

Department of Population Studies

M.A. Population and Development (Five Year Integrated) Programme **Programme Code: APOP51**

Programme Structure
(For students admitted from the academic year 2019-2020)

Course	Course Title		urs/ eek			Marks	1
Code		L	Р	С	CIA	ESE	Total
	Semester-I						1
19IPTAC11	Language-I: Course 1	3		3	25	75	100
19IPENC12	Language-II: Course 1	3		3	25	75	100
19IPOSC13	CORE:1 Introduction to Population Studies	4		4	25	75	100
19IPOSC14	CORE:2 Sources of Population Data	5		5	25	75	100
19IPOSC15	CORE:3 Environmental Studies	3		3	25	75	100
19IPOSA16	ALLIED:1 Principles of Sociology	3		3	25	75	100
	Total Credits			21			
	Semester-II						
19IPTAC21	Language-I: Course 2	3		3	25	75	100
19IPENC22	Language- II: Course 2	3		3	25	75	100
19IPOSC23	CORE:4 Fertility	4		4	25	75	100
19IPOSC24	CORE:5 Morbidity and Mortality Mortality (for the candidates joined from 2019- 2020)	4		4	25	75	100
19IPOSC25	CORE:6 Migration	4		4	25	75	100
19IPOSA26	ALLIED:2 Principles of Economics	3		3	25	75	100
	Total Credits			21			
	Semester-III		I				
19IPTAC31	Part-I: Language Course	3		3	25	75	100
19IPENC32	Part-II Language Course	3		3	25	75	100
19IPOSC33	CORE:7 Urbanization and Urban Planning	4		4	25	75	100
19IPOSC34	CORE:8 Population Policies and Programmes	4		4	40	60	100
19IPOSC35	CORE:9 Development: Theory, History and Policy	4		5	40	60	100
19IPOSC36	CORE:10 Computer and Its Applications	3		3			
19IPOSA37	ALLIED:3 Psychology	3		3			
				25			
	Semester-IV						
19IPTAC41	Language-I: Course 4	3		3	25	75	100
19IPENC42	Language–II: Course 4	3		3	25	75	100
19IPOSC43	CORE:11 Population and Environment	4		4	25	75	100
19IPOSC44	CORE:12Health Education and Nutrition	4		4	40	60	100
19IPOSC45	CORE:13 Population and Development Planning	4		4	25	75	100
19IPOSC46	CORE:14 Evaluation and Adjustment of Population Data	4		4	40	60	100

19IPOSA47	ALLIED:4 Dimensions of Rural Development	3	3			
	Total Credits		25			
	Semester-V	<u>'</u>	"	•		.
19IPOSC51	CORE:15 Population Geography	5	4	25	75	100
19IPOSC52	CORE:16 Population Estimates and Projections	5	4	25	75	100
19IPOSC53	CORE:17 Population Theories	4	4	25	75	100
19IPOSC54	CORE:18 Basic Statistical Methods	4	4	25	75	100
19IPOSC55	CORE:19 Population Education and Communication		4	40	60	100
19IPOSP56	CORE:20 Practical I		4			
	Total Credits		24			
	Semester-VI		l .	I		I
19IPOSC61	CORE:21 Statistical Applications	4	4	25	75	100
19IPOSC62	CORE:22 Reproductive and Child Health	45	4	25	75	100
19IPOSC63	CORE:23 Demographic Models	5	5	25	75	100
19IPOSC64	CORE:24 Data Base Management and Analysis Using SPSS	4	4	25	75	100
19IPOSP65	CORE:25 Practical II Community Outreach Programme (for the candidates joined from 2019-2020)	4	4	40	60	100
19IPOSC66	CORE:26 Value Education	3	3			
	Total Credits		24			
	Semester-VII	<u>'</u>	"	•		
19IPOSC71	CORE:27 Research Methodology	5	5	25	75	100
19IPOSC72	CORE:28 Statistical Demography (Environmental Management- for the candidates joined from 2019-2020)	5	5	25	75	100
19IPOSC73	CORE:28 Demography of Ageing	4	4	25	75	100
19IPOSC74	CORE:29 Principles of Public Health	5	5	40	60	100
19IPOSX75	Elective 1: Interdepartmental Elective Population and Health Research	3	3	25	75	100
	Total Credits		22			
	Semester-VIII					
19IPOSC81	CORE:30 Business Demography	5	5	25	75	100
19IPOSC82	CORE:31 Human Resource Management and Development	4	4	25	75	100
19IPOSC83	CORE:32 Advanced Studies in Mortality and Epidemiology(Morbidity and Epidemiology for the candidates joined from 2019-2020)	5	5	25	75	100
19IPOSC84	CORE:33 Gender Issues and Women Empowerment	5	5	40	60	100
19IPOSX85	Elective 2: Interdepartmental Elective Population Dynamics	3	3	25	75	100
19IPOSE86	Elective 3: Department Elective Health Planning and Policy	3	3	25	75	100
	Total Credits		22			
	Semester-IX					
19IPOSC91	CORE:34 Biostatistics	4	4	25	75	100
19IPOSC92	CORE:35 Tamil Nadu Demography	5	5	25	75	100

19IPOSC93	CORE:36 Practical – III (Practical II for the candidates joined from 2019-2020)	5	5	25	75	100
19IPOSC94	CORE:37 Field Work – Community Outreach Activities (Field Study Report for the candidates joined from 2019-2020)	4	4	25	75	100
19IPOSE95	Elective 3: Department Elective Health Planning and Policy	3	3	25	75	100
19ISOSC96	Soft Skills	3	3	25	75	100
	Total Credits		24			
	Semester-X	I .				
19IPOSC01	CORE:38 Socio-Economic and Demographic Implications of HIV/AIDS	5	5	25	75	100
19IPOSC02	CORE:39 Population Law and Human Rights	4	4	25	75	100
19IPOSC03	CORE:40 Computer Applications in Demographic Analysis	5	5	25	75	100
19IPOSC04	CORE:31 Project and Viva-voce	5	5	25	75	100
19IPOSX05	Elective 4: Interdepartmental Elective Tamilnadu Demography	3	3	25	75	100
19IPOSE06	Elective 5: Department Elective Population and Environment	3	3	25	75	100
	Total Credits		22			
	Semesters I-X Total Credits		230			

L- Lectures; P- Practical; C- Credits; CIA- Continuous Internal Assessment; ESE- End-Semester Examination

Note:

- 1.Students shall take both Department Electives (DEs) and Interdepartmental Electives (IDEs) from a range of choices available.
- 2. Students may opt for any Value-added Course listed in the University website.

 Elective Courses

S. No.	Course Code	Course Title		urs/ ek	С		Marks	
			L	Р	د	CIA	ESE	Total
1.	19IPOSE15	Elective 1: Interdepartmental Elective	3	0	3	25	75	100
2.	19IPOSE25	Elective 2: Interdepartmental Elective	3	0	3	25	75	100
3.	19IPOSE26	Elective 3: Department Elective	3	0	3	25	75	100
4.	19IPOSE35	Elective 4: Interdepartmental Elective	3	0	3	25	75	100
5.	19IPOSE36	Elective 5: Department Elective	3	0	3	25	75	100

Department Electives (DE)

Interdepartmental Electives (IDE)

S. No.	Course Code	Course Title	Department		urs/ eek			Marks	
				L	Р	С	CIA	ESE	Total
1.	19 SOSE 115.1	Soft Skills	English	3	0	3	25	75	100
2.	19 MATE 215.1	Discrete Mathematics		3	0	3	25	75	100
3.	19 MATE 215.2	Numerical Methods	Mathematics	3	0	3	25	75	100
4.	19 MATE 315.1	Differential Equations		3	0	3	25	75	100
5.	19 STSE 215.1	Statistical Methods		3	0	3	25	75	100
6.	19 STSE 215.2	Mathematical Statistics	Statistics	3	0	3	25	75	100
7.	19 STSE 315.1	Bio-Statistics		3	0	3	25	75	100
8.	19 PHYE 215.1	Classical Mechanics and Special Theory of Relativity		3	0	3	25	75	100
9.	19 PHYE 215.2	Physics of the Earth	Physics	3	0	3	25	75	100
10.	19 PHYE 315.1	Bio-Medical Instrumentation		3	0	3	25	75	100
11.	19 PHYE 315.2	Energy Physics		3	0	3	25	75	100
12	19 CHEE 215.1	Applied Chemistry		3	0	3	25	75	100
13	19 CHEE 315.1	Basic Chemistry	Chemistry	3	0	3	25	75	100
14	19 CHEE 315.2	Instrumental Methods of Analysis		3	0	3	25	75	
15	19 BOTE 215.1	Plant Tissue Culture		3	0	3	25	75	100
16	19 BOTE 215.2	Plant Science – I	Rotany	3	0	3	25	75	100
17	19 BOTE 315.1	Gardening and Horticulture	Botany	3	0	3	25	75	100
18	19 BOTE 315.2	Plant Science – II		3	0	3	25	75	100
19	19 ZOOE 215.1	Animal Culture Techniques	Zaalagu	3	0	3	25	75	100
20	19 ZOOE 315.1	Environmental Science	Zoology	3	0	3	25	75	100

21	19 GEOE 215.1	Environmental Geosciences	Earth	3	0	3	25	75	100
22	19 GEOE 315.1	Applied Geophysics	Sciences	3	0	3	25	75	100
23	19 MIBE 315.1	Microbiology	Microbiology	3	0	3	25	75	100
24.	19 CISE 215.1	R Programming	Computer & Information Science	3	0	3	25	75	100

Electives Offered to Other Departments

S. No.	Course Code	Course Title	s/	our we ek	•	Ī	Marks	
			L	P	С	CIA	ESE	Tota I
1.	19IPOSE11	Population Dynamics	3	0	3	25	75	100
2.	19IPOSE21	Tamilnadu Demography	3	0	3	25	75	100
3.	19IPOSE31	Health Education and Nutrition	3	0	3	25	75	100
4.	19IPOSE41	Population and Environment	3	0	3	25	75	100

Value Added Course

Course Code	Course Title		urs/ eek	С		Marks	
		L	Р		CIA	ESE	Total
19IPOSC26		3	0	3	25	75	100

Programme Outcomes

PO1: Critical thinking

PO2: cultivating cognitive skills required in the job market

PO3: Effective communication

PO4: Familiarity with ICT to thrive in the information age

PO5: Cultivating aptitude for research

PO6: Respect for alternate viewpoints including those conflicting with ones' perspectives

PO7: Ability to work individually and as members in a team

PO8: Upholding ethical standards
PO9. Acting local while thing global
PO10: Commitment to gender equality

PO11: Commitment to sustainable development

PO12. Lifelong learning

Programme Specific Outcomes

At the end of the programme, the student will be able to

PSO1: Acquire the knowledge on the study areas of Population dynamics, Health education

and Nutrition, Data management, Theories, Policies and Programmes.

PSO2: Demonstrate an understanding of the basic courses in Sociology, Psychology,

Economics, Statistics, Public Health and Nursing

PSO3: Develop technical skill to collect, compile and anlayse the Population Data.

PSO4: Exhibit the knowledge through survey research. PSO5: Recognize to develop an aptitude for research.

ITAC 11 Part - I: Language Tamil/Hindi / French jhs;:-1 - ITAC-11 - nra;ASk; ciueilAk;

kjpg;ngz;: 75 fpubl;: 3

myF:-1 - FWe;njhif

ghly; vz;fs;:- 3> 6> 16> 18> 24> 28> 32> 37> 40> 54> 57> 60> 69>

74> 77> 83> 85> 93> 97> 99

(,UgJ ghly;fs; kl;Lk;)

myF:-2 - GwehD}W

ghly; vz;fs;:- 9> 19> 27> 34> 38> 45> 51> 55> 66> 71> 76> 82> 86>

92> 96

(gjpide;J ghly;fs; kl;Lk;)

myF:-3 - jpUf;Fws;

md;Gilik> nra;ed;wp mwpjy;> mlf;fKilik> Gwq;\$whik> <if>

mUSilik (MW mjpfhuq;fs; kl;Lk;) ehybahu; fy;tp> fy;yhik (20 ghly;fs;)

myF:-4 - fk;guhkhazk;

Ffg;glyk; (mNahj;jpah fhz;lk;)

myF:-5 - ciueil

kh.nguparhkp J}ud; - rpw;gp. ghyRg;gpukzpad;

fhg;gpaj;jpwd; - Nrhk. ,stuR

ghu;it E}y;fs;:

1. FWe;njhif - c.Nt.rh. gjpg;G

2. GwehD}W - c.Nt.rh. gjpg;G

3. jpUf;Fws; - gupNkyofu; ciu

4. fk;guhkhazk; - mz;zhkiyg; gy;fiyf;fofg;

gjpg;G

- FWe;njhifr; nrhw;nghopTfs;
- 6. FWe;njhifj; jpwdha;T Nrh.e. fe;jrhkp
- 7. vl;Lj;njhifr; nry;tk; ny.g.fU. ,uhkehjd; nrl;bahu;
- 8. kh.nguparhkp J}ud; rpw;gp. ghyRg;gpukzpad;> rhfpj;amfhnjkp> Kjw;qjpq;G 2000

9. fhg;gpaj;jpwd; - Nrhk. ,stuR - kzpthrfu; gjpg;gfk;> nrd;id

PART – II: ENGLISH IASL – 12: English Through Literature I: Prose

Objective:

To develop the communicative competence of learners in the English Language through training them in the skills of listening, speaking, reading and writing.

