

DEPARTMENT OF ECONOMICS
HIMACHAL PRADESH UNIVERSITY
[NAAC Accredited 'A' Grade University]
Summer Hill, Shimla-171005



Regulations and Syllabus
ADD-ON COURSE (AOC)/ SHORT RUN COURSE IN
Post Graduate Diploma in Population Studies
Annexure 'B'

Approved by Board of Studies held on 10.06.2024
Approved by the Faculty of Social Sciences 01.07.2024

Department of Economics

Syllabus for Add-On Course (AOCs)/ Short Run Course titled Post Graduate Diploma in Population Studies

The following Add-On Course (AOC)/ Short Run Course in Post Graduate Diploma titled Population Studies to be offered by the PG Centre, prepared and proposed by the Department Council for implementation w.e.f. the academic session 2024-25 onwards was considered and approved by PG BoS on 10/16/2024 and by Faculty of Social Sciences on..... The scheme is placed before the Academic Council/ Executive Council for consideration and approval.

Table1: Semester wise Courses with Codes, Credits, Contact Hours and Marks Scheme

Semester	Nature of Course	Course Code	Course Name	Credits	Theory Contact Hours (L-5Hrs/Tutorial - 1hour)		Marks Scheme	
					Lecture Credits	Tutorial	Theory	Internal Assessment
I	AOC	APGDP111	Demographic Techniques	2	1	1	35	15
	AOC	APGDP112	Economics of Population	2	1	1	35	15
	AOC	APGDP113	Migration and Urbanization	2	1	1	35	15
	Subtotal-1			6	3	3	Marks=150	
II	AOC	APGDP121	Basic Statistics	2	1	1	35	15
	AOC	APGDP122	Population and Development	2	1	1	35	15
	AOC	APGDP123	Population, Environment and Sustainable Development	2	1	1	35	15
	SubTotal-2			6	3	3	Marks=150	
Grand Total*(1+2)			12	6	6	Total Marks=300		

NOTE: About Table1 the Following Points (A)and(B) are relevant:

(A) Course code descriptions: the codes for courses on offer is explained as follows:

1. APGDP111

Here: In **APGDP:** **APGD** denotes Add-on Course in Post Graduate Diploma; **P** denotes Population Studies. **111** represents 1st year, 1st Semester 1st Course. Similarly, **121** represents 1st year, 2nd Semester 1st Course.

(B) General Information

B (1) STUDENT INTAKE:

Total seats:

Subsidized seats: 20 + 02 + 02 + 03*

(Supernumerary 02 seats Reserved for Single Child who is a Girl + Supernumerary 02 seats

Reserved for J&K migrants + EWS of H.P.)

Non-Subsidized seats: 05

Total seats in APGDPS: 20+02+02 + 03* + 05 = 34.

There are 10% additional seats reserved for the Economically Weaker Section (EWS) category for admission. If these seats remain vacant than these seats neither be filled with other category nor will carry forward. Few Supernumerary seats for foreign National who apply through ICCR are also available as per H.P. University Rules.

B (2) Admission to the certificate course shall be made once in a year in the month of June/ July. A student shall register for an Add-on Course offered by submitting a duly filled in Registration Form. The admission shall be made on the basis of merit of the marks obtained in the qualifying examination.

B (3) ELIGIBILITY: Graduation. Besides 120 points roster system will be followed in the admission process.

B (4) Age limit: Maximum age limit for admission to APGDP course is 26 years for general category, 29 years for SC/ST category and 28 years for girl candidates, as on the 1st July of the year concerned. The Vice-Chancellor may permit age relaxation up to a maximum of six months.

B (3) Fee Structure

FEES TO BE PAID: Subsidized and Non-Subsidized (Both) Seats: As per University rules, the tentative detail of Annual fees to be charged from the students every July of the year concerned.

Subsidized Fee			Non-subsidized Fee	Mode of Payment
Semester	Boys In Rs.	Girls In Rs.	Boys/ Girls (in Rs.)	Online
1 st Sem.	7000	3500	7000+12000	
2 nd Sem.	7000	3500	7000+12000	

In addition to above, an amount of Rs. 3000 will be charged annually on account of examination fee for both subsidized and non-subsidized categories.

