DEPARTMENT OF GEOGRAPHY
M. D. UNIVERSITY, ROHTAK

M.A. in Population Studies

Department of Geography proposes to start a new M.A. programme in Population Studies from the session 2012-13. The programme is designed to provide a higher level of understanding of the population sciences including an in-depth knowledge of the linkages between population and various dimensions of socio-economic, health and environmental development. The course will also provide a comprehensive idea to conduct further research in various aspects of population-development-environment interface.

Eligibility Criteria for Admission
Admission to this course is open to candidates who have bachelor degree from a recognised University with a minimum percentage of marks prescribed by M. D. University for admission to other Post Graduate courses. Candidates seeking admission to the course should be graduates with any one of the following subjects:
>   Geography, Demography/ Population Studies, Sociology, Economics, Psychology,
>   Anthropology, Social Work, Mathematics, Statistics

Selection Criteria for Admission
Selection will be made on the basis of merit in the qualifying examination. Seats will be reserved as per policy laid down by the State Government.

Number of Seats and Award of Degrees
There shall be a total of 20 seats for admission to the course. On successful completion of the course, candidates holding Bachelor's Degree in Arts shall be awarded M.A. and candidates holding Bachelor's Degree in Science shall be awarded M.Sc. in Population Studies.

Duration of the Course
The M.A. /M.Sc. programme shall be of two academic years comprising four semesters. The schedule of the course shall be same as that of other PG courses of the university. Rules and regulations prescribed by the university from time to time for other PG courses shall also apply to this course.

Fee Structure
The fee structure of the programme will be as per other regular PG courses in the university**.**

Examination Process
At the end of every semester the students will be subjected to written examination as in other PG courses of the university. The course content of theory papers shall be spread over four units. The question paper will have five units. Each of the first four units of question paper will contain two questions from each unit of the syllabus. Candidate(s) are required to attempt one question from each unit. Unit-V shall be compulsory and shall contain eight short answer type questions covering entire syllabus. Internal assessment, end semester examination and declaration of results

of the programme shall be governed by the rules and regulations of the university from time to time. The end semester examination of the paper on Lab Work shall be conducted by a board consisting of the teacher in-charge and HOD or his nominee involved in the teaching of the course. The Vice-Chancellor shall approve the name of an additional outside expert on PGBOS of the department in the concerned field from a panel proposed by the HOD.

Project Report

A student is required to write a Project Report in the Fourth Semester on some demographic or related problems under the guidance of a faculty member in the department. The topic of the project report has to be proposed by the candidate at the beginning of the Fourth Semester. The findings of the report will be presented by the candidate in a seminar on a date decided by the HOD. The content of the report and presentation in the seminar shall be evaluated by a committee comprising of the HOD, concerned supervisor and one faculty member recommended by HOD from among the teachers engaged in the teaching of the course.

Scheme of Examination

Sr No.	Papers	Nomenclature	Max. Marks	Internal Assessment	End Sem. Exam	Duration of Exam.
SEMESTER-I						
1.	Paper-I	Introduction to Population Studies	100	20	80	3 Hours
2.	Paper-II	Basic Techniques of Population Analysis	100	20	80	3 Hours
3.	Paper-III	Society and Culture	100	20	80	3 Hours
4.	Paper-IV	Human Ecology	100	20	80	3 Hours
5.	Paper-V	Lab Work on Techniques of Population Analysis	100	Distribution of marks Lab work test : 60 Record on Lab work : 20 Viva Voce : 20		4 Hours
SEMESTER-II						
6.	Paper-VI	Geography of India with special reference to Human Aspects	100	20	80	3 Hours
7.	Paper-VII	Indian Society and Culture	100	20	80	3 Hours
8.	Paper-VIII	Indian Economy	100	20	80	3 Hours
9.	Paper-IX	Basic Statistical Techniques	100	20	80	3 Hours
10.	Paper-X	Lab Work on Statistics	100	Distribution of marks Lab work test : 60 Record on Lab work : 20 Viva Voce : 20		4 Hours
SEMESTER-III						
11.	Paper-XI	Fertility and Nuptiality	100	20	80	3 Hours
12.	Paper-	Mortality, Morbidity and Public	100	20	80	3 Hours