UNIT - 1

Bonnie Chamberlain "The Face of Judas Iscariot"

Swami Vivekananda "Speech at World Parliament of Religion"

UNIT - 2

Stephen Leacock "My Financial Career"

BhimraoAmbedkar "Speech on 4th November 1948 in the Constituent Assembly"

UNIT -3

Robert Lynd "On Forgetting" Nirad C. Chaudhuri "Indian Crowds"

UNIT-4

A. G. Gardiner "All about a Dog" Ruskin Bond "My Eccentric Guests"

UNIT-5

Martin Luther King (Jr.) "I Have a Dream" Khushwant Singh "The Portrait of a Lady"

TEXT BOOK:

Ayyappa Raja. S, Shanmugasundari. P., Deivasigamani. T., SaravanaPrabhakar. N, and Karthikeyan. B. English through Literature: Prose.

Semester-I Credits:4
19IPOSC13 INTRODUCTION TO POPULATION STUDIES Hours:4

The students will be enable to

LO1: Describe about basic components of population change.

LO2: Explain the growth of population of the globe.

LO3: compare the distribution of population in various regions of the world.

UNIT-

Introduction

Population Studies; concepts, definitions, nature and scope. Muliti – disciplinary nature; Relationship with selected disciplines – Statistics, Economics, Sociology, Psychology and Health. Components of Population change: Fertility, Mortality and Migration.

UNIT-2

Population Growth

Population growth in the world, developed and developing countries; India's population growth; trends & differentials in States and Union territories; Factors responsible for decline of population growth in the developed nations and relatively high growth in India; Population prospects in the world and in India:

UNIT-3

Population Distribution

Basic measures of distribution; Population Distribution among the developing and developed regions of the world; Factors affecting population distribution in India.

UNIT-4

Population Characteristics

Religion, Casts, Language, literacy and educational attainment, occupational status and marital status. Differentials of these characteristics among the states in India.

UNIT-5

Population Structure (Age & Sex)

Age structure: Concepts, Uses, Measures; factors affecting age structure. Trends in age structure in India; aging and younging of population. Sex structure: concepts, uses and sources; measures; trends in sex ratio in developed and developing regions and in India; Determinants of sex ratio.

TEXT BOOKS:

- 1. Bhende Asha A & Tara K. Kanitkar, Principles of Population Studies, Bombay: Himalaya Publishing House, 2001.
- 2. Bhaskar D. Mishra, An Introduction to the Study of Population, (Madras: Sourth Asian Publishers Pvt. Ltd., 1980).
- 3. Bogue, Donald J. Principles of Demography, (New York: John Whiley and Sons, 1969). Paterson, William, Population (New York: Macmillan, 1968).

SUPPLEMENTARY REDINGS:

- 1. Bose, Ashish, Studies in Demography, Delhi: B.R. Publishers, 2001.
- 2. Nam, Charles, Population and Society, Boston: Houghton Miffin Co., 1968.
- 3. Speiegelman, Introduction to Demography, London: Oxford University Press, 1970.
- 4. Shryock, Henry et al. The Methods and Materials of Demography, Washington: Bureau of Census, 1971, Vols. I and II.
- 5. United Nations, The Determinants and Consequences of Population Trends, New York: Department of Economics and Social affairs, 1978.
- 6. United Nations, ESCAP, Population of India: Country Monograph Series No.10, New York: United Nations, 1982.

After completion of the course students will be able to:

CO1: Acquire the knowledge about basic components of population change.

CO2: Understand the growth of population of the globe.

CO3:Identify the distribution of population in various regions.

CO4: Demonstrate the population characteristics

CO5: Comprehend the linkages of age and sex structure

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	-	-	✓	-	-	✓	✓		✓	✓	✓	-		✓	✓
CO2	✓	1	ı	✓	-	1	√	\	1	✓	✓	✓	ı	ı	✓	✓
CO3	✓	-	•	✓	-	•	✓	✓	•	✓	✓	✓	•	•	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-I

19IPOSC14 SOURCES OF POPULATION DATA

Credits: 5
Hours:5

LO1: Identify the sources of population data.

LO2: know the evolution of Census

LO3: Analyse the demographic and health surveys

UNIT-1 Introduction

Sources: Primary and Secondary sources, Uses and Limitations; Primary and Secondary data; Internet as a source of population information.

UNIT-2

Population Census

Census – Definitions, Scope and Features of Census; Evolution of Indian Censuses: Indian census: Census questionnaires, changes in individual slip over time; method of data

collection; Content of latest census; post-enumeration check and census tabulation; census publications, utility and limitations of census data.

UNIT-3

Registration Systems

Registration system: Vital statistics – Objectives; History of Civil Registration System – World and India; Organization, uses and Limitations; Sample Registration Scheme (SRS) in India: Objectives, uses and Limitations; Model Registration Scheme in India: Objectives, Coverage, uses and Limitations; Population Registers.

UNIT-4 Secondary Sources

Secondary sources: Demographic surveys, Statistical Year Book, Demographic year Book; National Sample Surveys (NSS) and other Sample Surveys, both National and International _ Advantages and Limitations.

UNIT-5

Selected Demographic and Health Surveys

World Fertility Surveys; Demographic Health Survey(DHS) National Family Health Survey, (NFHS – I & II) Reproductive Child Health Survey (RCHS).

TEXT BOOKS:

- 1. Bhende Asha A and Tara K. Kanitkar, Principles of Population Studies, Bombay: Himalaya Publishing House, 2001.
- 2. Bogue, Donald J., Principles of Demography, New York: John Whiley and Sons, 1969.
- 3. Davis, Kingsley, The population of India and Pakistan, Princeton: Princeton University Press, 1968.
- 4. Paterson, William, Population, New York: Macmillan, 1968.

SUPLLEMENTARY READINGS

- Shryock, Henry et al. The Methods and Materials of Demography, Washington: Bureau of Census, 1971, Vol.I and II.
- 2. Srinivasan K., Basic Demographic Techniques and Applications, New Delhi: Sage Publication, 1998.
- 3. Srivastava S.C. Indian Census in Perspective Census Centenary Monograph (New Delhi: government of India, 1971).
- 4. Thompson, Warren and Lewis, David, Population Problems (New York: McGraw Hill Book Co., 1965)

After completion of the course students will be able to:

CO1: Acquire the knowledge of sources of population data.

CO2: Impart knowledge on Census
CO3: Discuss the development of Vital Registration System
CO4: Gain knowledge on Secondary sources
CO5: Describe the different Demographic surveys

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6
CO1	✓	_	-	✓	_	-	✓	✓		√	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	1	✓	-	1	√	✓	ı	✓	✓	✓	-	1	✓	✓

Semester-I

19IPOSC15 ENVIRONMENTAL STUDIES

Credits: 3 Hours:3

The students will be enable to

LO1: Define the environment system

LO2: Classify the issues of environmental damage

LO3: Assess the resource depletion

UNIT: 1

The Environmental System

- (1.1) The Services Provided by the Environmental System
- (1.2) Ecosystems: Food Chains, Food Webs, Ecological Pyramids
- (1.3) Biochemical Cycles: Hydrological Cycle, Carbon Cycle.

UNIT: 2

Environmental Damage- Pollution

Sources and impact of

- (2.1) Air Pollution
- (2.2) Water Pollution
- (2.3) Land Pollution
- (2.4) Municipal Solid Waste
- (2.5) Noise Pollution

UNIT: 3

Resource Depletion

- (3.1) Importance of Forests: Causes and Consequences of Deforestation.
- (3.2) Bio Diversity: Meaning and Importance-Reasons and Consequences of Biodiversity Decline
- (3.3) Consequences of Overdrawing Water Resources.

UNIT: 4

Global Climate Change

- (4.1) The Science of Climate Change-The Green House Effect
- (4.2) Sources and Impact of Climate Change
- (4.3) Coping with Climate Change

UNIT: 5

Sustainable Development

- (5.1) Concepts and Definition of Sustainable Development (Brundtland Commission Definition)
- (5.2) Poverty, Population Growth and Environmental Damage
- (5.3) Policies for Sustainable Development

TEXT BOOK:

1. Erach Bharucha. Environmental Studies. New Delhi: UGC, 2004.

SUPPLEMENTARY REDINGS:

- 1. Kumarasam, K. A.Alagappa Moses and M.Vasanthy. Environmental Studies. Trichy: Bharathidasan University Pub., 2004.
- 2. Rajamannar. Environmental Studies. Trichy: EVR College Pub., 2004.
- 3. Kalavathy S. Environmental Studies.(Ed). Trichy: Bishop Heber College Pub., 2004.
- 4. Richard Wright and Dorothy F Boorse. Environmental Science: Toward a Sustainable Future. New Delhi: Prentice-Hall India, 2010.

After completion of the course students will be able to :

CO1: Impart an understanding the environmental system

CO2: Understand important issues of environmental damage

CO3: Understand the process of resource depletion

CO4: Describe the global climate change.

CO5: Become aware of sustainable development.

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6
CO1	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-I

19IPOSC16 PRINCIPLES OF SOCIOLOGY

Credits: 3 Hours:3

The students will be enable to

LO1: Identify the basic knowledge of Social institution

LO2: Outline the issues of status of women

LO3: interpret the sociological theories of fertility

UNIT-1

Sociology: Nature and scope, relationship with Population Studies: Social stratification; Societal narms and values.

UNIT - 2 Institutions

Social Institutions: Family, Marriage, Religion and their influence on population change. Impact of social mobility; primary and secondary groups; morms and values on population change.

UNIT – 3 Culture

Culture and Society: cultural patterns, functions and their influence on components of population change; Modernisation and its influence on contraception and fertility.

UNIT - 4

Status of Women

Dimensions of Status of Women: Concepts, Status affecting variables (SAVs) of Mahadevan. Its impact on Fertility.

UNIT - 5 Theories

Sociological Theories of Fertility: Social capillarity theory, theory of diffusion or cultural lag, theory of change and response; Social change: Factors of social change, Social change and Technology.

TEXT BOOKS:

- 1. Desai, A.R Rural Sociology in India (Mumbai: Popular Books, 1978)
- 2. Shankar Rao C.N. Sociology 9New Delhi: Chand and Company Ltd., 1995)
- 3. Sharm, R.K. Fundamentals of Sociology, (New Delhi: Atlantic Publishers, 1996)
- 4. Singh, K., Rural Sociology (Lucknow: Prakash Kendra, 1978)

SUPPLEMENTARY READINGS:

- 1. Blende, A and Kanitkar, T., Principles of population studies, (Bombay: Himalaya Publishing House, 2001).
- 2. UGC Report of the curricullam development centre social work education, published by UGC, 1990
- 3. United Nations., The Determinants and consequences of Poulation Trends. (New York: United Nations Publications, 1973)
- 4. Veena Dass et al; (EDS), Contributions to Indian Sociology, (New Delhi; Sage Publications, 1995).