In case of ambiguity or conflict in provisions, the HP University Ordinance shall prevail.

II SCHEME OF COURSES

Courses on offer are as follows:

Table2: The number & type of courses to be completed in each semester

Courses	Semesters		ALL Semesters (I &II)
	I	II	
Add-on-courses	03	03	06
Total Number of Courses	03	03	06

Compulsory Courses (06 Core Courses; {Core})

The syllabi for all Add-on-courses are specified in Two Blocks (three units).

III SCHEME OF EXAMINATION

APGDPS	2 credits each	- There shall be two Sections (I, II, III) in each paper. - Each section, preferably, may have 3 sub-sections each.	The evaluation shall be Continuous and Comprehensive Evaluation (CCE). Each paper in a Course shall be of <u>50 marks</u> and <u>divided as follows</u>: -- Internal Assessment 15 Marks -- End-Semester Examination 35 Marks INTERNAL ASSESSMENT: The Internal Assessment shall comprise the following: a. Attendance 05 marks b. Mid-term Test/Assignments/ Presentations 15 marks	There will be 3 Sections (A,B,C) and examiner shall <u>set 5 questions from both the Sections (I,II) in total and each question shall carry 10 marks.</u> - Section A will have 2 questions from Section I of the syllabus and students shall have to attempt any one. - Section B will have 2 questions from Section II of the syllabus and students shall have to attempt any one. - Section C will have 7 questions from both the sections (I and II) of the syllabus and students shall have to attempt any 5 questions.
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NOTE: Passing Percentage, to pass a course, the candidate shall have to secure at least 40% marks each, in both, internal and external assessment.

Marks for attendance are given as per following criteria:

>75%but<80%	:	1Mark
80%to85%	:	2Marks
>85%but<90%	:	3Marks
90%to95%	:	4Marks
>95%	:	5Marks

- The duration of each paper will be one and half (1.5) hours.

**ADD-ON COURSE/ SHORT RUN COURSE IN
POSTGRADUATEDIPLOMAINPOPULATIONSTUDIES(PGDP
S)Programme Outcome**

Throughout study, this course is expected to assist the candidate by:

- Facilitating the promotion of employees and strengthening their bio-data.
- Serving as a non-the-job training to facilitate career advancement.
- Teaching and understanding of concepts, theories, and issues in population studies.
- Building confidence to apply these learnings to their subsequent professional places.

Nature of Course: AOC
Course Code: APGDP111
DEMOGRAPHIC TECHNIQUES

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcomes

By the end of the course, students will be able to:

- measure fertility, mortality and sex ratios
- acquire techniques to make projections for future planning
- measure of migration rates
- systematize delivery of health protection cover
- undertake area analysis

SECTION/ BLOCK-I

- Unit-1 Components of Population Change, Fertility Levels, Trends and differentials in developing and developed countries;
- Unit-2 Proximate and socio- economic determinants of fertility, Sources of data and measures of fertility;
- Unit-3 Birth order parity, Parity progression ratio, Measures of productivity, Indirect methods of estimation of fertility, Reverse survival method, Rele method, The P/F ratio method and the own children method.

SECTION/ BLOCK-II

- Unit-1 Mortality: Levels and trends in developing and developed countries, Causes of mortality, Sources of data and measures of mortality, Maternal mortality rate;
- Unit-2 concepts and construction of life tables, abridged life table and construction of life table from incomplete data, Age-sex composition of population and its determinants;
- Unit-3 Nuptiality: concepts and sources of data, measures of nuptiality, estimates of nuptiality, Mean age at marriage from census data, Estimation of singulate mean age at marriage from the census data by using Hejnal's method and by Agarwal's method.

