Women and Children.

Unit II

Structure and Function of Social Institutions: Marriage and Family; Causes and Consequences of Social Problems in India: Population Growth, Poverty, Unemployment, Beggary, Drug Addiction, Alcoholism, Prostitution, Crime, Delinquency and Corruption.

Unit III

Age-sex, Religious, Linguistic, Caste and Tribal Compositions of Population in Odisha; Poverty Alleviation Programmes: MGNREGS, Indira Awas Yojana, Antyodaya Anna Yojana, Mid-day Meal Scheme, National Drinking Water Mission, Sarva Shiksha Abhiyan and National Old Age Pension Scheme.

Unit IV

Regional Disparities in Odisha: Access to Health Facilities, Safe Drinking Water and Sanitation; Gender Differentials in Nutritional Level; Gender, Caste and Rural-urban Disparities in Education; Gender Differentials in Age at Marriage; Rural-urban Differentials in Infant, Child and Maternal Mortality.

Suggested Readings:

- Bose, Ashish (1991), Population of India: 1991 Census Results and Methodology, B. R. Publishing Corporation, Delhi.
- De Souza, Alfred (ed.) (1978), The Indian City: Poverty, Ecology and Urban Development, Manohar Publications, New Delhi.
- Dreze, Jean and Amartya Kumar Sen (eds.) (2004), Indian Development: Selected Regional Perspectives, Oxford University Press, Delhi.
- Jain, Gopal Lal (2000), Rural Economy and Society: Towards Development, Mangal Deep Publications, Jaipur.
- Jena S. K. and K. N. Swain (2006), Social Change, Elegant Publishers, Bhubaneswar.
- Kar, P. K. (1998), Indian Society, Kalyani Publishers, New Delhi.
- Shankar Rao, C. N. (2006), Sociology: Principles of Sociology with an Introduction to Social Thought, Sultan Chand and Company, New Delhi.
- Sinha, B. N. (2008), Geography of Orissa, National Book Trust, India, New Delhi.

PS-102 SOCIAL DEVELOPMENT

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Perspectives of Development: Liberal, Marxian and Gandhian; Social Development: Central Tenets, Conditions, Barriers and Consequences; Social Change: Concept, Causes and Perspectives; Modernization: Concept, Features and Perspectives.

Unit II

Sustainable Development: Concept, Genesis, Evolution and Criticism; Concept of Gender, Gender and the Indian Constitution; Dowry and Domestic Violence against Women, Women's Participation in Household Purchase and Health Care; Role of Women in Social Development.

Unit III

Globalization: Concept and Features; Economic, Cultural and Social Dimensions; Globalization and Intellectual Property Rights; Protection of Indigenous Knowledge, and Information and Communication Technology; Role of Education and Mass-media in Social Development; Impact of Globalization on Indian Society.

Unit IV

Effects of Education, Health and Family Structure on Social Development; Effects of Social Development on Health Situations, Family Structure, Social Norms and Values; Impacts of Population Change on Food Supply, Housing, Water Supply, Educational Infrastructures, Employment Opportunities, and Income.

Suggested Readings:

- Berry, John W., R. C. Mishra and R. C. Tripathi (eds.) (2003), *Psychology in Human and Social Development: Lessons from Diverse Cultures: A Festschrift for Durganand Sinha*, Sage Publications, New Delhi.
- Bhanti, Raj (ed.) (2001), *Social Development: Analysis of Some Social Work Fields*, Himanshu Publications, Udaipur.
- Dahama, O. P and O. P. Bhatnagar (1980), *Education and Communication for Development*, Oxford and IBH Publishing Company, New Delhi.
- Das Gupta, Monica, Lincoln C. Chen and T. N. Krishnan (eds.) (1996), *Health, Poverty and Development in India*, Oxford University Press, Delhi.
- Kulkarni P. D. and Meher C. Nanavatti (1997), *Social Issues in Development*, Uppal Publishing House, New Delhi.
- Pimpley, P. N., K. P. Singh and A. Mahajan (eds.) (1989), *Social Development Process and Consequences*, Rawat Publications, Jaipur.
- Social Watch India (2007), *Citizens' Report on Governance and Development*, Sage Publications, 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

PS-103 ENVIRONMENT AND DISASTER MANAGEMENT

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Concept of Human Ecology and Environment; Ecosystem: Definition, Types, Structure and Component; Concept of Food Chain, Food Web and Ecological Pyramid; Biodiversity: Definition, Level, Values and Conservation; Natural Resources: Types and Conservation.

Unit II

Types of Environmental Pollution; Classification of Pollutants; Effects of Pollution on Human Health; Environmental Problems: Climate Change, Global Warming, Ozone Depletion, Acid Rain, Land Degradation and Desertification; Environmental Sustainability; Environmental Movements in India.

Unit III

Environmental Hazards and Disasters: Natural and Human Made; Risks, Vulnerability and Capacity Analysis; Effects of Disaster on Socio-economic Infrastructure and Health; Disaster Management: Conceptual Framework, Institutional Mechanism; Mitigation and Preparedness; Community-based Disaster Management.