After completion of the course students will be able to:

CO1: Acquire the basic knowledge of Sociology

CO2: Describe the Social Institutions

CO3: Recognize society and its culture

CO4: Discuss the issues of status of women

CO5: Analyse the Sociological theories of fertility

CO/	РО	PO	РО	PO	РО	РО	РО	PÓ	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	-	_	✓	_	_	✓	✓	-	√	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

jhs;:-2 -ITAC-21 - gad;ghl;Lj;jkpOk; nrk;nkhop tuyhWk;

kjpg;ngz;: 75 fpubl;: 3

Nehf;fk;

nkhopaikg;gpid tpsf;Fjy;

nkhopg; gad;ghl;by; cUthd - cUthFk; khw;wq;fisg; Gyg;gLj;Jjy; jpirnkhopfspd; fyg;gpdhy; jkpo;nkhopapy; Vw;gLk; khw;wq;fis tpsf;Fjy; nkhopf; FLk;gq;fs; Fwpj;Jk; nrk;nkhopj; jkpopd; rpwg;Gfs; Fwpj;Jk; nrk;nkhop Vw;Gf; Fwpj;Jk; tpsf;Fjy;

myF-1

vOj;Jf;fspd; vz;zpf;ifAk; tiffSk;> vOj;Jf;fspd; khj;jpiu>fhy ,ilepiyfs;>%tifg; Nghypfs; > ,Utifg; gjq;fs;> Gzh;r;rpfs;.

myF-2

nrhw;nwhlh; tiffs; (%tif nkhop) njhlhpyf;fzj;jpy; fhzg;ngWk; tOTk; tO mikjpAk; gj;jpaikg;Gk; epWj;jw; FwpaPLfs; gad;ghLk;. ciueil vOJk; NghJ Nkw;nfhs;s Ntz;ba tpjpKiwfs;.

myF -3

Nkilj;jkpo;

ePq;fSk; Ngr;rhsh; Mfyhk;-Fkhp mde;jd; Nkilg;Ngr;Rf;Fj; jahh; nra;jy;- Ngr;rhsUf;Fhpa jFjpfs;- NgRk; Kiwfs; - gof;f tof;fq;fs;.

myF-4

gilg;Gj;jpwd;

rpWfij- ftpij- fl;Liu- Xuq;f ehlfk; - E}y; Fwpj;j jpwdha;T vOjg; gapw;rpjuy;;.

myF-5

gad;ghl;Lj; jkpOk; nrk;nkhop tuyhWk;

மொழி- விளி கி - மொழிிிிிி பி கி - உலகி சி மொழிகி - இி தியி செ மொமிகி -செ மொழி தி திகி -வரையறைகி -வரி ி செ மொழி தமி - தமிழி தெரி மை- தமிழி കിനിിി കി - കൃഥിിി செ மொழி 1 ிகி . தமி செ மொழி அறி தே 1 - பி திமரி கலைஞி அமைிி கி -ி தி தி கால அறிஞி கி வரை (அறிஞி கி -நி வனி கி - இயி கி கி தொடிி யி சிகி - அறி பேரரி டி கி - உலி தமிி 1 சி மொழி மாநரி , கோவை-2010)

ghh;it Ehy;fs;:

- 1. Nrhk. ,stuR> ed;D}y; fhz;bif ciu> kzpthrfh; gjpg;gfk;> nrd;id.
- 2. m.fp gue;jhkdhh;> ey;y jkpo; vOj Ntz;Lkh? ghhp > epiyak;> nrd;id.
- 3. Ngr;Rf;fiy- Nf. tP. tPuuhftd;> tyk;Ghp gjpg;gfk;> jpUepd;wT+h;-602 024.
- 4. Fkhp mde;jd;> ePq;fSk; Ngr;rhsh; Mfyhk;> G+k;Gfhu; gpuRuk;> nrd;id.
- 5. vOJtJ vg;gb? kfuk; (njh. M) godpag;gh gpujh;];> nrd;id.

- 6. k. jpUkiy- Ngr;Rf;fiy- kPdhl;rp Gj;jf epiyak;-2008> kJiu.
- 7. சாலினி இளி திரையி , தமி சி மொழி ஆவணி , மணிவாசகி பதி பகி , செ னை, 2005.
- 9. ச. சாரதரி பரி சி கி சி வியி , மினரி சிிி தக நிலையி , மி ரை,(1993)
- 10. வா.செ.ி ழி தைசாமி உலகி சி வியி மொழிகளிி வி சையி

தமி , பாரதி பதி பகி , செ னை.

- 11 ஜி. ஜரி சரி வே சி மொழிகி வி சையி தமி , சி னை 2004.
- 12. சாலினி இளி திரையி தமிி ி சி மொழி ஆவணி , மணிவாசகி பதிி பகி சி னை-2005
- 13. ச. அகி தியலிி கி சி கஇலி கியி -சி வியி பரிவைமி யி பி பதிி பகி , சிதி பரி -2004.
 - 14. மணவை. ி தபா செி மொழி உி ி ி றி ி , அறிவியி தமிி அறி கி டளை, செினை.

PART – II: ENGLISH IENC– 22: English Through Literature II: Poetry

Objective:

To ensure and enhance:

- the ability of the learner to comprehend and appreciate poems in English
- the competence of the learner in using English language, and
- the interest of the learner in human values and perceptions

UNIT -1

William Shakespeare
 William Blake
 Robert Bridges
 "Sonnet 29"
 "A Poison Tree"
 "A Red, Red Rose"

UNIT-2

4. PB Shelley "Ozymandias"5. Alfred Tennyson "The Brook"

6. HillaireBellock "Matilda"

UNIT -3

7. Robert Frost "Stopping by Woods on a Snowy Evening"

8. Walt Whitman "O Captain, My Captain"

9. Sylvia Plath "Mirror"

UNIT -4

10. Toru Dutt "The Lotus" 11. A. K. Ramanujan "A River"

12. Keki N. Daruwala "Pestilence in Nineteenth Century Calcutta"

UNIT -5

13. Gabriel Okara "Once Upon a Time"

14. Maki Kureshi "The Kittens"

15. Robert Finch "Peacock and Nightingale"

TEXT BOOK:

1. Karthik Kumar. S., Gnanaprakasam.V., Arputhavel Raja. G., Shanmugasundaram. C., and Vijaya. R. English Through Literature: Poetry

Semester II 19IPOSC23 FERTILITY Credits: 4

Hours:4

The students will be enable to

- **LO1**. Know the basic knowledge about fertility.
- **LO2.** Summarize levels and trends of fertility
- **LO3.** Distinguish the theories fertility.

UNIT - 1

Fertility – Introduction

Fertility: Concepts and Definitions, Importance of the study of fertility; Data sources and errors; Factors important in the analysis of fertility.

UNIT - 2

Fertility Measures

Measures of Fertility: Crude Birth Rate, General Fertility Rate, Age Specific Fertility Rate, Total Fertility Rate, Rates adjusted for Age and Sex; Child Woman Ratios, Children ever born, Measures of Reproduction: Gross Reproduction Rate; Net Reproduction Rate.

UNIT - 3

Factors Affecting and Fertility

Physiological, Social, Economic, and Cultural factors affecting fertility; Value of Children; Davis-Blake's Intermediate Variables Framework; Bongaart's Proximate Variables.

UNIT - 4

Levels, Trends and Differentials in Fertility

Levels and Trends in fertility in World, Developed and Developing Countries and in India; Causes and Consequences; Fertility differentials by age, religion, literacy, residence, occupation, income, and by status of women.

UNIT - 5

Theories of Fertility

Theory of Demographic Transition, Threshold Hypothesis, Social Capillary Theory, Theory of Change and Response, Theory of Cultural Lag.

TEXT BOOKS:

- 1. Agarwala, S.N., India: Population Problems, (Bombay: Tata McGraw Hill Publishing Co., Ltd., 1985).
- 2. Bhende Asha, A., and Tara Kanitkar, Principles of Population studies, 13th ed. Bombay: Himalaya Publishing House, 2000.

3. Bongaarts Proximate Determinants, (New York: academic Press, 1983).

SUPPLEMENTARY READINGS

- 1. Bulatao, R.B., and R.D. Lee (eds.) Determinants of Fertility in Developing Countries Vol. I (New York: Academic Press, 1983).
- 2. *Caldwell, J.C., Theory of Fertility Decline, (London: Academic Press, 1982).
- 3. Davis, K., and Judith Blake, 'Social Structure and Fertility: An Analytic Framework' Economic Development and Social Change, Vol. 4, No.3 1956, pp.211-235.
- 4. *Driver, Edwin, D. Differential Fertility in Central India, (Princeton: Princeton university Press. 1963).
- 5. Freedman. R., The Sociology of Human Fertility: A Trends Report and Biblography, (Oxford: Basic Blockwell, 1963).
- 6. Shryock, Henry, S., et.al., The Methods and Materials of Demography Vol. 1 & 2 (Washington D.C: U.S Bureau of the Census, 1980).
- 7. *Thomlison, Ralph, Population Dynamics, New York: Random House, 1955.
- 8. *United Nations, The Determinants and Consequences of Population Trends, Vol. 1 (New York: United Nations, 1973).

After completion of the course students will be able to:

- **CO1**. Acquire the basic knowledge about fertility.
- **CO2.** Understand the measures of fertility
- CO3. Analyze the levels and trends of fertility in World and differentials in fertility.
- **CO4.** Define the concept of the theories of fertility.

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	P01	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1																
COI	✓	_	_	✓	_	-	✓	✓	_	✓	✓	✓	_	_	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-II 19IPOSC 24 MORTALITY Credits:4 Hours:4

The students will be enable to

- **LO1**. Define the basic knowledge of mortality.
- **LO2**. Explain the measures of mortality.
- **LO3.** Relate the levels and trends of mortality.

Introduction

Mortality: Importance of study; concepts, definition, data sources and limitations; Factors important in the analysis;

UNIT – 2 Measures

Measures: Crude Death Rate, Specific death rates by Age, Sex, Causes of Death, Marital status and other characteristics; Standardization of Death Rates: Comparative Mortality Index and Standardized Mortality Ratio; Lexis Diagram and its Importance.

UNIT-3

Infant and Maternal Mortality

Importance of study; Measures; Perinatal, neo-natal and Post-neo-natal mortality rates; child mortality; Causes: endogenous and exogenous; Trends and differentials in developed and developing countries and in India; Prospects of decline; maternal mortality rates: Levels and trends and future prospects.

UNIT - 4

Mortality Levels, Trends and Differentials

Levels and trends in mortality in developed and developing countries and in India; Prospects of mortality decline in developed and developing countries and in India. Mortality differentials by age, sex, residence and souci-economic characteristics

UNIT - 5 Life Tables

Life Table: Concepts, definition types, assumptions and columns. Current and Cohort of Construction of Life tables from Age Specific Death Rate: Construction of life table on the basis of Single Census and two Censuses: Conversion of Abridged Life table into complete life table.

REFERENCES:

- 1. *Barclay, George, Techniques of Population Analysis, New York: John Wiley & Sons, Inc. 1958.
- Bhat, P.N Mari, Preston, S.H and Tim Dyson, Viral Rates in India 1961-81, Panel of India, Committee on Population and Demography, Report No. 24 Washington D.C national Academy Press, 1984.
- 3. *Bhende, AshaA., and Tara Kanitkar, Principles of Population studies, 13th Edition, (Bombay: Himalaya Publishing House, 2000).

SUPPLEMENTARY READINGS

- K.Lkohli, Mortality in India (New Delhi: Sterling Publishers Pvt. Ltd., 1977).
- 2. A.Kusharkwa, Souci and Economic Factors in Reality in Developing Countries, World Population Conference, 1965 Balgrade.
- 3. K.Mahadevan, et al, Culture, Nutrition and Infant and Child Mortality: A study in South Central India (Mimeographed) 1981.

- 4. Omram, A.R., The Epidemiology Thrasition: A Theory of the Population Change, Milbank Memorial Fund Quarterly Vol.49, 1971.
- 5. *Padmanabha, P., 'Mortality in India: A note on Trends and Implications', Economic and Political Weekly, 17(32) pp.1285-90 1982.

After completion of the course students will be able to :

- CO1. Inculcate the basic knowledge of mortality.
- **CO2**. Understand the measures of mortality.
- **CO3.** Analyze the levels and trends of mortality.
- CO4. Explore the differentials in mortality
- **CO5.** Recognize the basic knowledge of life table.

CO/	РО	РО	PO	РО	РО	РО	PO	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	02	О3	04	O 5	O 6
CO1	✓	_	_	✓	_	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	√	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-II 19IPOSC25 MIGRATION

Credits: 4 Hours:4

- **LO1**. Define the basic knowledge of migration.
- **LO2**. Explain the theories migration.
- **LO3.** Relate the policies of migration

UNIT – 1 Introduction

Migration: Concepts, Definitions; Importance of Study; Sources and Quality of Data; Forms and Types of Migration.

UNIT – 2 Internal Migration

Internal Migration: Migration Patterns; Characteristics of Migrants in developing countries with special emphasis to India. Measures of Internal Migration: Direct and Indirect Methods of Estimation; Advantages and limitations.

UNIT – 3 Determinants of Migration

Factors influencing Migration. Determinants of Internal migration: Demographic, Economic, Social, and Political at the place of origin and destination. Consequences of migration both at Micro and Macro levels.

UNIT - 4

Theories and Models

Ravenstein's Laws of Migration, Everett Lee's Theory of Migration, Peterson's Typology on Migration to add Zipf and Kent gravity model, Wolpert's decision making aspects of migration, Stouffer's model and Todaro's Model of Rural-Urban Migration.

UNIT - 5

Policies

International Migration - Immigration and Emigration; Factors affecting International Migration; consequences; Policies in Developed and Developing Countries Refugees - Problems.

TEXT BOOKS:

- 1. *Bhende Asha, A. and Tara kanitkar, 2000, Principles of Population Studies, Murnbai: Himalya Publishing House.
- 2. Pathak, K.B and F.Ram, 1992. Techniques of Demographic Analysis, Mumbai: Himalaya Publishing House.
- 3. *Rogers, A, 1975, Introduction to Multi-regional Mathematical Demography, New York: John Willey. Chapter 1 & 2

SUPPLEMENATRY READINGS

- 1. Shryock Henry S., Jacob S. Siegel and Associates, 1973. The Methods and Materials of Demography, Vol. II Washington. DC: U S. Bureau of the Census.
- 2. *United Nations. 1973. Determinants and Consequences of Population Trends. Vol. 1, New York. Chapter VI & VIII

After completion of the course students will be able to:

- **CO1** Impart the knowledge on Migration.
- **CO2**. Provide an Overview of different types of Migration.
- CO3. Understand the determinants of migration
- **CO4**. Explore the theories of migration
- CO5. Assess the policies of migration

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	_	_	✓	_	_	✓	✓	_	✓	✓	✓	_	_	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	√	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-II

19POSC26 PRINCIPLES OF ECONOMICS

Credits: 3 Hours:3

The students will be enable to

- **LO1**. Outline the concepts of economics
- LO2. Recognize the concepts of economic development
- LO3. Illustrate different human resource development

UNIT - 1

Basic Concepts in Economics

- 1.1. Scarcity and Opportunity Cost
- 1.2. Rational Behaviour Marginalism Incremental Concepts
- 1.3. The Goals of an Economic System What to produce? How to Produce? How to distribute?