SUGGESTED READINGS

- Agarwal, S.P. (1969), Manpower Supply-Concepts and Methodology, Meenakshi Prakashan, Meerut, India.
- Agarwal, S.P. (1970), Manpower Demand-Concepts and Methodology, Meenakshi Prakashan, Meerut, India.
- Barday, G.W. (1958). Techniques of Population Analysis, John Wiley& Sons, New York.
- Bhende, A. and T. Kanitkar. Principles of Population Studies, Himalaya PublishingHouse, Bombay.
- Pathak, K.B. and F. Ram. Techniques of Demographic Analysis, Himalaya Publishing House, Bombay.
- Rogue, D. J. (1971). Principles of Demography, John Wiley, New York.
- Shryok, H. and J.S. Siegel, (1976). Methods and Material of Demography, Academic Press, New York,
- United Nations. Indirect Techniques for Demographic Estimation, U.N. Publications, New York.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part A will have 2 questions from Section II of the syllabus of 10 Marks each and students shall have to attempt any one.
3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks

A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.

Nature of Course: AOC
Course Code: APGDP112
ECONOMIC OF POPULATION

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcomes

By the end of the course, students will acquire:

- enhanced general awareness of the relationship between economics and population
- analytical insights and knowledge population processes, structure and distribution
- ability to analyse total and per capital output
- competence to develop plans, policies and strategies of economic development
- deeper insights into economic inequalities and inequities

SECTION/ BLOCK-I

Unit-1 Early theories of population (Malthus, Ricardo, Marx, J.M. Keynes and others).

Unit-2 Effect of Pre- industrial technological and institutional changes on population.

Unit-3 Demographic transition. The concept of optimum population.

SECTION/ BLOCK-II

Unit-1 Economic determinants of fertility: new household economics (Leibenstein theory and Gary Becker's Theory).

Unit-2 Alternative economic approaches to fertility theory (Easterlin's and Caldwell's theories).

Unit-3 Cost and values of children and their effects on fertility

SUGGESTED READINGS

- Agarwala, S. N. (1972). India's Population Problem, Tata McGraw Hill, Bombay.
- Bhende, A.A. and T. Kanitkar. Principles of Population Studies, Himalaya Publishing House, Bombay.
- Boque, D. J. (1971). Principles of Demography, John Willey, New York. 14.Registrar General of India, Census of India, Government of India, New Delhi.
- Coale, A. J., and F.M. Hoover, (1958). Population Growth and Economic Development in Low Income Countries: A Case Study of India's Prospectus, Princeton University Press, Princeton.
- Davis, K. (1972). World Urbanization: 1950-70. Vol. II, Population Monograph Series, No. 9. University of California, Barkley.
- Everett S. Lee, A Theory of Migration Demography, February 1996.10.Books
- Fred Arnold, et. al., The Value of Children, A Cross-National Study, Vol.1 (East-West Population Institute, 1975).
- Gary Becker, an Economic Analysis of Fertility, in National Bureau of Economic Research, Demographic and Economic Change in Developed Countries, (Princeton

University Press, 1960), pp. 209-240.

- Gary S. Becker, A Theory of Marriage, in T.W. Schultz, ed., Economics of the Family (University of Chicago, 1974), pp. 299-344.
- John C. Caldwell, Towards a Restatement of Demographic Transition Theory, Population and Development Review, Vol. 2, Nos. 3-4, September and December 1976, pp. 321-366.
- Misra, B.D. (1996). An Introduction to Study of Population.
- Pathak, K. B. & Ram F. Techniques of Demographic Analysis, Himalaya Publishing House, Bombay.
- Shrivastava, O.S. (1983). A Textbook of Demography, Vikas Publishing House, New Delhi. Smith. PC. (1983). Trends and differentials in Nuptality in the Population of the Philippines, Country Monograph Series No. 5 UNESCAP, Bangkok. 19. Shryok, H. Siegel, J.S. and Associates (1976). The Methods and Material of Demography, Academic Press, New York.
- Shrivastava, O.S. (1996). Demography and Population Studies, Vikas Publishing House Pvt. Ltd., 2nd Edition.
- Simon Kuznets, Modern Economic Growth (Yale University Press, New Haven, 1966), Chapter 2, Growth of Population and Product, pp. 34-85.
- Thomas Malthus, A Summary View of the Principles of Population, in D.V. Glass, ed., An Introduction to Malthus, Watts and Co., London, 1953, pp. 117-181.
- Thomas P. Espenshade, The Value and Cost of Children, Population Bulletin, Vol. 32, No. 1, 1977, pp. 3-32 only.
- United Nations, the Determinants and Consequences of Population Trends, Vol. I, 1973, part of chapter 2, Population Theory, pp. 33-48.
- United Nations, (1973). The Determinants and Consequences of Population Trends, Vol. I, UN Publications, New York.
- Weeks, J.R. (1978). Population: An Introduction to Concept and Issues. Wadsworth Publishing Co., Belmont, California.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part A will have 2 questions from Section II of the syllabus of 10 Marks each and students shall have to attempt any one.
3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks

A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.

Nature of Course: AOC
Course Code: APGDP113
Course – IX
Migration and Urbanization

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcomes

By the end of the course, students will acquire:

- To understand the concept of measure of migration and urbanization
- Analytical insights and determinants of internal migration
- to know different theories of migration
- competence to develop plans, policies and strategies to reduce rural urban differences
- deeper insights in to development of smart cities with rural connectivity

SECTION/ BLOCK-I

Unit-1 Concepts: Concepts and definition of migration, sources and quality of data, types of migration,

Unit-2 census definition of migrants, limitations. Factors affecting migration, consequences of migration.

Unit-3 **Measures of Migration:** Crude migration rate, Age – specific migration rate, migrant component, migration streams, index of preference, Hamilton's rates, estimation of net migration from vital statistics.

SECTION/ BLOCK-II

Unit-1 Internal Migration: Internal migration patterns and characteristics in developing countries with a special focus on India.

Unit-2 Determinants of internal migration; causes of migration at the place of origin and at the place of destination.

Unit-3 Consequences of internal migration; demographic, economic, social and political consequences at the individual, household and community level.

Suggested Readings

- Coale, A.J.: **The Growth and Structure of Human Population – A Mathematical Investigation**, Princeton University Press, Princeton.
- Coale, A.J. & Demeny, P.; **Regional Model Life Table and Stable Population**, Princeton University Press, Princeton.
- Ram, F. and Pathak, K. B., 1998: **Techniques of Demographic Analysis**, 2nd Edition, Himalaya Publishing House, Bombay.
- Oberai, A. S., 1987: **Migration, Urbanisation and Development**, International Labour Office, Geneva.
- Kingsley, Davis, 1972: **World Urbanisation 1950-70**, Vol. II, Population Monograph Series 4 and 9, University of California, Berkeley.

- Mitra, R. G., 2002: **Understanding Patterns of Migration from Census 2001 Data**, Council of Cultural Growth and Cultural Relations, Cuttack.
- Todaro, M.P., 1976: **Internal Migration in Developing Countries**, International Labour Office, Geneva.
- United Nations, 1979: “Trends and Characteristics of International Migration since 1950”, in **Demographic Studies**, No. 64, U.N., New York.
- United Nations, 1983: **Determinants and Consequences of Population Trends**, Vol. I, U.N., New York.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part A will have 2 questions from Section II of the syllabus of 10 Marks each and students shall have to attempt any one.
3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks

A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.

Nature of Course: AOC
Course Code: APGDP121 BASIC
STATISTICS

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcomes

By the end of the course, students will be able to:

- acquire and apply statistical techniques in the empirical analysis of economic relationships.
- understand and infer from the process of data collection and various sampling methods.
- construct and interpret index numbers for economic variables. Measure and evaluate components of time series.
- apply, solve and prove various probability theorems using appropriate probability distributions.
- understand, explain, solve and apply hypothesis testing and selection of appropriate techniques for testing hypotheses.

SECTION/ BLOCK-I

Unit-1 Measure of Central Tendency, Dispersion, Skewness and Kurtosis.

Unit-2 Correlation; Meaning and methods of measuring correlation, Karl Pearson's method, Spearman's Rank Correlation coefficient, Limitations of Correlation analysis.