	XII	Health				
13.	Paper-XIII	Research Methodology	100	20	80	3 Hours
14.	Paper-XIV	Demographic Situations in India	100	20	80	3 Hours
15.	Paper-XV	Lab Work on Demographic, Statistical and GIS Software	100	Distribution of marks Lab work test : 60 Record on Lab work : 20 Viva Voce : 20			4 Hours
		SEMESTER-IV				
16.	Paper-XVI	Migration and Urbanization	100	20	80	3 Hours
17.	Paper-XVII	Population Policies	100	20	80	3 Hours
18.	Paper-XVIII	Gender Issues in Population Studies	100	20	80	3 Hours
19.	Paper-XIX	Any one of the following;	100	20	80	3 Hours
		(i) Reproductive Health				
		(ii) Population Ageing				
		(iii) Epidemiology				
		(iv) Population and Sustainable Development				
20.	Paper-XX	Project Report	100	Distribution of marks: Project Report: 50 Presentation and viva-voce exam: 50		_
		Total Marks	2000			

HOD (Geog.)

M.A. Population Studies: Semester I
PAPER-I: INTRODUCTION TO POPULATION STUDIES

End Semester Exam : 80 Marks
Internal Assessment : 20 Marks
Total : 100 Marks
Time : 3 Hours

Unit-I
Population Studies – nature, scope and significance; Population Studies and other disciplines; development of Population Studies; fundamental variables in Population Studies - birth, death and migration; Sources of data on population – Census; Civil Registration System; Sample Surveys – NSSO, NFHS and DLHS.

Unit-II
World Population Statistics: Trends of population, Population Growth in the Major Regions after World War-II, Recent Pattern of Fertility, Mortality and Migration in the world; Population as a Resource – the debate, Human Development Index, Population Projection for the world; Population control movement.

Unit-III
Indian Population Concern: Trends of Population Growth; Fertility, Mortality – infant, child and maternal; cause of death; sex composition of population; age at marriage and women Health; population ageing; recent trends and patterns of internal migration; Demographic Dividend and Health Concerns in India, India's Population Policy and Programs.

Unit IV
Population Theories: Early thinking of Population Issues – Confucius and other Chinese writers; Greek and Roman thinkers; Population Issues in the eyes of religion – Hinduism, Judaism, Christianity and Islam; Pre-Malthusian theories on population – Mercantilist and Physiocrats; Malthusian Theory; Optimum population theory; socialist writings (Marxand Engles); Mathematical and Biological theories; Demographic Transition Model.

Note: The question will have five units. Each of the first four units of question paper will contain two questions from each unit of the syllabus. Candidate(s) are required to attempt one question from each unit. The unit five shall be compulsory and shall contain eight short answer type questions covering entire syllabus. All questions carry equal marks.

Reading List:
Agarwala, S. N., 1981. India's Population Problems. New Delhi: Tata McGraw Hill.
Bhende, Asha A. and Kanitkar, Tara, 2000. Principles of Population Studies. 9th edition. Mumbai: Himalaya Publishing House.
Mishra B. D., 1995. An Introduction to the Study of Population. Second edition, New Delhi: South Asian Publishers Pvt. Ltd.
Thompson, Warren S. and David Lewis, 1976. Population Problems. New Delhi: McGraw Hill Book Co.
United Nations, 1973. The Determinants and Consequences of Population Trends, Vol. I. ST/SOA/ SER.A./SO, Population Studies No: 50. New York: U.N.

United Nations, 1980. <u>World Population Trends and Policies</u>, 1979. MonitoringReport, Vol. I. ST/ESA/SER.A /70, Population Studies No: 70. New York: U.N.

M.A. Population Studies: Semester I
PAPER-II: BASIC TECHNIQUES OF POPULATION ANALYSIS

End Semester Exam : 80 Marks
Internal Assessment : 20 Marks
Total : 100 Marks
Time : 3 Hours

Unit I
Basic Concepts and Measures: Rates and ratios – ratios, proportions, rates, persons-years of life or exposure, cohort; basic demographic equation. Data sources, compilation and presentation of basic data: Censuses, Vital Registration, Sample surveys and other sources.