UNIT - 2

Principles and Concepts of Economic Development

- 2.1. Concept of Development Measures of Economic Development
- 2.2. Common Characteristics of Developing Economies
- 2.3. Factors in development Capital, Natural Resources, Cultural Values and Human Resources.

UNIT - 3

Theories of Population

- 3.1. Malthus Theory Contempory Relevance
- 3.2. Theory of Demographic transition
- 3.3. Theory of optimum population.
- 3.4. Beckers Household theory of fertility Demand for children in developing countries.

UNIT - 4

Human Resource Development

- 4.1. Concept of Human Capital
- 4.2. Role of Health and Education in human development
- 4.3. Distinction between Human Development & Human Resource Development.

UNIT - 5

Population and Sustainable Development

- 5.1. Macro economic model of population growth Coale and Hoover model.
- 5.2. Development consequences of population growth Population growth as obstacle and stimulus to growth.
- 5.3. Poverty and Inequality.
- 5.4. Population and Global Environment

TEXT BOOKS:

- 1. Todaro, Michael. P and Stephen C. Smith (2004), Economic Development (Pearson Education, New Delhi).
- 2. Gills, Malcolm, et. al., (2000) Economics of Development, (W.W. Norton & Company, New York).
- 3. Datt, Ruddar & Sundharam, K.P.M. (2004), Indian Economy (S. Chand & Co).

SUPPLEMENTARY READINGS:

- 1. World Bank (2003), World Development Report on Sustainable Development, Oxford University Press, Oxford.
- 2. Robbert A. Leon, Basic Economic Principles (McGraw Hill, International Book Company, New Delhi).
- 3. Ahuja H.L. (2004) Advanced Economic Theory (Sultan Chand Co., New Delhi).
- 4. Ruffin Roy. J (1992) Intermediate Micro Economics (Harper & Collins Publishers, New York)
- 5. Ray S.K. (2007), the Indian Economy (Prentice Hall of India).

After completion of the course students will be able to :

CO1: Acquaint the concepts and importance of Economics.

CO2: Recognize the Principles and Measures of Economic Development

CO3: Explore the theories of Population related Economic theories.

CO4: Identify and differentiate Human Resource Development.

CO5: Learn the Macroeconomic model of Population growth

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓		-	✓			✓	✓	-	✓	✓	✓			✓	✓
CO2	✓	•	ı	✓	ı	•	✓	✓	-	✓	✓	✓	ı	•	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	•	•	√	•	1	√	✓	-	✓	√	√	•	•	✓	✓
CO5	√		•	√	-		√	✓	-	✓	✓	√	-	-	√	✓

SEMESTER III

Language-1 jkpo;

ITAC 31- ciueilAk; ehlfKk;

kjpg;ngz;fs;: 75 fpubl;:3

Nehf;fk;: ,yf;fpaq;fspd; rpwg;GfisAk; fUj;JfisAk; ciueil topahfg; Gyg;gLj;jy; - ciueilj;jpwid vLj;Jiuj;jy;

myF-1

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,yf;fpa tpsf;fk; - Mrpupau; (t.Rg. khzpf;fk;)
    ,yf;fpa tpsf;fk; - ,yf;fzf; Fws;fs; - tupirg;ghl;L - tho;thq;F - J}a ,yf;fpak; - eilKiw mwq;fs; -
    ,yf;fpaf;fiy
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myF-2

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Fwszpfs; - ,yf;fpa nts;sk; - jd;neQ;rk; - ,yf;fpaj;jsk; - Fws;
tpsf;fk; - ek;gpf;if E}y; - ePjp tpsf;fk;
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myF-3

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k.g.nguparhkpj;J}ud; - (Mrpupau; - rpw;gp ghyRg;gpukzpak;) tho;Tk; gzpAk; - md;gpy; jpisj;j ftpij – rpWfijg; gilg;Gfs; ehlfq;fSk; fPu;j;jidfSk; - fl;Liur; nry;tk;
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myF-4

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rpWtu; ,yf;fpak; mwptpay; E}y;fSk; gpwTk; - fiyf;fsQ;rpag; gzp—ghujp jkpo; - J}ud; vd;nwhU kdpju;.
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myF-5

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ehlfk; - Njhif tz;zk; (Mrpupau; - Ihf;lh; r. rtfu;yhy;)
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ghIE}y;fs;:

- 1. t.Rg.khzpf;fk; ,yf;fpa tpsf;fk;
- kzpthrfu; E}yfk;> Kjw;gjpg;G-1971
- 2. rpw;qp ghyRg;qpukzpad; kh. g.nguparhkpj;J}ud;

rhfpj;a mfhnjkp> Kjw;gjpg;G-2000

3. Ihf;lu; r. rtfu;yhy; - Njhif tz;zk;> godpak;khs; ntspaPL> nrd;id> Kjw;gjpg;G-2008

IENC 32 - PART-II ENGLISH: ENGLISH THROUGH LITERATURE III: DRAMA

UNIT 1

1. Charles Dickens: Great Expectations

UNIT 2

- 1. The Robe of Peace (O' Henry)
- 2. The Miracle of Puran Bhagat (Rudyard Kipling)

UNIT 3

- 1. The Truth about Pyecraft (H.G. Wells)
- 2. Quality (John Galsworthy)

UNIT 4

- 1. Mabel (William Somerset Maugham)
- 2. The Far and the Near (Thomas Wolfe)

UNIT 5

- 1. Half-a-Rupee Worth (R.K. Narayan)
- 2. A Devoted Son (Anità Desai)

TEXT BOOKS:

Seshadri, K.G., ed. Stories for Colleges. Chennai: Macmillan, 2003

PART - II: ENGLISH

IASL 32 - English Through Literature III: Drama

Objective:

To enhance the conversational competence of the learner by introducing to him to dramas in English

UNIT -1I

Stanley Houghton "The Dear Departed" Kenneth Sawyer Goodman "The Game of Chess"

UNIT - 2

A. A. Milne "The Princess and the Woodcutter"

Anton Chekhov "A Marriage Proposal"

UNIT - 3

Arnold Bennett "The Stepmother"

Arthur Miller "Grandpa and the Statue"

UNIT - 4

William Shakespeare King Lear(Act II, Scene i)
William Shakespeare King Lear(Act III, Scene i)

William Shakespeare Julius Caesar (Act III, Scene ii)

UNIT - 5

Betty Keller "Tea Party"

TEXT BOOK:

Florence. S., Aruna Devi. G., Rajamohan. R., Bhuvaneswari. S., and Soundararajan. M. English Through Literature: Drama

Semester-III

19IPOSC33 URBANIZATION AND URBAN PLANNING

Credits: 4 Hours:4

The students will be enable to

LO1. Know the basic knowledge of Urbanisartion.

LO2. Explain the changing patter of Urabnisation

LO3. Analyse the levels and trends of Urbanisation

UNIT – 1: Introduction

Urban Geography: Concepts, Nature and Scope. Factors influencing Urban growth. Location, spacing and size of urban settlement. The urban hierarchy, urban morphology, and classification of urban areas.

UNIT – 2: Urbanization

Meaning, Definition, and changing concept of urban. International comparision, concept of urban in the Indian censuses since 1872.

UNIT - 3: Measures

Degree of urbanization, Tempo of urbanization, size of locality of residence of the median inhabitants, population potentials, Rank-size Rule, Lorenz curve and Gini's concentration & co-efficient, Determinants of urbanization.

UNIT 4: Levels and Trends of Urbanization

Levels and Trends of Urbanization in Developed an Developing countries and in India; Urban and rural growth differentials; implications of rural localities for urban growth Role of transportation in affecting urbanization, size and spacing of urban centers; Problems of urbanization and over-urbanization.

UNIT – 5: Urban Planning

Concepts, approaches choice of a suitable strategy; Demographic considerations in urban planning; Policies and Programmes affecting urbanization, urbanization and multi-level planning, Relationship to economic growth, urban growth, rural growth, Population density etc.

TEXT BOOKS:

- 1. Bhende, Asha A and Tara Kanitkar, Principles of Population Studies, 13th edition, (Bombay: Himalaya Publishing House, 2000).
- 2. Boque, Donald J., Principles of Demography (New York: John Wiley Sons, 1981)
- 3. *Bose, Ashish, India's Urbanization 1901-2001 (New Delhi: Tata McGraw Hill Publishing Company Ltd. 1980).

SUPPLEMEMNTARY READINGS

- 1. Goldstein,S and David F Sly (eds.) Basic Data Needed for the Study of Urbanization, (Belgium: IUSSP, 1975).
- *United Nations, the Determinants and Consequences of Population Trends, Vol. I (New York: Dept. of Economic and Social Affairs, 1973).

After completion of the course students will be able to:

- CO1: Demonstrate basic knowledge about urbanization
- **CO2:** Understand the changing pattern in the concept of urbanization.
- CO3: Develop to analyse the measures of urbanization.
- CO4: Identify the levels and trends of urbanization

CO5: Appreciate the various approaches of urban planning

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	P01	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	02	О3	04	O5	O6
CO1	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	•	✓	✓	✓	-	•	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-III 91IPOSC34 Title POPULATION POLICIES AND PROGRAMMES Credits: 4
Hours:4

The students will be enable to

- **LO1**. Describe the knowledge about the population policies
- LO2. Classify organsiation structure of FPP
- LO3. Outline the role of different agencies in FPP

UNIT - 1

Population policies; Definition; Types; policy Goals; world population and Health conferences; overview of population policies in Developed and Developing countries; India's Population Policy; Pre-Independence and post-Independence Era; Policy during Emergency and After, new population policies.

UNIT - 2 Family Planning

Family Planning: Meaning, Objectives, Principles, Characteristics; Need for Family Planning: History of Family Planning Movement in the World, Developed and Developing Countries; Evolution of Family planning Programme in India.

UNIT - 3 Organization structure, Approaches and FP methods

Organization Structure: Central, State, District levels and implementation at the Primary Health Centre; Approaches to Family Planning: Clinical Approaches, Extension Approach, Camp Approach, Cafeteria Approach and Integrated Approach; RCH approach; Target free Approach; community Needs Assessment approach; Targets and Achievements, Target Approach and its importance; Funds allocation, Targets and Achievements under various plan periods; Family planning methods.

UNIT - 4 Acceptance Trends, Factors and Evaluation

Trends in the family Planning Programme: Trends in the acceptance of Family Planning methods, Socio-economic, cultural and psychological factors influencing acceptance of family planning; Research Studies.

Family Planning Evaluation; Concepts, definition, Acceptance, Use-effectiveness and extend-use-effectiveness; Characteristics; Family planning programme impact measures: Acceptance rate, percent protected coups Years protection. Life table continuation rates, Fertility indices and Birth Averted;

UNIT – 5: Different Agencies in Family Planning Promotion

Role of Different Agencies in the promotion of Family Planning: Role of Government Agencies: Mass Media; Family Planning Association of India (FPAI); Population Foundation of India and IASP; Educational & Research Institutions; Role of World Agencies; UN, World Bank, WHO, IUSSP, UNFPA, UNICEF, etc.; Non-Governmental organization; International Planned parenthood Federation; Rockefeller Foundation and the Population Council etc.

TEXT BOOKS:

- 1. *Asha A. Bhende and Tara Kanitkar, Principles of Population studies (Bombay: Himalaya Publishing House, 2000)
- 2. *Bernard Berelson. Family Planning and Population Programs (Chicago: Chicago University Press, 1969)
- 3. Bernard Berelson, Family Planning Program (New York: Basic Book Co., 1969)

SUPPLEMENTARY READINGS

- 1. Chandrasekaran C. and A.L. Hermaslin (eds.) Measuring the Effect of Family Planning Programme on fertility Decline (Belgium: Ordina,1990).
- 2. Chandrasekhar, S., Population and Law in India (Madras: Macmillan, 1978)
- 3. -----, Infant Mortality, Population Growth and Family Planning in India (London: George Allen and Unwin, 1972)
- 4. *Manual on Target Free Approach in Family Welfare Programme (New Delhi: Ministry of Health and Family Welfare,)
- 5. Manual on Community Needs Assessment Approach (Formerly Target Free Approach) in Family Welfare Programme, (New Delhi: Ministry of Health and Family Welfare)
- 6. *Nafis Sedik et al., Population control (Islamabad: Pakistan family Planning council, 1959.
- 7. Nirmala Murthy (ed.) Family Planning Programme in the organized Sector (New Delhi: sterling Publishers Pvt. Ltd., 1963).
- 8. Piers M. Blackie, Family Planning in India: Diffusion and Policy (London:Edward Arnold, 1975).
- 9. Rele, J.R. and Tara Kanitkar, Fertility and Family Planning in Greater Bombay (Bombay: Popular Prakashan, 1982).
- 10. Reproductive and Child Health Programme Scheme for Implementation, 1997, (New Delhi: Department of Family Welfare, Government of India)
- 11. Srinivasan, K. et al., Evaluation of Family Planning Oriental on camps (Bombay: International Institute for Population Studies, 1982).
- 12. *United Nations, The Determinants and Consequences of Population Tends (New York: Deportment of Economic and Social Affairs, 1972).
- 13. *Vatsala Narain and C.P. Prakasam (eds.), Population Policy Perseptives in Developing Countries (Bombay: Himalaya Publishing House, 1983).
- 14. Exposure and Impact Analysis of Mass Media in Family Planning Audience Analysis the Gandhigram Institute of Rural Health and Family welfare, Monograph series, 11, 1982).