Unit IV

Emergency Response: Search, Rescue and Evacuation, Managing Relief; Role of Various Agencies; Damage and Loss Assessment; Recovery, Rehabilitation and Reconstruction; Disaster Management Strategies; Role of Information, Education and Communication in Disaster Management.

Suggested Readings:

- Dash, M. C. and P. C. Mishra (2001), *Man and Environment*, Macmillan India, Calcutta.
- Goel, S. L. and Ram Kumar (2001), *Disaster Management: Organisation and Management, Health Management of Human Beings and Animals Rehabilitation*, Deep and Deep Publications, New Delhi.
- Kumar, U. and M. J. Asija (2007), *Biodiversity: Principles and Conservation*, Agrobios (India), Jodhpur.
- Mehta, C. S. (2009), *Environmental Protection and the Law*, A.P.H. Publishing Corporation, New Delhi.
- Narayan, B. (2009), *Disaster Management*, A.P.H. Publishing Corporation, New Delhi.
- Prakash, Indu (1994), *Disaster Management: Societal Vulnerability to Natural Calamities and Man Made Disasters, Preparedness and Response Indian Scene*, Rashtra Prahari Prakashan, Ghaziabad.
- Sharma, P. D. (2000), *Ecology and Environment*, Rastogi Publications, Meerut.
- Trivedi, P. C. (2004), *Environmental Pollution and Management*, Aavishkar Publishers, Jaipur.

PS-104 STATISTICAL METHODS

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Scope, Importance, Limitations and Misuse of Statistics; Frequency Distribution: Uni-variate and Bi-variate; Table: Construction and Types; Graph: Histogram, Bar-diagram, Frequency Polygon, Ogive and Pie-chart; Series: Individual, Discrete and Continuous.

Unit II

Measures of Central Tendency: Mean, Median and Mode; Measures of Dispersion: Range, Quartile Deviation and Standard Deviation; Coefficient of Variation; Measures of Skewness and Kurtosis; Measures of Location: Quartile, Decile and Percentile.

Unit III

Probability: Concept and Basic Properties, Distribution: Normal and Abnormal; Moving Average; Arithmetic and Exponential Growth Rates; Interpolation and Extrapolation; Bi-variate Association and Causation: Correlation Analysis - Pearson and Spearman Coefficients.

Unit IV

Linear Regression Analysis; Concepts of Hypothesis, Null Hypothesis and Alternative Hypothesis; Testing Hypothesis: Parametric Tests - F', t' and Z' Tests; Non-Parametric Tests and their Uses, Chi-square Test.

Suggested Readings:

- Blalock (Jr.), Hubert M. (1979), *Social Statistics*, McGraw-Hill, New York.
Croxtton, F. E., D. J. Cowden and S. Klein (1982), *Applied General Statistics*, Prentice-Hall of India, New Delhi.
Goon, A. M., M. K. Gupta and D. Dasgupta (1985), *Basic Statistics*, World Press, Calcutta.
Gupta, S. C. (1992), *Fundamentals of Statistics*, Himalaya Publishing House, Bombay.
Ramchandran, P. (1968), *Social Work Research and Statistics*, Allied Publishers, Bombay.
Siegel, Jacob S. and David A. Swanson (eds.) (2004), *The Methods and Materials of Demography*, Elsevier Academic Press, San Diego.
Snedecor, G. W and W. G. Cochran (1994), *Statistical Methods*, Oxford and IBH Publishing Company, New Delhi.
Weiss, Robert S. (1968), *Statistics in Social Research: Introduction*, John Wiley and Sons, New York.

PS-105 STATISTICAL APPLICATIONS

Total Marks = 100

Credit hour = 8

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| 1. Histogram and Bar-diagram | 7. Mean and Median |
| 2. Frequency Polygon and Curve | 8. Moving Average |
| 3. Ogive: Less and More than Types | 9. Standard Deviation |
| 4. Proportion and Pie-chart | 10. Pearson Correlation Coefficient |
| 5. Age-sex Pyramid | 11. Linear Regression Equations |
| 6. Arithmetic and Exponential Growth Rates | 12. Disparity Indices |

Second Semester: Mark Distribution	
<u>Theory</u> Semester Examination – 40 Internal – 10 ----- Total – 50	<u>Practical</u> Practical Test – 40 Field Report – 40 Practical Record – 05 Presentation (GR) – 05 Viva-voce – 10 (Pr. - 5 + Fld. - 5) ----- Total – 100

PS-201 RESEARCH METHODOLOGY

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Meaning, Significance and Types of Research; Research Process: Conceptual, Empirical and Analytical Phases; Review of Literature; Formulation and Justification of Problem; Hypothesis; Research Design; Importance and Uses of Scaling and Index: Likert Scale and Composite Index.

Unit II

Quantitative Methods of Data Collection: Direct, Self-administered and Telephonic Interview; Qualitative Methods of Data Collection: Participant and Non-participant Observation; Focus Group Discussion, Construction of Schedule and Questionnaire; Research Ethics.