Unit II
Evaluation of quality of data: Sources and types of errors in data; General methods of evaluation of errors in data on age and intervals – Whipple's Index, Myers' Blended Index, Digit Preference Quotients for Birth Interval and UN Accuracy Index; Smoothing of age distribution.

Unit III
Measures of growth and distribution: rates of population growth - arithmetic, geometric and exponential rates; doubling time; distribution and density: spatial measures of distribution – mean centre, median point and modal centres of distribution; measures of population concentration; population potential.

Unit IV
Analysis of the components of population change: Fertility and nuptiality – basic concepts and their measures; Measures of mortality and life table; Migration analysis – direct and indirect measures of migration; Population estimates and projection.

Note: The question will have five units. Each of the first four units of question paper will contain two questions from each unit of the syllabus. Candidate(s) are required to attempt one question from each unit. The unit five shall be compulsory and shall contain eight short answer type questions covering entire syllabus. All questions carry equal marks.

Reading List:

Bhende, Asha A., and Tara Kanitkar, (2000): Principles of Population Studies, 9th Ed., Mumbai: Himalaya Publishing House.
Keyfitz, N., (1968): Introduction to the Mathematics of Population. Massachusetts: Addison Wesley.
Shryock, Henry, S., Jacob S. Siegel and Associates, (1980): The Methods and Materials of Demography. New York: U.S. Department of Commerce, Bureau of Census.
Pathak, K. B and Ram, F (1998): Techniques of Demographic Analysis, Mumbai: Himalaya Publishing House,
Srinivasan, K., (1998): Basic Demographic Techniques and Applications. New Delhi: Sage Publications.

PAPER-III: SOCIETY AND CULTURE

End Semester Exam : 80 Marks
Internal Assessment : 20 Marks
Total : 100 Marks
Time : 3 Hours

Unit-I
Society and culture: Society – concept, definition and meaning; types of society – pre-industrial, industrial and post-industrial societies; rural and urban societies; culture as a way of life; functions of culture. Social Stratification – Class, caste and ethnicity; Religion – beliefs and rituals;

Unit-II
Social institutions: Family – its concept, origin, types and functions; distinctive features of family; contrasts in the nature and functions of family in the east and the west; marriage – concept, forms and function of marriage; dissolution of marriage and religion.

Unit-III
Gender and society: patriarchy/ matriarchy and woman; sex and gender – social construction of gender and sex; Gender based division of labour; women in industrial societies.

Unit-IV
Social change: concept, direction and factors of social change – urbanisation and industrialisation, literacy and education, role of mass media, social movements; interdependence of the underlying factors of social change; Population, health and ageing;

Note: The question will have five units. Each of the first four units of question paper will contain two questions from each unit of the syllabus. Candidate(s) are required to attempt one question from each unit. The unit five shall be compulsory and shall contain eight short answer type questions covering entire syllabus. All questions carry equal marks.

References:
1. Crompton, R (1993): Class and Stratification – An Introduction to Current Debates, Blackwell Publishers, Oxford, U.K.
2. Davis, Kingsley (1981): Human Society, Delhi, Surjit Publications.
3. Erasove, Boris and Singh Yogendra (2006): The Sociology of Culture, Rawat publications, New Delhi.
4. Giddens, Anthony (2001): Sociology, Blackwell Publishers Ltd., Oxford, UK.
5. Haralambos, M and R H Heald (2008): Sociology – Themes and Perspectives, Oxford University Press, New Delhi .
6. MacIver, R M and Charles H Page (1974): Society – An Introductory Analysis, Macmillan Press LTD. Delhi.
7. Majumdar, D N and Madan, T N (2003): An introduction to Social Anthropology, Mayoor Paperbacks, Delhi.
8. Nagpaul, Hans (1972): The Study of Indian Society, S Chand 7 Co. (Pvt.) LTD, New Delhi.

M.A. Population Studies: Semester I
PAPER-IV: HUMAN ECOLOGY

End Semester Exam : 80 Marks
Internal Assessment : 20 Marks
Total : 100 Marks
Time : 3 Hours

Unit-I
The concepts of ecology, ecosystem and biosphere; ecosystem – its component, functions and types; energy flow in the ecosystem – trophic levels, food chains and food-webs; nutrient cycle; hydrological cycle.