After completion of the course students will be able to:

CO1: Acquire the knowledge about Population Policies

CO2: Understand the Evolution of Family planning

CO3: Recognize the Organizational structure, approaches and FP methods.

CO4: Critically evaluate the FP programmes

CO5: Demonstrate the role of different agencies in Family planning programme

CO/ PO	PO 1	PO 2	PO 3	PO 4		PO 6		PO 8		PO1 0				PS O4		
CO1	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓		-	✓	-	-	✓	✓	-	✓	✓	✓	•	-	✓	✓

Semester-III 19IPOSC35 DEVELOPMENT; THEORY, HISTORY AND POLICY Credits: 5 Hours:5

The students will be enable to

LO1. Know the history of social development

LO2. Classify the social policies

LO3. Discriminate the theories of development in social change

UNIT – 1: History of Development

India in the early days – Early Industries - The conquest of India by the British Economy during the British Period - Decline of Indian handicrafts – Social Development : Evaluation, Progress and Development.

UNIT - 2: Development of Economics

Criteria of underdevelopment – Characteristics of under development – Obstacles to Economic development – Concept of development - Stages of Economics development.

UNIT -3: Development of Society

Importance of the study of social Policy – Social Developing: Evolution, Progress and Development –Human needs and quality of Life, Key issues in development polices

UNIT - 4: Theories of Development

Classical, Marx, Schurmpeter, Models on development – Harrod and Domar Models on Development - Neo – Classical theories on Development (Meade, Solow) Max – Weber, ideal Types, Social action - Bureaucracy, Theory of Social change

UNIT -5: Policy and Prospects

Agriculture, Industrial Trade and Manpower Development Policy Global Inter dependence on future planning - Machineries for coordination and integrated Development. Growth versus Development

TEXT BOOKS:

1. Indian Economy Problems, Polices, land Development by S.Sankaran, Margham Publication, Chennai.

- 2. Adelman, Irma, Theories of Economic Growth and Development, Oxford University Press, London.
- 3. Bawer, P.T. and Yamay B.S. The Economic of Under Developed Countries Cambridge: Cambridge University Press

SUPPLEMENTARY READINGS

- 1. Dewett, K.K and Satish, Wadhawand, Economics of Growth and Development; A critical Study S.Chand and Co, New Delhi.
- 2. Sharma and Sastri. Social Planning: Concepts and Techniques. Luck now; Shastri Rajendra Pande. Sociology of Development. Delhi: Mithal Publication.
- 3. Bhende, Asha A and Tara Kanitkar, Principles of Population Studies. Bombay: Himalaya Publishing House,
- 4. Sankar Rao C.N. Sociology New Delhi: Chand and Company Ltd.,

After completion of the course students will be able to :

CO1: Gain knowledge on the history of India's Social development

CO2: Understand the concept of Under- development and Development

CO3: Discuss the Social policies in development of society

CO4: Apply the theories of development in social change

CO5: Describe the policy and prospectus on future planning

CO/	РО	РО	PÖ	ΡO	PO	PO	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
004																
CO1	✓	_	_	✓	-	_	✓	✓	_	✓	✓	✓	_	_	✓	✓
CO2	✓	-	-	✓	1	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	1	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	1	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-III 19IPOSC36 COMPUTER AND ITS APPLICTION

Credits: 3 Hours:3

The students will be enable to

LO1. Define the devices computers

LO2. Classify the operating system of computers.

LO3. Choose data communication elements

UNIT - 1

Introduction to Computers: History - Generation of Computers - Storage Devices - Primary Storage Devices (RAM, ROM, PROM, EPROM) - Secondary Storage Devices (Floppy Disk, Hard Disk, Optical Disk and Magnetic Tapes) - Input and Output Devices (Keyboard, Mouse, Joystick, Monitor, Printers and Scanners).

UNIT -21

Introduction to Operating System: Types of Operating System (DOS, Windows) – Operating System Features – Booting (Warm and Cold Booting) - Introduction to Software: Software Types (System Software, Application Software) - Computer Languages (Machine Language, Assembly Language and High Level Language) – Computer VIRUS, WORMS and Vaccines.

UNIT - 3

Personal Productivity Software: Introduction to MS-Office - MS-Word - MS-Excel - MS-Power Point - MS-Access.

UNIT - 4

Data Communication: Elements - Computer Network - Types (LAN, MAN and WAN) - Topology - Transmission Media – Guided Medium (Twisted Pair, Coaxial Cable and Fiber Optic Cable) – Wireless Transmission.

UNIT - 5

Introduction to Internet: Browser and Its types -

World Wide Web (WWW) - Internet Service Provider (ISP) - HTTP - Electronic Mail - Introduction to Multimedia - HTML - Creation of Web Pages.

TEXT BOOKS:

- 1. Sanjay Saxena. A First Course in Computers. New Delhi: Vikas Publishing House, 1998.
- 2. Peter Norton. Introduction to Computers. (4th Edition). Delhi: Tata McGraw-Hill, 2001.
- 3. Alexis Leon, Mathew Leon. Fundamentals of Information Technology. New Delhi: Vikas Publishing House, 1999.

SUPPLEMENTARY READINGS:

- 1. V.Rajaraman. Introduction to Information Technology. (2nd Edition). Delhi: PHI., 2013.
- 2. Neil Randall. Teach Yourself the Internet in a Week (2nd Edition). Delhi: PHI., 1996.
- 3. Behrouz A Forouzan. Data Communication and Networking. (2nd Edition). Delhi: PHI.,

After completion of the course students will be able to:

CO1: Acquire the knowledge on history of computers and its devices

CO2: Understanding the operating systems of computer

CO3: Analyse the personal productivity software

CO4: Identify Data communication elements

CO5: Explain the internet introduction

Semester-III

19IPOSC37 POPULATION PSYCHOLOGY

Credits: 3
Hours:3

The students will be enable to

LO1: List out the psychological perspectives on value of children

LO2: Illustrate the theories of motivation **LO3:** Distinguish the theories of learning

UNIT – 1: Children: Psychological Perspective

Psychological perspective on value of children to parents and fertility. Family size and personality development in children. Juvenile delinquency. Role of family in juvenile delinquency and remedial measures

UNIT –2I: Theories of Motivation

Theories of Motivation Maslow's theory, Hull's Drive - Reduction theory, and Theory of Achievement Motivation. Linkage of these theories to fertility and contraceptive behavior.

Mechanism of cognition. Cognitive consonance theory, cognitive dissonance theory and balance theory. Selective perception and it's influence on fertility and contraceptive behavior.

UNIT – 3: Measurement Techniques

Nature and formation of attitudes. Measurement of attitudes: Thurston, Linkert, Bogardus and Guttman scales. Techniques of attitude change and behavioral modification - acceptance of contraception and small family norm

UNIT – 4: Theories of Learning

Theory of connectionism, theory of contiguous conditioning, and theory of operant conditioning. Application of learning theories in contraceptive behavior

UNIT - 5 Leadership

Definition and categories of Leadership. Characteristics of Leaders, functions of leaders. Role of leaders in propagation of ideals of family welfare

TEXT BOOKS:

- 1. *Arnold, F et.al., 1975. The value of children: A cross-national study (Vol.I) Hawaii: East-West Institute, pp. 1-14, 40-98, 130-158.
- 2. David Krech, et.al., 1962. Individual in Society, McGraw-Hill, Kogakusha Ltd., International student edition, pp. 137-172, 422-453.
- 3. *Fawcett., 1973. "Psychological Perspectives on Population". New York: Basic Books, Inc.

SUPPLEMENTARY READINGS

- 1. Festinger, L. 1967. The theory of cognitive dissonance. In: Communication, Madras: Higginbothams (p) Ltd., pp.14-23.
- 2. *Hurlock, Elizebeth, B.1974. personality Development. New Delhi: Tata McGraw-Hill Pub. Pp.351-380.
- 3. *Khan,M.E. et.al., 1979. People's perception about family planning. New Delhi: Operations Research Group.
- 4. *Morris, C., 1973. Psychology: An Introduction. New York: Appleton-Century Crafts, pp.32-354.

After completion of the course students will be able to:

CO1: Explain the psychological perspectives on value of children

CO2: Understand the theories of motivation

CO3: Discuss the measurement techniques

CO4: Describe the theories of learning

CO5: Prepare themselves for leadershiP

(CO/	РО	PO1	PS	PS	PS	PS	PS	PS								

РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	_	-	✓			✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	1	✓	1	1	✓	✓	1	✓	✓	✓	-	-	✓	✓
CO3	>	•	ı	✓	ı	ı	✓	✓	ı	✓	✓	✓	-	•	>	✓
CO4	>	•	ı	✓	ı	ı	✓	✓	ı	✓	✓	✓	•	•	>	✓
CO5	✓	-	ı	√	ı	ı	✓	✓	ı	✓	✓	✓	-	-	✓	✓

IENC-42 PART - II: ENGLISH

IASL 42 - English Through Literature IV: Short Story

Objective:

To develop the communicative competence of learners in the English Language through training them in the skills of listening, speaking, reading and writing

UNIT - 1

O' Henry "After Twenty Years"
 Ernest Hemingway "A Day's Wait"

UNIT - 2

Flora Annie Steel "Valiant Vicky"
 Oscar Wilde "The Selfish Giant"

UNIT-3

1. R. K. Narayan "An Astrologer's Day" 2.ShashiDeshpande "I Want"

UNIT-4

Leo Tolstoy "Where Love is God is"
 Somerset Maugham "The Ant and the Grasshopper"

UNIT -5

Chinua Achebe "Marriage is a Private Affair"
 Bessie Head "Heaven is not closed"

TEXT BOOK:

Selvaraj. A., Dinakaran. P., Madhavan. M., Ganeshram. K., and Shanthi. SP. English Through Literature: Short Story

Semester-IV

19IPOSC43 POPULATION AND ENVIRONMENT

Credits: 4 Hours:4

The students will be enable to

LO1: Recognize the concepts of ecology and eco sytems

LO2: Monitor the environmental crises **LO3**: Generalize the ecological imbalances

UNIT – 1: Ecology and Eco-System

Ecology and Ecosystem; Human Geography and its relevance to Population Studies; Residential and Social Environment: Elements of Social Environment; Patterns of Social contact, Examination of the relationship among these factors. Human Ecology and its relevance to population studies.

UNIT – 2: Population Distribution

Special distribution of population: Importance of the study, measures of density, factors affecting special distribution. Population distribution in India and in the World.

UNIT - 3: Land and Research

Land use: Changing patterns, conservation and management of resources. Policies and programmes for better management.

UNIT – 4: Environmental Degradation

Environmental crisis; Air-pollution, water pollution and Noise pollution depletion of biotic resources, ecological imbalances etc.

UNIT – 5: Population Growth and Ecological imbalance

Global warming, Green house effect, El-nino effect, Soil erosion, Deforestation Desertification, Salinity and water logging. Man's Perception and adjustment to ecological imbalances:

TEXT BOOKS:

- 1. *Demko et.al: 1970. Population Geography: A Reader, New York: McGraw Hill.
- 2. Sharma, R.C., Population Trends, Resources and Environment, Hand Book on Population Education. Delhi: Dhampet Rai & Sons.
- 3. *United Nations, 1983. Population Resources, Environment and development: Proceedings of the expert group on Population and Resources, Environment and development Geneva.

SUPPLEMETNARY READINGS

- 1. Population Reports, Series M, No. 15, Special Topics on Population and Environment: The Global Challenge, Feb. 2001.
- 2. Charles Kendigh, S., Ecology with special reference to Animals and Man (New Delhi: Prentice Hall of India pvt. Limited, 1980)
- 3. *Ehrlich, Paul R., et al. Ecoscience, Population Resources, Environment (San Francisco: W.N Freeman and Company, 1977).
- 4. *Murdock, William, Environmental, Resources, Pollution and Society, (New York: 1974)

After completion of the course students will be able to :

CO1: Understand the ecology and eco-system. **CO2** Demonstrate the knowledge of population distribution.

CO3: Cultivate the appreciation of uses of the Environment.