Unit III

Concept and Importance of Sampling; Difference between Sample Survey and Census; Sampling Frame; Sampling Methods: Simple Random Sampling, Systematic Sampling, Cluster Sampling, and Purposive Sampling; Large-scale Survey Sampling - NFHS-3; Sampling and Non-sampling Errors; Pilot Survey.

Unit IV

Variable: Meaning and Measurement Scales; Data Processing: Editing, Classification and Tabulation; Meaning and Need of Interpretation of Data; Presentation of Uni-variate, Bi-variate, and Multi-variate Tables; Report Writing: Steps, Format and Referencing/Bibliography.

Suggested Readings:

- Ahuja, Ram (2001), *Research Methods*, Rawat Publications, Jaipur.
- Blalock (Jr.), Hubert M. (1979), *Social Statistics*, McGraw-Hill, New York.
- Croxtan, F. E., D. J. Cowden and S. Klein (1982), *Applied General Statistics*, Prentice-Hall of India, New 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.
- 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, New Delhi.

PS-202 EPIDEMIOLOGY AND PUBLIC HEALTH

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Epidemiology: Definition, Components and Aims; Epidemiological Methods: Descriptive Epidemiology, Analytical Epidemiology - Case Control and Cohort Studies; Concepts of Attributable and Relative Risk; Concept of Experimental Epidemiology; Concepts of Association and Causation; Uses of Epidemiological Studies.

Unit II

Investigation of an Epidemic: Objectives and Major Steps; Screening for Diseases: Concept, Use and Types; Screening Test and its Evaluation; Clinical Trial: Concept, Ethics and Phases; Clinical Trial Design: Uncontrolled and Controlled; Concepts of DALY and DALE; Biostatistics: Scope and Uses.

Unit III

Concept and Scope of Public Health; Health Care of the Community: Concept, Levels, Elements and Principles of Health Care; Assessment of Health Status and Health Problems; Organizational Structure of Health Care Delivery System in India; Primary Health Care in India: Village, Sub-centre, PHC, CHC and District Levels; Health Insurance; Voluntary Health Organizations in India.

Unit IV

Health for All and National Strategy for HFA 2000; Millennium Development Goals; National Health Policy 2002; National Malaria Eradication Programme; ICDS Programme; National Rural Health Mission; National Disease Surveillance System; Resources for Public Health: Private and Government Health Expenditures; Role of NGOs in Community Health Development.

Suggested Readings:

- Banerji, Debabar (1985), *Health and Family Planning Services in India: An Epidemiological, Socio-cultural and Political Analysis and A Perspective*, Lok Prakash, New Delhi.
- Good, Christopher Saxty (ed.) (1976), *The Principles and Practice of Clinical Trials: Based on a Symposium organized by the Association of Medical Advisers in the Pharmaceutical Industry*, Churchill Livingstone, Edinburgh.
- Kleinbaum, David G. and Lawrence L. Kupper (1982), *Epidemiologic Research: Principles and Quantitative Methods*, John Wiley and Sons, New York.
- McMahon, B. and T. F. Pugh (1970), *Epidemiology: Principles and Methods*, Little Brown and Company, Boston.
- Ministry of Health and Family Welfare (2000), *Bulletin on Rural Health Statistics in India*, Government of India, New Delhi.
- Ministry of Health and Family Welfare (2002), *National Health Policy: 2002*, Government of India, New Delhi.
- Park, K. (2009), *Text Book of Preventive and Social Medicine*, Banarsidas Bhanot Publishers, Jabalpur.
- United Nations (2010), *Millennium Development Goals Report 2010*, Department of Economic and Social Affairs, New York.

PS-203 MATERNAL AND CHILD HEALTH

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Maternal Health: Concept and Definition; Ante-natal Care: Definition, Regime and Importance; Common Problems of Pregnancy; Natal Care: Place of Delivery, Natal and Post-natal Cares; Abortion: Legal and Illegal Abortions, Safe and Unsafe Abortions.

Unit II

Maternal Mortality: Concept, Measurement, Causes and Consequences; Reproductive Health: Definition, Gynaecological, Abortion and Contraceptive related Morbidity; Consequences of Reproductive Morbidity; Infertility: Causes and Consequences.

Unit III

Child Health: Concept and Definition; Infant and Child Mortality: Definition, Causes and Consequences; Mosley-Chen Framework of Infant Mortality; Child Health Problems: Diarrhea, Measles, Respiratory Infection, Malnutrition; Infant and Child Health Scenarios in Odisha; Breast Feeding: Concept and Importance.

Unit IV

Child Immunization: Meaning, Importance, Regime and Barriers, State of Immunization in Odisha; Role of NGOs and Mass-media in Universal Immunization; ICDS for Child Health; Role of NRHM in Child Health; MDGs in view of Child Health; Influence of Family Structure in Child Rearing.