Unit-II
Man-nature relations: approaches to the study of man-nature relations – environmental determinism, teleological, possibilistic, economic deterministic and ecological approaches; historical perspectives on man-nature relations – pre and post industrial phases; trends in the growth of human population.

Unit-III
Ecological crises: forms of ecological imbalances – climate change, global warming, ozone depletion; air and water pollution; acid rain; land degradation and deforestation.

Unit-IV
Global environmental problems and International co-operation: Earth Summits – issues and challenges.

Note: The question will have five units. Each of the first four units of question paper will contain two questions from each unit of the syllabus. Candidate(s) are required to attempt one question from each unit. The unit five shall be compulsory and shall contain eight short answer type questions covering entire syllabus. All questions carry equal marks.

Reading List:

1. Clapham, W B (1981): Human Ecosystem, MacMillan Publishing Company, New York
2. Odum, E P and garry W Barrett (2005): Fundamentals of Ecology, Cengage Learning India Pvt. Ltd. New Delhi.
3. Singh, S (1995): Environmental Geography, Prayag Pustak Bhawan, Allahabad.
4. Sinha, R K (1998): Human Ecology, INA Shree Publishers, Jaipur.
5. Yadav, P R and Shubhrata R Mishra (2004): Human Ecology, Discovery Publishing House, New Delhi.

Max. Marks : 100
Time : 4 Hours
Distribution of marks :
Lab work test : 60
Record on Lab work : 20
Viva Voce : 20

Unit I
Age –Sex Pyramids and Adjustment of Age Data: Graphical presentation of age distribution and construction of age-sex pyramid: Assessment of digit preference - Computation of Whipple's and Myers Indexes and age ratios, and U. N. Age-Sex Accuracy Index.
Interpolation and Smoothing of Age Data Interpolation, graphical, use of mathematical curves; Smoothing of age data – graphical, moving average, graduation using Karup-king, Beers formula.
Unit II
Life table and Population Growth Rates: Construction of the Life Table: Conventional and Reed-Merril Methods; Computation of linear, geometric, and exponential growth rates of population.
Unit III
Standardization and Stable Population: Standardization – direct and indirect methods adjusting for death rates, Computation of NRR, intrinsic rate of natural increase, stable age distribution, birth and death rates.
Unit IV
Descriptive Statistics
Classification of data, frequency distributions, graphical presentation (histogram, frequency curve, ogives), Computation of measures of central tendency; ungrouped and grouped data, and omputation of measures of dispersion.
(Note: Five exercises from each unit)

Reading List:
1. *Bhende, Asha A., and Tara Kanitkar, 2000. ***Principles of Population Studies.*** 9th
Ed., Mumbai: Himalaya Publishing House.
2. Blalock, Jr. Hubert M., 1984. ***Social Statistics.*** 2nd edition. New York: McGraw Hill
Book Company.
3. Daniel, Wayne W., 1974. ***Bio-Statistics: A Foundation for Analysis in the Health
Sciences.*** New York: John Wiley & Sons Inc.
4. Goon, A. M., M. K. Gupta and D. Das Gupta, 1966. ***Basic Statistics.*** Calcutta: World
Press.
5. Keyfitz, N., 1968. ***Introduction to the Mathematics of Population.*** Massachusetts:
Addison Wesley.
6. Kurtz, Norman L. R., 1983. ***Introduction to Social Statistics.*** Tokyo: McGraw Hill
International Book Company.
7. *Shryock, Henry, S., Jacob S. Siegel and Associates, 1980. ***The Methods and

Materials of Demography. New York: U.S. Department of Commerce, Bureau of Census.

8. *Snedecor, George, W and William, G. Cochran, 1967. ***Statistical Methods.*** 6th edition. New Delhi: Oxford & IBH Publishing Co.

9. *Srinivasan, K., 1998. ***Basic Demographic Techniques and Applications.*** New Delhi: Sage Publications.

10. United Nations, 1966. ***The Concept of a Stable Population – Application to the Study of Population of Countries with Incomplete Demographic Statistics***. New York: United Nations.

11. *Walpole, Ronald, E., 1974. ***Introduction to Statistics.*** 2nd edition. New York: Macmillan Publishing Co., Inc.