CO4: Recognize the environmental crisis

CO5: Acquire enhanced awareness about ecological imbalance.

CO/	РО	РО	РО	РО	РО	РО	РО	PO	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6
CO1	✓	_	-	✓	_		✓	✓	_	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	√	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	1	✓	-	ı	✓	✓	-	✓	✓	✓	ı	•	✓	✓

Semester-IV

19IPOSC44 HEALTH EDUCATION AND NUTIRITION Credits: 4

Hours:4

LO1: Recognize the importance Public Health LO2: Classify the nutritional requirements

LO3: Organize the health educational programmes

UNIT 1

Public Health

Concepts, Definition, Importance of Public Health; personal hygiene; Various health aspects: curative. Promotive and Preventive: Indicators of Health.

UNIT -2

Environment and Health

Sanitation, Water Supply and Public Hygiene: Household, Community, Industrial; Occupational Health Hazards - physical, Chemical, Biological, Mechanical and Psycho-social.

UNIT -3

Nutrition

Food and its classification; concept of nutrition, process, Concepts, Nutritients, Functions and Sources; Balanced Diet; Nutritional requirements of special groups, pregnant and lactating women and Infant and children

UNIT -4

Malnutrition

Factors, Nutritional Deficiency Diseases; Recommended Nutrition Standards: Supplementary Nutritional Programs: Applied Nutrition Programmes; Nutritional feeding Programmes etc.

UNIT - 5

Health Education

Health Education: Concepts, definitions, objectives, scope, principles and contents; Health Education Methods; Role of Health Educator; Development of Health Education Programmes; Evaluation of Health Education Programmes; Agencies involved in the Health Education.

TEXT BOOKS:

- 1. *R.P Devadas, Nutrition in Tamil Nadu, (Madras: Sangam Publishers, 1972)
- 2. *S.Davidson, R.Passmore and J.F Brode Truswel, Human Nutrition and Dietetics (Livingston: The English Language Book Society and Churchill, 1975)
- 3. C.Gopalan, S.C Balasubramanian and B.V Ramasastri, Diet Atlas of India (New Delhi: ICMR 1972)

SUPPLEMENTARY READINGS

- 1. C.Gopalan, B.V Ramasastri and S.C Balasubramanian, The Nutrition Value of Indian Foods (New Delhi: ICMR 1978)
- 2. C,Gopalan and K,Vijayaragavan, Nutrition Atlas of India (New Delhi: 1971)
- 3. *R.Gosh, A Treatise on Hygiene and Public Health (Calcutta: Scientific Publishing Company Inc. 1950)

- 4. M.Swaminathan, Essentials of Nutrition Vol. I and II (Madras: The Ganesh and Co., 1974)
- 5. *J.E Park and K.park, Preventive and Social Medicine (India: Bannersidas Bhanot and Company Limited, 1976)
- 6. P.S Venkatachalam and L.M Revello, Nutrition for Mother and Child, Special Report Series No.40 Nutrition Research Laboratories, 1962)

After completion of the course students will be able to :

- **CO2**. Understand the hygienic practices.
- **CO3**. Provide an overview about nutrition.
- CO4. Recognize the various nutrition programs.
- **CO5**. Demonstrate the knowledge of health education

РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
✓			✓	_		✓	✓		√	✓	✓			✓	✓
√	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	√
✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
✓	1	1	√	-	1	√	✓	1	✓	√	✓	1	1	√	√
	1	1 2 · · · · · · · · · · · · · · · · · ·	1 2 3 · · · · · · · · · · · · · · · · · ·	1 2 3 4	1 2 3 4 5	1 2 3 4 5 6	1 2 3 4 5 6 7 V	1 2 3 4 5 6 7 8 \(\) - - \(\) \(\) \(\) \(\) \(\) \(\) - - \(\) \(\) \(\) \(\) - - \(\) \(\) \(\)	1 2 3 4 5 6 7 8 9 Image: Section of the content of t	1 2 3 4 5 6 7 8 9 0 V - - V V - V V - - V V - V V - - V V - V	1 2 3 4 5 6 7 8 9 0 01 V - - V V - V V V - - V V - V V V - - V V - V V	1 2 3 4 5 6 7 8 9 0 01 02 V - - V V - V V V V - - V V - V V V - - V V - V V	1 2 3 4 5 6 7 8 9 0 01 02 03 V - - V V - V V V - V - - V V - V V - V - - V V - V V -	1 2 3 4 5 6 7 8 9 0 01 02 03 04 ✓ - - ✓ ✓ - ✓ ✓ ✓ ✓ ✓ - - ✓ - - ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ - - ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	1 2 3 4 5 6 7 8 9 0 01 02 03 04 05 V - - V V - V V V V V - - V V - - V V - V V V V V - V

Semester-IV

91IPOSC45 POPULATION AND DVELOPEMNT PLANNING Credits: 4
Hours:4

- **LO1**. Recognize the economic development
- **LO2** Explain the consequences of population growth on national income
- **LO3**. Identify the different types planning for socio-economic development.

UNIT - 1

Basic Concepts in Development

Concept and indicators of social and economic development, classical and Harrod-Domar model of economic growth. Approaches to development; changing concept - emphasis on distributive aspects, Social aspects, Physical Quality of life Index (PQLI), PQLI, Human Development Index modernization proces.

UNIT - 2

Population and Development

Consequences of population growth on national and per capita income, Income distribution, Capital formation, Rate of savings and investment, Allocation of resources, size of the labour force, Industrialization, Malthusian and Boserupian perspectives; Demographic behaviour in the context of socio-economic change.

UNIT - 3

Development Planning and Population

Concept of planning, Approaches, Choice of a suitable strategy, Population planning as an integral part of overall development planning, Demographic considerations in planning for different sectors.

UNIT - 4

Planning for Food and Housing

Population and Food security; Food requirements and production, supply and distribution, poverty and malnutrition; agricultural development;

UNIT -5

Planning for Other Aspects of Development in India

Planning for education, employment and manpower, rural development, urbanization, environmental and other aspects.

TEXT BOOKS:

- 1. *Ansley J.Coale and E.M Hoover, Population and Economic Development in Low-income Countries (New Jersey: Princeton University Press, 1958)
- 2. Asha A. Bhenda and Tara Kanitkar, Principles of Population Studies, (Bombay: Himalaya Publishing House, 2000)
- 3. *Charles P.Kindilberger and Bruce Herrice, Economic Development (London: Mc Graw Hill Ltd., 1977)

SUPPLEMENTARY READINGS

- 1. C.H Hanumantha Rao and P.C Joshi, Reflection on Economic Development and Social Change (New Delhi: Allied Publishers pvt. Ltd. 1980)
- 2. Higgins, Benjamin, Economic Developemnt (Delhi: UBS, 1976)
- 3. Hultman et. al (eds.) Problems of Economic Development (Boston: HeaLth and Co., 1968)

- 4. *P.D Malgarkar and V.A Panandikar, Population and Development (Bombay: Somaiya Publication Pvt, Ltd., 1982)
- 5. S.ManZoor Alane and G.Ram Reddy, Socio-Economic Development Problems in South East Asia (Bombay: Popular Prakashan, 1978)
- 6. Marcus F. Fraud (ed.), Responses to Population Growth in India, Change in Social, Political and Economic Behaviour (New York: Praeger Publishers 1975)
- 7. K.N.Prasad, Problems of Indian Economic Development National and Regional Dimensions (New Delhi:Sterling Publishers Private Limited, 1983)
- 8. Rudder Dutt and K.P.M Sundaram, Indian Economics (new Delhi: Sultan Chand and Co., (P) Ltd., 1982)
- 9. M.L Seth, Principles of Economics (Agra: Lakshmi Narai Agarwal, 1982)
- 10. N.Sydeny Coontz, Population Theories and Economic Interpretations (London: Rouledge: Kega Padul, 1968)
- 11. United Nations, The Determinants and Consequences of Population Trends (New York: Department of Economic and Social Affairs, 1975)
- 12. *Yves Bizien, Population and Economic Development (New York: Prager Publishers, 1973)
- 13. World Development Reports

After completion of the course students will be able to:

- **CO1**. Acquire knowledge on basic concepts and development
- CO2 Describe the consequences of population growth on national income
- **CO3**. Recognize the different types planning.
- **CO 4**.Explore Population growth with food production and supply
- **CO5**. Enlighten the planning for Socio-Economic development

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	O3	04	O5	O6
CO1	✓		1	✓		1	✓	✓		✓	✓	✓			✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-IV 91IPOSC46 EVALUATION AND ADJUSTMENT OF POPULATION DATA Credits: 4
Hours:4

LO1. Recognize the evaluation of demographic data

LO2. Recall the factors of completeness in statistical registration.

LO3. Generalize the graduation of demographic data

UNIT - 1

Evaluation of data

Errors of coverage content, general methods for detecting errors comparison of individual data, re-enumeration survey.

Consistency of totals at successive censuses: Analyzing the rate of change between two censuses, comparing rates of change during the interval between three or more censuses.

UNIT - 2

Factors Affecting Completeness of Census

Consistency of census totals with vital statistics and migration statistics. Balancing equation: definition and limitations - use of the balancing equation.

UNIT - 3

Factors Affecting Completeness of Birth and Death Registration

Appraisal of birth and death statistics balancing equation. Direct checks on completeness of vital statistics registration - Chandrasekar and Deming formula.

UNIT - 4

Evaluation and Measurement of Errors in Age Reporting

Whipple's index, Myer's index and United Nations age accuracy index. Uses and limitations.

UNIT - 5

Adjustment and Gradation of Data

Interpolation - Method of adjustment - curve fitting, interpolation: Linear Interpolation; Newton's Formulas.

Graduation of age and sex data, Methods of Graduation: Graphic Method, Moving average method and mathematical methods.

TEXT BOOKS:

- 1. *Bhende Asha, A. and Tara kanitkar, 2000. Principles of Population Studies, Mumbai: Himalaya Publishing House.
- 2. ESCAP, 1982, Population of India, Country Monograph Series No. 10, New York: United Nations, pp 379-413.
- 3. *Prakasam, C.P., G. Rama Rao and R.B. Upadhyay, 1987, Basic Mathematics in Population Studies, Mumbai: Gemini Publishers. Chapter VI, VIII, IX.

SUPPLEMENTARY READINGS

- 1. Pathak, K.B and F.Ram, 1992. Techniques of Demographic Analysis, Mumbai: Himalaya Publishing House.
- 2. Registrar General of India, 1997 Civil Registration System in India.
- 3. Registrar General of India, 1998. Sample Registration System, Statistical Report.

- 4. Registrar General of India, 1999. Registration of Births and Deaths in India.
- 5. *Shryock Henry S., Jacob S. Siegel and Associates, 1980. The methods and Materials of Demograpohy, Vol I & II, Washington, D.C:U.S. Bureau of the Census.
- 6. *Srinivasan, K. 1998. Basic Demographic Techniques and Applications, New Delhi: Sage Publications India Pvt. Ltd.
- 7. United Nations, Manual II, 1955. Methods of Appraisal of Quality of basic data for population estimates, ST/SOPA/Series, A/23, New York. Chapter I to III.
- 8. United Nations, 1998. Handbook on Civil Registration and Vital Statistics Systems, Management, Operation and Maintenance, New York.
- 9. *United Nations Population Fund, 1993, Reading in Population Research Methodology, Vol I, Basic Tools, Illinois, USA: Social Development Centre.

After completion of the course students will be able to :

- CO1. Acquire knowledge on evaluation of demographic data
- CO2.understanfd the factors affecting completes of census data
- **CO3**. Acquaint to learn the completeness of statistical registration
- **CO4**. Assess the measurement of errors in age reporting.
- **CO5**. Interpret the adjustment and graduation of data

CO/	РО	РО	РО	PO	РО	PO	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O 6
CO1	✓	-	_	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	√	√	-	✓	√	√	-	-	✓	√
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-IV 19IPOSA47 DIMENSION OF RURAL DEVELOPMENT

Credits: 3 Hours:3

LO1: Recognize the history of Rural development and planning **LO2:** Demonstrate the Principles of rural development planning

LO3: Select the concept of PRA in ruraldeveloepemnt

UNIT -1

Rural Development - Conceptual framework, objectives and scope - Evolution of rural development in India - Brief review of pre and post independent attempts towards rural development and its overall impact. Limitations of rural development efforts in India.

UNIT - 2

Poverty in India - Concept and dimensions of poverty - causes and consequences of poverty - Gender and poverty - constrains in poverty alleviation. Poverty alleviation measures

pursued in India (a brief review of development programmes is expected). Now economic reforms and it's impact on rural development.

UNIT - 3

Rural Development planning - Concept and dimensions - dynamics of panning and development in India. Decentralised planning and its relevance - principles and methodology of multi-level planning. Five Year plans and rural development.

UNIT - 4

Empowerment of rural poor - Concept and dimensions of empowerment -Sources of dismpowerment and need for empowering rural poor - approaches and constraints in empowerment of rural people.

UNIT - 5

Participatory development - Concept and meaning of peoples participation - need for participation development - methods and techniques of peoples participation. Participatory Rural Appraisal (PRA) - Concepts and relevance of PRA - relevance of PRA in rural development.