Suggested Readings:

- Boler, T., C. Marston, N. Corby and E. Gardiner (2009), *Medical Abortion in India: A Model for the Rest of the World?*, Marie Stopes International, London.
- Das Gupta, Monica, Lincoln C. Chen and T. N. Krishnan (eds.) (1996), *Health, Poverty and Development in India*, Oxford University Press, Delhi.
- Deshprabhu, Rashmi (2001), *Child Development and Nutrition Management*, Book Enclave, Jaipur.
- Nanda, V. K. (2008), *Nutrition and Health for Child Development*, Anmol Publications, New Delhi.
- Park, K. (2009), *Text Book of Preventive and Social Medicine*, Banarsidas Bhanot Publishers, Jabalpur.
- Siegel, Jacob S. and David A. Swanson (eds.) (2004), *The Methods and Materials of Demography*, Elsevier Academic Press, San Diego.
- Srinivasan, K. (1998), *Basic Demographic Techniques and Applications*, Sage Publications, New Delhi.
- United Nations (1973), *The Determinants and Consequences of Population Trends*, Vol. I, Department of Economic and Social Affairs, New York.

PS-204 HIV/AIDS AND COUNSELLING

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Disease Profile: Immune System, Stages of HIV/AIDS; Theories of Origin of HIV/AIDS; Transmission of HIV/AIDS through Sex, Blood and Mother-to-Child; Misconception of HIV/AIDS; Global and National Scenarios; HIV Situation in Odisha; Implications of HIV/AIDS.

Unit II

HIV Prevention and Control: UN and Government Initiatives; HIV/AIDS Education: Goal, Prevention and Steps; Life-skill Education for HIV/AIDS; HIV/AIDS and Ethical Issues; Rights of HIV/AIDS Patients; Vulnerable Population; NGO and Corporate Sector Initiatives in India for Prevention of HIV/AIDS.

Unit III

Concepts, Types, Functions of and Barriers to Communication; Schramm and Berlo Models; Socio-cultural Constituents in Communication; Population Communication Programmes in India; Folk Media: Concept, Characteristics, Types and Functions; Concepts of Group and Mass-communication; Health Communication and its Functions.

Unit IV

Counselling: Concept and Need; Characteristics of a Good Counsellor; Processes involved and Techniques used in Counselling: Supportive and Behavioural, Cognitive and Psychoanalytical; Practical Issues involved in Counselling; Role of Counselling in Population and Health Education.

Suggested Readings:

- Aptekar, Herbert H. (1955), *Dynamics of Casework and Counseling*, Houghton Mifflin, Boston.
- Bhaskara Rao, Digumarti (ed.) (2000), *HIV/AIDS and Law, Ethics and Human Rights*, International Encyclopaedia of AIDS, Vol. 4, Discovery Publishing House, New Delhi.
- Bhaskara Rao, Digumarti (ed.) (2000), *HIV/AIDS: Socio-economic Realities*, International Encyclopaedia of AIDS, Vol. 3, Discovery Publishing House, New Delhi.
- Jaiswal, T. B. L. (1992), *AIDS: Causes and Prevention*, Mittal Publications, New Delhi.
- Mcleod, John (2008), *An Introduction to Counselling*, Rawat Publications, New Delhi.
- Mcleod, John (2009), *Counselling Skill*, Rawat Publications, New Delhi.
- Nelson-Jones, Richard (1995), *Practical Counselling and Helpful Skills: How to Use the Lifeskills Helping Model*, Cassel and Company, London.
- Ravichandran, N. (2004), *Living 'Life' with HIV/AIDS: Striving towards Basic Rights*, Pentagon Press, New Delhi.

PS-205 STATISTICAL APPLICATIONS IN HEALTH

Total Marks = 100

Credit hour = 8

A. Laboratory Work

1. Construction of Schedule
2. Likert Scale and Index
3. Sampling: Sample Size Determination
4. Screening Test
5. Relative and Attributable Risk
6. DALY and DALE

B. Field Work

Visit: Weekend field visit for a complete day (six hours) will be undertaken in the nearby localities for the students, who are to submit a group report to the head of the department about their observations on the same date. At the end of the semester, each student will submit a report on his/her share in the field visit observations. Both group and individual reports are to be approved by the guide.

Study: Interaction with Village People, Collection of Information on Problems related to their Health and Livelihood, Making them Aware of Public Efforts for Solution of Hindrances for Development in Rural Areas/ Urban Slums, Their Responses to Public Policies, Evaluation of Activities of Self-Help Groups and Micro-institutions.

Third Semester: Mark Distribution	
<u>Theory</u>	<u>Practical</u>
Semester Examination – 40	Practical Test – 80
Internal – 10	Practical Record – 05
-----	Presentation (GD) – 05
Total – 50	Viva-voce – 10

	Total – 100

PS-300 FAKIR MOHAN STUDIES (NON-CREDIT COURSE)

PS-301 DATA STRUCTURES AND FERTILITY

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Nature and Scope of Population Studies; Relationship of Population Studies with Other Disciplines; Malthusian Theory of Population; Views of Karl Marx on Population; Optimum Population Theory; Theory of Demographic Transition, Concept of Population Change and Balancing Equation.

Unit II

Sources and Types of Demographic Data; Population Census: Uses and Limitations; Sample Registration System in India; Sample Survey: Uses and Limitations; Age-sex Structure and its Common Measures; Errors in demographic data: types, sources, measurement and adjustment.