Unit-3 Linear Regression; relation between correlation coefficient and regression coefficients, Fitting of regression equations, Standard error of estimates.

SECTION/ BLOCK-II

Unit-1 The General Linear Regression Model, An Introduction to the matrix formulation and solution of the general linear regression Model.

Unit-2 Solution for a model with one dependent and two independent variables. Prediction for simple regression models of demand, supply, production and cost.

Unit-3 Multiple and partial correlations and regressions. Relationship between the measures of multiple correlation and measures of partial correlation, Beta coefficients.

SUGGESTED READINGS

- Agarwal B.L., (1977). Basic Statistics, New Age International Limited, New Delhi.
- Croxton F.E., D.J. Cowden and Sidney Klein. Applied General Statistics, Prentice Hall of Indian, New Delhi.
- George Snedecar and W.G. Chockrane. Statistical Methods. Oxford & IBH, New Delhi.
- Gujarati Damodar. Basic Econometrics, Second Edition, L.R. Klein.

- Gupta S.P., Statistical Methods, Sultan Chand & Sons, New Delhi.
- Nagar A.L. and R.K. Das. Basic Statistics, Oxford University Press, New Delhi.
- Singh S.P., (1996). Statistics. S. Chand & Company, New Delhi.
- Spiegel M... Theory and Practice of Probability and Statistics, Schaum's outline series, McGraw Hill.
- Taro Yamane. Statistics, Harper International.
- Walker H.M. and J. Lev. (1953). Statistical Inference, Holt, Rinehart and Winston, Oxford and IBH Publishing Company, Calcutta.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part B will have 2 questions from Section II of the syllabus of 10 Marks each and students shall have to attempt any one.
3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks

A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.

Nature of Course: AOC

Course Code: APGDP122

POPULATION AND DEVELOPMENT

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcome

By the end of the course, students will be able to:

- know and be aware of determinants of development
- examine population impact on development processes
- understand impact of population on environment and on health
- formulate policy perspective on migrations and regulation.

SECTION/ BLOCK-I

Unit-1 Indicators and determinants of development, Components of population growth, Measures of population change (i.e., growth, structure and distribution).

Unit-2 History of World Population Growth, Population trends during ancient to modern times,

Unit-3 Regional variations in rates of growth of population by broad regions of the world, Population density in different regimes.

SECTION/ BLOCK-II

Unit- 1 Population Theory: The classical and neo-classical schools of economics and population theory, Socialist and Marxist writings on population, Optimum Population Theory, The theory of demographic transition.

Unit-2 Modernization and demographic change: Fertility transition, Mortality transition, Modernization and migration,

Unit-3 Inter-relationship between population and development: Effects of economic development on demographic parameters (effect on mortality, fertility and migration), Population growth and development: effect of population growth on development.

SUGGESTED READINGS

- Bain John, (1990), Demographic Change and Asian Labour Markets in the (1990's) Population and Development Review, Vol. 1(4): 615-645.
- Boserup Easter, "Environment, Population, and Technology in Primitive Societies", Population and Development Review, Vol. 2, No.1, 1976.
- Boserup Easter, The Conditions of Agriculture Growth, Aldine- Atherton, New York, 1965.
- Kuznets Simon, Modern Economic Growth, Yale University Press, New Haven, 1966 (Chapter 2, "Growth of Population and Product").

- Mishra R.S. (1990), Economic of Growth and Developing, Somaiya Publication Pvt. Ltd.
- Ray T. K. and G. Rama Rao (1984), Introduction in Evaluation of Demographic Impact of Family Planning Programme, Himalaya Publishing House, Bombay
- Todaro, M. 1981, Economic Development in the Third World, Longman, London.
- United Nations (1979), The Methodology of Measuring the Impact of Family Planning Programme on Fertility, Manual IX, Population Study, No. 66, New York.
- United Nations, (1993), Population Policies and Programmes, Department of Economics & Social Informal & Policy Analysis, New York.
- Yaukey, David, Demography: The Study of Human Population, St. Martin's Press, New York.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part A will have 2 questions from Section II of the syllabus of 10 Marks each and students shall have to attempt any one.
3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks

A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.