TEXT BOOKS:

- 1. *Satyasundaram I (1997): Rural Development, Himalaya Publishing House, New Delhi.
- 2. Katat Singh (1986): Rural Development Principles, policies and Management, SAGE Publications, New Delhi.
- 3. *Vankata Reddy.K (1992): Rural Development in India Poverty and Development, Himalaya Publishing House, New Delhi.

SUPPLEEMNTARY READINGS

- 1. Maheswari. S (1985): Rural Development in India A Public Policy Approach, SAGE Publications, New Delhi.
- 2. Kanchan Chopra, Gopal K., Kade Kodi & Murty.M.N. (1990): Participatory Development, SAGE Publications, New Delhi.
- 3. Hoshiar Sing (1995): Administration of Rural Development in India, Sterling Publishers Private Ltd., New Delhi.
- 4. Madhuri Sinha (1993): Poverty, Planning and Social Transformation, Deep & Deep Publications, New Delhi.

- 5. Sam Bob.B (1998): Participation of the poor in Rural Development Programmes (Selected case Studies), Discovery Publishing House, New Delhi.
- 6. *Rahul Mudgal (1996): Economic Dimensions of Rural Development, Sarup & Sons, New Delhi.
- 7. *Mathur. B.L. (1996): Rural Development and Cooperation, RBSA Publishers, Jaipur.
- 8. Aamarenra (1998): poverty, Rural Development and Public Policy, Deep & Deep Publications, New Delhi.
- 9. Nagpal C.S. & Mittal A.C (1993) Rural Development, Anmol Publications Pvt., Ltd., New Delhi.
- 10. *Arun Ghosh (1992) Planning in India, SAGE Publications, New Delhi.
- 11. Laxmidevi (1997): Planning for Employment and Rural Development, Anmol Publications Pvt., Ltd., New Delhi.
- 12. *Kailpada Deb (1997): The challenge of Rural Development, M.D. Publications Pvt., Ltd.,, New Delhi.
- 13. Sundaram. K.V (1999): Decentralised Multilevel, Concept Publishing Company, SNew Delhi.

After completion of the course students will be able to:

CO1: Describe the history of Rural development and its impact

CO2: Recognize poverty and its impact in rural India

CO3: Explain the principles of rural development planning.

CO4: Analyse the empowerment of rural masses

CO5: Discuss the concept PRA in rural development.

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6
CO1	✓	-	-	✓	_	-	✓	✓	_	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	√	✓
CO4	✓	-	-	√	-	-	√	✓	-	✓	√	✓	-	-	√	✓
CO5	✓	•	1	√	-	ı	√	✓	ı	✓	√	✓	-	•	√	✓

Semester-V

91POSC51 POPULATION GEOGRAPHY

Credits: 4 Hours:4

LO1: Describe the importance of geographical approaches

LO2: classification of physical divisions of India

LO3: Outline the concept of Social space

UNIT-1

Importance of Geographical factors- Physical factors (relief, rainfall, temperature, soil and vegetation) Economic and Social factors (Mineral resources and industrialization, transport, language, religion and caste/tribe); the influence of geographical factors on population.

UNIT-2

Geographical approaches: the concept of region- formal and functional regions; the concept of growth pole and regional development; core and periphery; distance and decay function; Maps- scale, choropleth, isopleths and distribution maps.

UNIT-3

Physical divisions of India; administrative organization of India. Historic-Cultural regions; Agro-climatic regions; NSS regions.

UNIT-4

Theoretical Perspectives in Geography- Place of geography in Social sciences; man and nature relationship- determinism and possibilism; Positivism (quantification) and Phenomenology; and Radical and Postmodern Geography.

UNIT-5

Concept of Social Space; Social Structure and Spatial Structure; Role of time and space in social sciences.

TEXT BOOKS:

- 1. Abler, R, Adams, J and Gould P., (1971): Spatial Organization: The Geographer's view of the World, Prentice Hall, New Jersey.
- 2. Johnston, R.J., (2004): Geography and Geographers, Oxford Unity Press.
- 3. Richard, Peet., (1998): Modern Geographic Thought, Blackwall Publishers

SUPPLEMENTARY READINGS

- Singh, R.L., (1971) India: A Regional Geography, National Geographical Society of India, Varanasi.
- 2. Francis John Monkhouse (1956) Maps and Diagrams: Their Compilation and Construction, University of Michigan.

3. JF Friedman (1966) Regional Development Policy: A Case Study of Venezuela, Cambridge, Massachusetts: MIT Press, 1966.

After completion of the course students will be able to :

CO1: Understand the importance of Geographical factors **CO2:** Critically analyse the geographical approaches

CO3: Recognize the Physical division of India

CO4: Discuss the theoretical perspectives in geography

CO5: Relate the concept of social space

CO/	РО	РО	РО	РО	PO	РО	PÔ	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6
CO1	✓	-	-	✓	_	-	✓	✓	_	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-V 91POSC52 POPULATION ESTIMATES AND PROJECTIONS Credits: 4
Hours:4

growth and measurement

LO2: Estimate the population growth

LO3: Interpret the linkage of ratio method and specific projections

UNIT - 1

Population Growth, Measurement

Dynamics of Population Growth: Balancing equation, Population growth Rate; Linear, Geometric and Exponential; Doubling time, Location of events in time; Lexis diagram and its uses.

UNIT - 2

Population Estimates

Nature, uses, types, methods of estimates; Model Life Table Technique, Stable Population Models and Methods based on data from censuses and surveys.

UNIT - 3

Mathematical Method

Assumptions, types; Linear, Geometric and Exponential, Modified exponential, Logistic curve, Gompertz law.

UNIT - 4

Component Method

Assumptions, Projections of Fertility, Mortality and Migration;

UNIT - 5

Ratio Method & Specific Projections

Ratio Method; Assumptions and importance specific projections: school going population projection of working age population and other socio-economic characteristics; Evaluation of projections.

TEXT BOOKS:

- 1. Asha A Bhenda and Tara K.Kanitkar, Principles of Population Studies, (Bombay: Himalaya Publishing House, 1985)
- 2. *Bogue, Donald J., Principles of Demography, (New York; John Wiley and sons, 1969)
- 3. Davis, Kingsley, The Population of India and Pakistan (Princeton: Princeton University Pres, 1968).

SUPPLEMENTARY READINGS

- 1. Paterson, William, Population (new York; Macmillan, 1968).
- 2. *Srinivasan, K., Basic Demographic Techniques and Applications (New Delhi: Sage Publication, 1998)
- 3. Srivastava S.C. Indian Census in Perspective Census Centenary Monograph (New Delhi; government of India, 1971)

- 4. *Shryock, Henry et al. The Methods and Materials Of Demography (Washington; Bureau of census, 1971) Vol.I and II.
- 5. Thompson, Warren and Lewis, David, Population Problems (New York; McGraw Hill Book Co., 1965).
- 6. *United Nations, The Determinants and Consequences of Population Trends (New York; department of Economics and Social affairs, 1978).
- 7. -----, Methods of Appraisal of Quality of Basic data for Population Estimates, ST./SOA/Series A /23 manual II.
- 8. -----, Statistical Year Books (Various years).
- 9. -----, Demographic Year Books (Various years).
- 10. United Nations, Statistical Office, Handbook of Vital statistical Methods, Studies in Methods, series F.No.7 NY, 1955.
- 11. -----, Handbook of Population Census Methods Vol.1 General Aspects of a Population Census, Studies in method Series F.No.5 NY, 1958.

After completion of the course students will be able to :

- **CO1:** Demonstrate the knowledge of population growth and measurement
- CO2: Describe Population estimates
- **CO3:** Explain the mathematical methods
- **CO4:** Identify Component Method for population projection
- **CO5:** Comprehend the linkages of Ratio method and specific projections

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6
CO1	✓	-	_	✓	_	-	✓	✓	_	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-V 91IPOSC53 POPULATION THEORIES

Credits: 5
Hours:

LO1: Recognize the theories related to population

LO2: Explain the socio-economic theories

LO3: summaries the modern theories

UNIT - 1

Pre-Malthusian and Ancient Thought on Population

Ancient thought on Population issues; Confucius and other Chinese Writers, Greek thought, Indian and Roman thought; Religion and Population issues; Pre-Malthusian views: Mercantilists, Physiocrats and others.

UNIT - 2

Malthusian and Neo-Classical Population Theories

Malthusian theory and criticism and relevance; The Neo-classical school and the Population issue; Marxian views on population issues; Biological Theories: Sadler's theory; Donbleday's Diet Theory, Carrodo Gini's Theory, Herbert Spencer's theory; Castro's theory of protein consumption.

UNIT - 3

Socioeconomic Theories

Social capillarity theory; theory of change and Response, theory of diffusion or cultural lag, Optimum theory, Threshold hypothesis, Logistic Curve.

UNIT - 4

Modern Theories - I

Theory of demographic Transition - critical evaluation and applicability; Leibenstein's critical minimum effort thesis; Lewis theory and Coale and Hoover Models.

UNIT - 5

Modern Theories – II

Becker's theory, Ronald Freedman conceptual models, Caldwell's model on fertility.

TEXT BOOKS:

- 1. *Asha A.Bhende and Tara kanitkar, Principles of Population Studies (Bombay: Himalaya Publishing House, 2000)
- 2. *8Bernard Berelson, (ed) Population policy in developed Countries (New York: McGraw Hill Book Co., 1974.
- 3. ----- Family Planning and Population Programmes (Chicago: Chicago University Press, 1969)

SUPPLEMENTARY READINGS

- 1. Chandrasekhar, S., Infant Mortality, Population Growth and Family Planning in India (London: George Allen and Unwin 1972).
- 2. India's Population Policy Reports 1976, 1977 and 1993.
- 3. *Khan, M.E., C,V.S prasad and Ashok majimdar, People's Perception about Family Planning in India; (New Delhi: concept Publishing company, 1980)
- 4. Nafis Sadik et al. Population control (Islamabad: Pakistan Family Planning council, 1959)
- 5. Rele, J.R. and Tara Kanitkar, Fertility and Family Planning in Greater Bombay (Bombay; Popular Prakashan 1982)
- 6. *Srinivasan, K.and others, Evaluation of Family Planning Orientation on Camps (Bombay: International Institute for Population Studies, 1982)
- 7. *United Nations, The Determinants and consequences of Population Trends (New York: Department of Economic and Social Affairs 1972)
- 8. Vatsala narain and C.P.Prakasm Population Policy Perspectives in Developing countries (BombayL: Himalaya Publishing House, 1983)

After completion of the course students will be able to:

CO1: Understand the Pre-Malthusian and ancient thought on population

CO2: Demonstrate Malthusian and Neo-Classical theories.

CO3: Understand the Socio-economic theories

CO4: Explore the theory of Demographic Transition

CO5: Enlighten modern theories

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CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
PO	1	2	3	4	5	6	7	8	9	0	01	02	О3	04	O5	06
CO1	1			1			1	1		✓	1	√			√	1
		-	-		-	-		·	-		-	-	-	•	-	-
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-		✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	_	✓	✓	✓	_	-	✓	✓
																l

CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	•	-	✓	✓

Semester-V 91IPOSC54 BASIC STATISTICAL METHODS

Credits: 4 Hours:4

LO1: Recognize the theories related to population

LO2: Explain the socio-economic theories

LO3: Summaries the modern theories

UNIT –1: Introduction Diagrammatic Representation

Introduction to statistics: Descriptive and Inductive statistics. Concept of variables, Nominal, Ordinal and Interval scale variables.

Tabulation of data, conversion of raw data into frequency distribution, graphical presentation of nominal, ordinal data.

UNIT - 2: Descriptive Statistics

Measures of Central Tendency: Mean (arithmetic, geometric, harmonic) Median, Mode; Merits and demerits of different measures.

Measures of dispersion: Range, Variance, Standard Deviation; Merits and demerits of different measures of dispersion. Measures of Skewness and Kurtosis.

Techniques of analyzing bivariate nominal and ordinal level data: Contingency table, odds ratios; partial odds.

UNIT- 3: Probability and Distribution

Introduction to set theory, Introduction to the concept of probability, A-priory, and mathematical probability. Events: exhaustive, mutually exclusive events; Laws of probability, additive and multiplicative laws of probability.

Discrete probability distributions: Binomial probability distribution and Poisson distribution and their properties. Continuous probability distribution; Introduction to Normal distribution and its properties, applications of normal distribution.

UNIT- 4: Sampling and Test of Significance

Concepts in Inductive statistics: Population, sample parameter, and statistic. Sampling distribution of mean and standard error. Concepts of statistical hypothesis, critical region, level of significance, and two types of errors.

Testing statistical hypothesis and test of significance. Testing the difference of means and proportions: t-test for small samples and tests based on normal distribution for large samples. Testing the association of attributes and Chi-square goodness of fit.

UNIT - 5: Analysis of variance, Correlation and Regression

Analysis of Variance and Covariance.