Unit III

Importance of Studying Fertility; Basic Concepts in Fertility; Methods of Family Planning; Davis and Blake Intermediate Variable Framework and Bongaart's Proximate Determinant Model; Theories of Fertility: Social Capillarity Theory, Theory of Diffusion and Cultural Lag, Theories of Leibenstein, Becker, Easterlin and UN Threshold Hypothesis;

Unit IV

Basic Measures of Fertility: Crude Birth Rate, General Fertility Rate, Age-specific Fertility Rate and Total Fertility Rate; Standardization of CBR and GFR: Direct and Indirect Methods; Coale's Fertility Index; Parity Progression Ratio; Measures of Reproduction: Gross and Net Reproduction Rates.

Suggested Readings:

- Bhatia, H. S. (1983), *Ageing and Society: A Sociological Study of Retired Public Servants*, The Arya's Book Centre Publishers, Udaipur.
- Bhende, A. and T. Kanitkar (2010), *Principles of Population Studies*, Himalaya Publishing House, Mumbai.
- Bouge, Donald Joseph (1969), *Principles of Demography*, John Wiley and Sons, New York.
- Krishnan, P. and K. Mahadevan (eds.) (1992), *The Elderly Population in Developed and Developing World: Policies, Problems and Perspectives*, B. R. Publishing Corporation, New Delhi.

- Pathak, K. B. and F. Ram (1992), *Techniques of Demographic Analysis*, Himalaya Publishing House, Bombay.
- Siegel, Jacob S. and David A. Swanson (eds.) (2004), *The Methods and Materials of Demography*, Elsevier Academic Press, San Diego.
- Bongaarts, John and R. G. Potter (1983), *Fertility, Biology and Behaviour: An Analysis of the Proximate Determinants*, Academic Press, New York.
- United Nations (1973), *The Determinants and Consequences of Population Trends*, Vol. I, Department of Economic and Social Affairs, New York.

PS-302 MORBIDITY AND MORTALITY

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Health Status: Concept, Measures and their Comparative Relevance - Morbidity, Nourishment and Mortality; Health Transition: Importance of its Study for Policy and Public Intervention; Measurement of Morbidity: Incidence and Prevalence Rates; Point and Period Prevalence Rates; Sources, Quality and Use of Morbidity Data.

Unit II

Measurement of Nourishment: Height for Age and Weight for Height Measures; Measurement of Mortality: Death Rates - General and Specific; Crude Death Rate, Age-specific Death Rate, Cause-specific Death Rate and Sex-specific Death Rate; Other Specific Measures of Mortality: Relevance and Usefulness of their Study.

Unit III

Rates of Still Birth, Perinatal Mortality, Neonatal Mortality, Post-neonatal Mortality, Infant Mortality, Child Mortality, Under-five Mortality and Maternal Mortality; Adjustment of Infant Mortality Rate: Forward and Backward Methods; Life Expectancy; Factors affecting Early Childhood Mortality; Relation of Infant Mortality with Fertility.

Unit IV

Standardization of Death Rates: Direct and Indirect Methods; Life Table: Concept, Assumptions, Types, Uses and Construction; Concept of Model Life Table; Factors affecting Mortality Decline in the Developed and Developing Countries; Mortality Differential by Socio-economic Categories and Importance of its Study.

Suggested Readings:

- 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.
- Mahadevan, K. (ed.) (1992), *Health Education for Quality of Life*, B. R. Publishing Corporation, New Delhi.
- Park, K. (2009), *Text Book of Preventive and Social Medicine*, Banarsidas Bhanot Publishers, Jabalpur.
- Preston, Samuel H. (ed.) (1982), *Biological and Social Aspects of Mortality and the Length of Life*, Ordina Editions, Liege.
- Siegel, Jacob S. and David A. Swanson (eds.) (2004), *The Methods and Materials of Demography*, Elsevier Academic Press, San Diego.
- Srinivasan, K. (1998), *Basic Demographic Techniques and Applications*, Sage Publications, New Delhi.
- United Nations (1973), *The Determinants and Consequences of Population Trends*, Vol. I, Department of Economic and Social Affairs, New York.

PS-303 MOBILITY AND MIGRATION

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Concepts of Mobility and Migration; Sources of Migration 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

Measures of Internal Migration and Problems of Base Population; Estimation of Lifetime and Inter-censal Migration from Place of Birth; Duration of Residence and Place of Last Residence Data; Indirect Measures of Net Internal Migration: Vital Statistics Method, National Growth Rate Method, and Census and Life Table Survival Ratio Methods.

Unit III

International Migration: Sources of Data; Categories of International Migration: Labour Migration, Brain Drain, Refugee and Illegal Migration; International Migration: Determinants; Consequences upon Demography, Economy and Society; Socio-economic Effects of Remittances; Linkage of International Migration with Health.

Unit IV

Basis of Decision Making in Migration; Problems of Left Behinds; Issues of Social Networking and Health of Migrants; Migration Theories and Models: Ravenstein's Laws of Migration, Everett Lee's Theory of Migration, Wolpert's Decision Making Aspects of Migration, Todaro's Model of Rural-Urban Migration.