Nature of Course: AOC
Course Code: AOCPGDP123

Population, Environment and Sustainable Development

Credit	Lecture	Tutorial	Practical
2	1	1	0

Course Outcome

By the end of the course, students will be able to:

- Know and be aware of determinants of development
- Examine population impact on development processes
- Understand impact of population on environment and on health
- Formulate policy perspective on migrations and regulation.

SECTION/ BLOCK-I

Unit-1 Sustainable Development: Conceptual and theoretical issues; importance of studying sustainable development: meaning, concepts and definitions; inter-linkages between ecology and development,

Unit-2 Economic growth and ecological degradation, indicators and processes involved in its achievement. Brundtland Report on Environment and Development Agenda.

Unit-3 Innovations for Sustainable Development: Conventional perspectives on development; critics of conventional development perspectives, case studies based on experiences from developed and developing countries. How the concept of sustainability has influenced the policy, programme practice in development sectors.

SECTION/ BLOCK-II

Unit-1 Population - Environment Linkages: Ecological and environmental dimensions of sustainable development. Approaches to environment; Gandhi an approach, Marxian/ Socialist approach.

Unit-2 Neo- classical approach, Market approach, Population growth and climate change; population matters to sustainable development and environment (growth, age structure, spatial distribution).

Unit-3 Population and Quality of life: Quality of life: definition and measurement, resource creation, management and distribution of water, air, housing etc., sanitation, health and healthcare, education and information.

Suggested Readings

1. Bongaarts, John, 1992: "Population Growth and Global Warming", **Population and Development Review**, 18, pp. 299-319.
2. Brundtland, G.H., 1987: **Our Common Future: The World Commission on Environment and Development**, Oxford University Press, Oxford.
3. Davis, Kingsley and Mikhail, S.B. (ed.), 1991: **Resources, Environment and Population: Present Knowledge, Future Options**, Oxford University Press, New York.
4. Demeny, Paul, 1989: **Demography and the Limits to Growth**, Supplement to **Population Development Review**, New York.
5. Government of India, 1999: **Silent Revolution for Environmental Conservations**, Ministry of Environment and Forests, New Delhi.
6. Pebley, Anne R. 1998: "Demography and the Environment", **Demography**, Vol. 35, No. 4, pp. 377-389.
7. McNicoll, G., 2005: **Population and Sustainability**, Working Paper No. 205, Population Council, New York.
8. Harris, J.M. 2004: **Basic Principles for Sustainable Development**, Global Development and Environment Institute, working paper.
9. Pimental, David et.al. 1999: "Will Limits of the Earth's Resources Control Human Numbers?", **Environment, Development and Sustainability**, pp. 19-39.
10. Preston, Samuel H., 1994: **Population and Environment: From Rio to Cairo**, International Union for the Scientific Study of Population (IUSSP).
11. Simon, J.L., 1996: **Population Matters: People, Resources, Environment and Immigration**, Transaction Publishers, New Brunswick, NJ.

Paper Pattern for End-Semester Examination: There will be 3 Parts (A, B, C) and the Examiner shall set 5 questions from both the sections (I, II) in total.

1. Part A will have 2 questions from Section I of the syllabus of 10 Marks each and students shall have to attempt any one.
2. Part A will have 2 questions from Section II of the syllabus of 10 Marks each and students shall have to attempt any one.
3. Part C will have 7 questions from Section (I and II) of the syllabus and students shall have to attempt any 5 questions. Each question will carry 3 Marks.

Note: The class test in all types of courses must be scheduled once 50% of the syllabus is covered. To pass a course, the candidate shall have to secure at least 40% marks separately, in internal and End-Semester-Examination.

Internal Assessment

1. Internal Assessment (15 Marks)
2. Attendance = 05 Marks
3. Class Test, Assignments and Presentations = 10 Marks

A minimum attendance of 75% in each paper, in each semester shall be mandatory failing which the student will not be permitted to write the End-Semester-Examination. The rules for the relaxation in the requirement shall be in accordance with the University Ordinance.