Suggested Readings:

- 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.
- Halton, T. J. and J. G. Williamson (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.
- Shaw, Gareth and Dennis Wheeler (1985), *Statistical Techniques in Geographical Analysis*, John Wiley and Sons, Chichester.
- 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.

PS-304 RUDIMENTS OF POPULATION STUDIES (Choice Based)

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Population Studies: Scope and Relationship with Other Disciplines; Views of Malthus and Karl Marx on Population; Theory of Demographic Transition; Sources of Demographic Data; Age-sex Structure and its Common Measures

Unit II

Fertility: Concept and Basic Measures - Crude Birth Rate, Age-specific Fertility Rate and Total Fertility Rate; Methods of Family Planning; Determinants of Fertility; Theories of Fertility: Social Capillarity Theory, Theory of Diffusion and Cultural Lag, Theories of Leibenstein

Unit III

Concepts of Health, Morbidity and Mortality; Basic Measures of Morbidity and Mortality; Factors affecting Infant Mortality; Factors Affecting Mortality Decline in India; Concepts of Life expectancy and Life Table

Unit IV

Migration: Concept, Types Determinants and Consequences of Internal Migration; Factors affecting Population Distribution; Urban Area, Urbanization and Urban Population Growth; Urban Problems in India

Suggested Readings:

- Bhende, A. and T. Kanitkar (2010), *Principles of Population Studies*, Himalaya Publishing House, Mumbai.
- Chandana, R. C. (2002), *Geography of Population: Concepts, Determinants and Patterns*, Kalyani Publishers, New Delhi.
- Das Gupta, Monica, Lincoln C. Chen and T. N. Krishnan (eds.) (1996), *Health, Poverty and Development in India*, Oxford University Press, Delhi.
- Desai, A. R. and S. Devidas Pillai (eds.) (1990), *Slums and Urbanisation*, Popular Prakashan, Bombay.
- Pathak, K. B. and F. Ram (1992), *Techniques of Demographic Analysis*, Himalaya Publishing House, Bombay.
- Siegel, Jacob S. and David A. Swanson (eds.) (2004), *The Methods and Materials of Demography*, Elsevier Academic Press, San Diego.
- Srinivasan, K. (1998), *Basic Demographic Techniques and Applications*, Sage Publications, New Delhi.
- Yadava, K. N. S. (1989), *Rural-Urban Migration in India: Determinants, Patterns and Consequences*, Independent Publishing Company, Delhi.

PS-305 SPSS AND DEMOGRAPHIC TECHNIQUES

Total Marks = 100

Credit hour =8

(A) Data Analysis in SPSS

1. Creation of Data Frame
2. Frequency and Recoding
3. Cross-tabulation
4. Construction of Indices
5. Pearson Correlation Coefficient
6. Linear Regression Equations

(B) Demographic Techniques

1. Myer's Index and Whipple's Index
2. United Nations Joint-score Method
3. Measures of Fertility and Standardization of CBR
4. Measures of Mortality and IMR Adjustment
5. Construction of Life Table
6. National Growth Rate and Census Survival Methods

Fourth Semester: Mark Distribution	
<u>Theory</u>	<u>Project</u>
Semester Examination - 40	Proposal and Presentation (10+5) - 15
Internal – 10	Data Work - 20
-----	Findings and Presentation (10+5) - 15
Total – 50	Report – 30
	Grand Viva-voce – 20

	Total – 100

PS-401 SPATIAL DISTRIBUTION AND URBANIZATION

Total Marks = 50 (End Term-40 + Internal-10)

Credit hour =4

Unit I

Spatial Distribution of World Population and Factors Affecting it; Variation in Rural-Urban Distribution and Density of World Population with Special Reference to India; Methods of Studying Population Distribution: Index of Redistribution, Lorenz Curve and Gini Concentration Ratio.

Unit II

Urbanization: Concept, Importance of Study and Sources of Data; Urban and Related Concepts used in Indian Census; Components of Urban Population Growth; Kingsley Davis Model of Urbanization; Level and Tempo of Urbanization; City Population Distribution; Rank Size Rule and Primacy Index.

Unit III

Urban Development: Concepts; Urban Morphology; Theory of Urban Origins; Models of Metropolitan Growth: Burgess Concentric Zone Model, Hoyt's Sector Model, Harris and Ullman's Multiple Nuclei Model; Elements of City Planning.

Unit IV

Trends of Urbanization in Developing and Developed Countries; Phenomena of Over-urbanization and Urban Primacy; Urbanization Related Problems in Developing Countries with Focus on India: Land Use, Housing, Slums, Water Supply and Sanitation, Transport, Environmental Problems, Urban Health Issues and Other Social Problems.

Suggested Readings:

- 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.
- 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.
- 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.

Specialization – I (Development Studies)

PS-402A: History and Theories of Development

Unit I:

Concept of Development, Transition from Quantitative to Qualitative Indices; Growth and Development – Characteristics of Modern Economic Growth – Its Unequal Spread and Global Disparities; Common Characteristics and Dissimilarities among Developing Countries.

Unit II:

International Order and its Impact on Development: Historical Review from the GATT to WTO; TRIMS, TRIPS and their Implications; International Capital Movements and Financial Flows: Exchange Rates and Transmission of Crises across National Frontiers – Convertibility, Ratification.

Unit III:

Approaches to Development Theory: Core Values of Development, Assessing Development from Per Capita Income to PQLI, Choice and Access; Changing Perceptions of the State's Role in Crisis; Non-specific Classical and Neo-classical Theories: Schumpeterian, Marxian.

Unit IV:

Specific Thought on Development: Rosenstein-Rodan, Capital-centred Theories, Aid and Technology-centered Thoughts, Stage Theory; Institutional Focus and Dualistic Explanations - Nurkse, Myrdal and Hirschman; Structuralist Approach and Dependency Theory of Frank.

PS-403A: Contemporary Indian Economy (Development Studies)

Unit I

India as a developing economy: Meaning and characteristics of Indian Economy as a developing Economy, Measure issues of Development. Process of Industrial transition, Natural Resources, Economic development and environmental Degradation.

Unit II

Infrastructure in the Indian Economy: Infrastructure and Economic development, 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. The communication system in India. Private investment in Infrastructure: outlook and prospects.

Unit III

Economic Reforms: Liberalization: Meaning scope and characteristics, Privatization: Meaning and scope of Privatization, Comparison of public and private sector, Privatization wave in the world. Globalization: Meaning and scope. Globalization and its advocacy. Globalization and its impact on India.

Unit IV

Agriculture and WTO, Food processing, Subsidies, Agricultural prices and Impact of public expenditure on agricultural growth. Role of foreign direct investment and multinationals. Intellectual property rights, Implications of TRIPS, TRIMS, GATS and new EXIM policy. New Exchange Rate Regime: Partial and full convertibility, Capital account convertibility. New Economic Policy and Public Finance: Fiscal Responsibility Act

PS-404A: Social Exclusion, Inclusive Policy and Development

Unit-I:

Social Exclusion: Concept, meaning and forms social exclusion, who is socially excluded and why this matter, role of culture in social exclusion. Dalit, ST, Religious minorities, Children, Women, Aged, Physically and mentally challenged people, People affected by HIV/AIDS.

Unit-II:

Poverty and dimensions of social exclusion; Human Rights Approach: Deprivation; Inequality; Globalization, Displaced people of mega development projects, Migrants and Refugees, Language, Caste system, inequality and social exclusion, Social exclusion and exploitation

Unit-III:

Inclusive Policy: Concepts, meaning and forms of social inclusion, Reducing poverty by tackling social exclusion. Social Policies. Current policies of protective discrimination, Public policies to reduce social exclusion, Constitutional safeguards, Post-industrial Structuralism, Norm of structural exclusion,

Unit- IV:

Panchayati Raj and women empowerment, Panchyati Raj SCs/STs, Convention on the Rights of the Child, Sub-plan approach to tribal development. Compulsory child Education and Mid-Day- Meal Programme, Housing for Marginalized communities.

Specialization – II (Nutrition Studies)

PS - 402B: Agriculture and Food Security

Unit-I:

Agriculture in India: The place of Agriculture in the National Economy, Progress of Agriculture through Five year plans, Present Position of Indian Agriculture, Green revolution, National Agricultural Policy-2000. Cropping pattern in India since 1951, Livestock and Dairy development. Agricultural Management: Concept, Scope and Principle, Recent trends in Agricultural Management, Problems of Agricultural Management.

Unit-II:

Land Reforms: Need and Scope, Abolition of Intermediaries, Tenancy Reforms, Ceiling on land holdings Operational land holding in India, Problems of sub-division and fragmentation of Holdings, Co-operative farming. Agricultural Marketing, Co-operative marketing. Minimum Support Price for food grains. NABARD and its role in rural credit.

Unit-III:

Food security: Concept, measurement; Food Insecurity and linkage to Nutrition, Determinants of food Insecurity, Dimensions of Food security problems. Household food security: Concept, indicators, Measurement, Local food systems, Land tenure and food security.

Unit-IV:

Food security in India: Concept, Food self sufficiency and food security, PDS and its impact on poverty. Policy options for reforms of PDS. Mechanization of agriculture and food security; Agricultural Subsidies: Subsidies on Fertilizers, Pesticides, Seeds. Flood, Drought and monsoon irregularities and food insecurity. Farmers' suicides and agricultural burden in India.

PS - 403B: Food, Nutrient and Dietetics**Unit-I:**

Concepts related to Food and Nutrition; Classification of Foods; Functions of Food – Physiological, Psychological and Social; Classification of Nutrients and their functions – Protein, Fat, Carbohydrates, Vitamins, Minerals; Nutritional Profiles of Principal Food – Cereals, Pulses, Vegetables and Animal Foods; Nutritional Constituents of Human body.

Unit-II:

Nutritional Requirement: Concept of RDA, Energy – Measurement and Requirement, Protein – Assessment and Requirement, Requirement of Fat and Carbohydrate; Balanced Diet and Dietary Goals; Nutritional Factors in Selected Diseases – Cardiovascular Diseases, Diabetes, Obesity and Cancer.

Unit-III:

Dietetics: Definition and Scope; Family Meal Management: Nutrition and Food Requirement during Lifecycle - Pregnancy, Lactation, Infancy, Childhood, Adulthood and Old age; Food Surveillance and Food Hygiene – Milk, Meat, Fish, Egg, Fruits and Vegetables Hygiene; Food Borne Diseases and Food Toxicants.

Unit-IV:

Government Regulations in Food Quality Control in India: FAO/WHO codex Alimentarius commission, PFA, AGMARK, BIS, FPO, Fair Average Quality (FAQ) specification for food grains, ISO 9000 series; Hazard Analysis Critical Control Point (HACCP) – Concept, Principles and Applicability, Consumer Protection Act (CPA) – 1986, Prevention of Food Adulteration Act, 1954.

PS - 404B: Community Nutrition:

Unit-I:

Interrelationship between food, nutrition and health; Nutritional Problems in Public Health and their Control: Low birth weight, Protein Energy Malnutrition, Xerophthalmia, Nutritional anaemia, Iodine Deficiency Disorders, Endemic fluorosis and Lathyrism

Unit-II:

Assessment of Nutritional Status: Clinical Examination, Anthropometry, Biochemical Evaluation, Functional Assessment, Assessment of Dietary Intake, Vital and Health Statistics and Ecological Studies; Nutritional Surveillance and Growth Monitoring; Food Consumption Patterns in India; Nutritional Status of Women and Children in India.

Unit-III:

Problems of Malnutrition – Over nutrition, Under nutrition, Imbalance and Specific Deficiency; Factors affecting nutritional status: Conditioning Influences, Cultural Influences, Socio-Economic Factors, Food Production, Health and Other Services; Preventive & Social Measures to Combat Malnutrition – Actions at family, Community, National and International Levels

Unit-IV:

Community Nutrition Programmes: Vitamin A Prophylaxis Programme, Prophylaxis against Nutritional Anaemia, Special Nutrition Programme, Mid Day Meal Programme, ICDS; Nutrition Education – Concept and Objectives; Role of food technology in combating malnutrition: Food Fortification and Food Preservation.

Specialization – III (Gender Studies)

PS-402C: Gender and Society

Unit 1:

Gender differences: Masculinity and femininity; Biological and social; Social construction of gender; Stratification by gender: Functionalist and Conflict theory; Sexism and its consequences

Unit: II

Position of women within: family, marriage, kinship; Endogamy and Exogamy, reservation policy and its implication for women; Differential Status of women: Rural and urban Women, married and widow, single mother, and victims of sexual offenses.

Unit: III

Women in Indian society: Constitutional and legislation in support of women's cause; Women in the field of education, employment and political participation; Problems of sex workers and domestic workers.

Unit: IV

Gender bias in school enrollment, drop out, gender stereotyping in text books; Education for socially and economically backward women, women and Right to Education (RTE), Women in Higher and professional Education.

PS-403C: Gender and Health:

Unit-I

Definition and Dimensions of Health; Health Indicators and Gender Gap; Implications of menarche, pregnancy, child birth, menstrual disorder and Menopause for women. Gender dimension of: unwanted pregnancy, sex determination tests & termination of pregnancy, abortion.

Unit: II

Gender dimension of infertility, inability to beget a son, surrogate motherhood. Burden of Contraceptive choice and use; Impact of adolescent marriage and child bearing on health; Health issues relating to intimate partner violence and sexual Abuse.

Unit: III

Stress and occupational hazards of women workers and girl child laborers; Sex Workers: risk and gendered character of HIV/AIDS and other sexually transmitted diseases. Problems of older Women: Mental health of women; Survivors of sexual violence: Communal and conflict situation

Unit-IV

Gender bias health delivery system and medical research; Under Utilisation of Health Care Services, Need for Gender Sensitive Health Care Services, Improving Access to and Breaking Barriers to health care for women; NRHM (National Rural Health Mission) for women.

PS-404C: Gender and Environment

Unit –I

Key environmental challenges; Eco-feminist perspectives of environment; Nature and Feminine Principle, Basic needs in Rural and Urban Environments, Women's Dependency on Eco system – Fodder, Fuel wood, water, Minor Forest Produce; Care and Management of Natural Resources.

Unit –II

Rural Environment: Medicinal plants, water Resources, Livestock management, Food Security; Impact of Indoor and Outdoor Pollution, Awareness on Drainage and Sanitation; Urban environment: Solid and Liquid Waste, disposal of wastes; Solid Waste Management, Methods of Recycling and role of women in Waste management.

Unit –III

Women's Resistance to environmental destruction: Collective strength, Joint Forest Management, CHIPKO Movement, Narmada Bachao Aandolan; National Environmental policy 2006: Objectives, Principles and Strategies.

Unit –IV

Professional Women in biodiversity management, Conservation: Botanical gardens, gene banks, and home gardens; Role of women in Agro biodiversity, seed preservation, International Conferences on Environment: Focus on Agenda 21 of Rio Conference

PS-405 PROJECT WORK