Introduction to the concept of correlation: Pearson correlation coefficient, and its properties; Spearman ranks correlation coefficient. Concept of linear regression, fitting of regression line to bi-variate data.

Introduction to Multivariate Analysis. Concept of multi-variate regression. Multiple and Partial correlation coefficients.

TEXT BOOKS:

1. Blalock, Hubert M. (1960): Social Statistics, McGraw-Hill Book Company, New York.

- 2. Dillon, W.R. and Goldstein, M. (1984): Multivariate Analysis, John Willey and Sons, New York.
- 3. Douglas and Altman (2006): Practical Statistics for Medical Research, Chapman and Hall Publication, Washington, D.C.

SUPPLEMENTARY READINGS

- 1. Ebdon, E. (1978): Statistics in Geography, Basil Blackwel, Oxford.
- 2. Goon, A.M., Gupta, M.K. and Dasgupta, B. (1985): Fundamental of Statistics Vol. I, The World Press Private Ltd. Calcutta.
- 3. Graeme Hutcheson and Nick Sofroniou, (1999): The Multivariate for Social Scientist, SAGE Publications.
- 4. Gupta, S.C. and Kapoor, V.K. (1986): Fundamental of Mathematical Statistics, Sultan Chand and Sons Publishers, Delhi.
- 5. Howell David C. "Fundamental Statistics for the Behavioral Sciences", 4th Edition, an International Thosuross Publishing Company, USA.
- 6. Mc Clave, James T., P. George Benson and Terry Sincich (2001): Statistics for Business and Economic, Eighth Edition, Prentice Hall, NJ, USA.
- 7. Norman R. Kurtz (1999): Statistical Analysis for the Social Sciences, Allyn and Bacon.
- 8. Retherford, R.D. and Choe, M. K., (1993): Statistical Models for Casual Analysis, A Wiley-Inter-Science Publications, John Wiley and Sons, INC, New York.

After completion of the course students will be able to:

CO1: Explain the introduction to Statistics

CO2: Understand to compute the measures of Central tendency and Dispersion

CO3: Find out the relevance of probability and distribution

CO4: Classify sampling and Test of significance

CO5: Work out analysis of variance, Correlation and Regression

CO/	РО	РО	PÓ	РО	РО	PO	РО	РО	PO	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	О6
CO1	✓	_	_	✓			✓	√	-	√	√	✓	_	_	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	√	-	-	√	✓	-	✓	✓	✓	-	-	√	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-V 91IPOSC55 POPULATION EDUCATION AND COMMUNICATION

Credits: 4 Hours:4

LO1: Describe the communication approaches

LO2: Recognize the knowledge on population education

LO3: Develop the Population education extension programmes

UNIT – 1: Communications

Meaning, Basic elements in communication process, Problems of communication, channels, Types, merits and limitations.

UNIT – 2: Communication Approaches

Information transmission approach, Persuasion approach and dialogue, Diffusion model of innovations: Adoption process, stages, criticism; Innovation: Decision, meaning, stages, role of mass media, peer groups and opinion leaders; Adopters of innovation: categories and their characteristics.

UNIT – 3: Communication and Social Changes

Barriers of communication in family planning. Husband -Wife communication in family planning - Factors influencing - demographic souci-economic, cultural, familial and psychological

UNIT – 4: Population Education

Meaning, Concept, Definition Scope and need for Population Education. Components of Population Education: Population Dynamics, Family life Education and reproductive biology, Health Education and Nutrition Education.

UNIT – 5: Extension Programme

Meaning, definition, objectives, scope and its organization: Selection of content and strategies and Training. Role of different Agencies in Population Education.

TEXT BOOKS:

- 1. Park, J.E. and K. Park, Preventive and Social Medicine (New Delhi: Bannersidas Bhanot and Company Ltd., 1976)
- 2. Bernard Berelson, Beyond Family Planning (New York: Population Council, 1969)
- 3. *Bogue Doanld J., Mass Communication and Motivation for Birth Control (Chicago: University of Chicago, 1969)

SUPPLEMENTARY READINGS

- 1. Bogue Doanld J., Principles of Demography, (New York: John Wiley & sons, 1969)
- 2. Dubey and Devgn, Family Planning Communication Studies in India (New Delhi: C.I.P.F., 1969)
- 3. *F.P.A.I. Population Education for the Younger Generation, Report of the Proceedings of the Seventh All India Conference of the F.P.A.I. at Mandal, 1979.
- 4. *John, Wider et al., Information, Education and Communication for Population and Family Planning: A Guide for National Action

- 5. Kline, David and David Harman, Issues in Population Education, (Lexington: Health & Co., 1976)
- 6. *Sohanlal Nagda et al., (eds.) Handbook on Population education, (Triapti: S.V. University, 1975)
- 7. *Srinivasan Rao (ed), Handbook on Population Education, (Tripati: S.V.University,1971)
- 8. United Nations, The Determinants and Consequences of Population Trends (New York: Department of Economic and Social Affairs, 1975).

After completion of the course students will be able to :

CO1: Acquire the knowledge of elements in communication process

CO2: Understand the various communication approaches

CO3: Describe the communication and social changes

CO4: Acquire the knowledge of Population education

CO5: Understand the importance of Population Education in extension programmes.

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	О6
CO1	✓	-	-	✓	-		✓	✓	-	✓	✓	✓	-		✓	✓
CO2	√	-	ı	✓	-	ı	✓	√	ı	✓	✓	✓	-	ı	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	•	✓	-	•	✓	✓	•	✓	✓	✓	-	•	✓	✓
CO5	✓	-	•	✓	-	•	✓	✓	•	✓	✓	✓	-	•	✓	✓

Semester-V 91IPOSC56 PRACTICAL I Credits:4 Hours:4 **LO1:** Outline the skill of computing the rate of the components of population change and family planning

FERTILITY

- 1. Crude Birth Rate
- 2. Age Specific Birth Rate
- 3. Gross Reproduction Rate
- 4. Net Reproduction Rate
- 5. Child-woman Ratio
- 6. Sex-age adjusted birth rate
- 7. Standardized birth rate and General Fertility Rate

NUPTIALITY

- 8. Singulate mean age at marriage
- 9. Age at Divorce, Separation & Remarriage
- 10. Age at Widowhood

MORTALITY

- 11. Crude Birth Rate & Age Specific Death Rate
- 12. Standardized Death Rate
- 13. Life Table: Complete Life Table & Abridged Life Table
- 14. Infant Mortality Rate: Conventional method & Cohort method

MIGRATION

- 15. In-migration and out migration rate
- 16. Gross migration and Net migration rate
- 17. Forward survival ratio method
- 18. Reversel survival ratio method

FAMILY PLANNING

- 19. Acceptance rate
- 20. Couple Protection Rate (couple currently protected & couple effectively protected)

After completion of the course students will be able to :

CO1: Acquire the knowledge of elements in communication process

CO2: Understand the various communication approaches

CO3: Describe the communication and social changes

CO4: Acquire the knowledge of Population education **CO5:** Understand the importance of Population Education in extension programmes.

CO/	РО	РО	РО	PO	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	√
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-VI

91IPOS61 STATISTICAL APPLICATIONS

Credits: 4 Hours:4

LO1: Describe the software and its related advantages to demography.

LO2: Classify the large scale data with SPSS-facilities

LO3: Evaluate the Survey analysis and demonstrate basic functions of GIS.

UNIT 1

Basics of MORTPAK4, SPECTRUM and applications.

UNIT 2

Introduction to SPSS-facilities, creating database structure, data entry, specifying scales, validation of data entry, importing and exporting data. Data Manipulation – recoding creating new variable, sorting, filtering and selection of specific data, generating simple frequencies, use of syntax editor. Large scale data handling – (using NFHS, DLHS-RCH, NSSO) Merging, splitting data and formatting.

UNIT 3

Correlation and regression analysis – interpretation and regression diagnostic test. Multivariate analysis – concepts and interpretation of results of multiple regression, logistic regression, ANOVA, MCA with and without interaction. Survival analysis-cox regression test of proportionality and heterogeneity.

UNIT 4

Introduction to STATA, generating, variables, commands and do file editor. Survey analysis – estimation of mean, proportion, design effect and probit analysis and standard non-parametric test.

UNIT 5

Concept of data hierarchy and multilevel analysis. Introduction to MLwiN, importing and formatting data. Illustration of 2 and 3 level analysis using NFHS, DLHS-RCH, NSSO data. Introduction to GIS and illustration.

TEXT BOOKS:

- 1. SPSS 14.0 Brief Guide SPSS Inc.
- 2. SPSS regression models 11.0 SPSS Inc.
- 3. SPSS advanced models 11.0 SPSS Inc.

SUPPLWEMNTARYR EADINGS

- a. Stata programming reference manual: Release 8., 2nd Edition. Stata Press.
- 2. Stata survey data reference manual: Release 8., 2nd Edition, Stata Press.
- 3. Snijders, Tom A.B. and Bosker, Roel J., (1999): Multilevel analysis: An introduction to basic and advanced multilevel modeling. Sage Publications.
- 4. Cromley, Ellen K. and McLafferty, Sara L., (2002): GIS and public health. Guilford Press, New York.

After completion of the course students will be able to:

CO1: Acquire the knowledge of software and its related advantages to demography.

CO2: Demonstrate to apply the large scale data with SPSS-facilities

CO3: Interpretate the results through Correlation and regression analysis.CO4: Understand the Survey analysisCO5: Demonstrate basic functions of GIS and illustration.

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6
CO1	✓	-	_	✓	_	-	✓	✓	_	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	1	-	✓	-	1	√	✓	-	✓	✓	✓	ı	1	✓	✓

Semester VI

91IPOPC62 REPRODUCTIVE AND CHILD HEALTH

Credits: 4 Hours: 4

LO1: Recognize about human reproduction and reproductive health.

LO2:Explain the gynecological problems.

LO3: Outline the Sexual Transmitted Diseases and health programmes.

UNIT-1

Anatomy and Physiology of Human Reproduction, Mechanism of conception and pregnancy.

The Concept, Evolution (ICPD conference) and the components of Reproductive Health. Reproductive Health Rights. Social and cultural determinants of Reproductive Health. Reproductive Morbidity.

UNIT- 2

Gynecological problems - Menstrual, Reproductive Tract Infections (RTI). Obstetrical problems -Pregnancy complications, delivery complications, post-natal problems. Male Reproductive Health Problems.

UNIT-3

Sexual Behavior, Homosexuality, Extramarital sex, Adolescent Sexuality, Eunch, Blood Transfusions.

Sexually Transmitted Diseases (STD) and HIV / AIDS -Prevalence rate, Medical and Social aspects. Commercial sex workers and other vulnerable groups. Interventions by Governmental, Non-governmental organizations.

UNIT-4

Reproductive Health Programme Management: Assessment of community needs , Health seeking behavior.

Special groups -Focus on Reproductive Health of Women with special reference to Commercial Sex Workers, Truck drivers, Jail in-mates and street children. Policy issues and quality of care.

UNIT-5

RCH Programmes in India:

Research Studies on Reproductive Health.

TEXT BOOKS:

- 1. *Mahadevan, K. et.al., 1998. Reproductive Health, AIDS Prevention and Development of Women, Delhi: B.P
- 2. Padbidri V.G and S.N. Daftary, 1999. Shaw's Text Book of Gynaecology. New Delhi: B.I.Churchill Livingstone pp.33-45, 214-239, 351-360.
- 3. *Krishna Menon, M.K. and B.Palaniappan 1988. Clinical Obstetrics. Chennai: Orient Longman, pp.8-23, 127-192.

SUPPLEMENTARYR EADINGS

1. United Nations, 1975. Chapter 16 Human Reproductive Student's Study Guide on Biology of Population, New York: United Nations, pp.357-359.

After completion of the course students will be able to:

CO1:Acquire the knowledge about human reproduction and reproductive health.

CO2:Understant the gynecological problems.

CO3:Identify the Sexual Transmitted Diseases.

CO4:Understand the reproductive

health programmes and management.

CO5: Demonstrate RCH programmes and research studies.

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6
CO1	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-VI 91IPOSC63 DEMOGRAPHIC MODELS

Credits: 5
Hours: 5

The students will be enable to

LO1. Recognize the Life-table and its types.

LO2. Analyse the intrinsic rate of natural increase.

LO3. Estimate the fertility, Mortality and Migration by direct and indirect methods

UNIT - 1

Model Lifes Tables and Fertility Models

Coale and Demeny regional model life tables and stable population, United Nations model life tables for developing countries, Brass Model. Multiple decrement life tables, Fertility models: Coale-Trussell, Brass, Rele Model.

UNIT -2

Stable Population

Definition, intrinsic rate of natural increase, intrinsic birth rate and death rates, mean length of generation, stable age distribution net reproduction rate, computation of rate of growth and birth rate of stable population from the fertility and mortality schedules.

UNIT - 3

Indirect Methods of Estimating Mortality

Chandra-Deming technique, Differencing method, Census Survival Ratio method, overall Survival Ratio method, Stable Population Model, Methods based on children veer-born and children surviving to estimate infant and childhood mortality.

UNIT - 4

Indirect Methods of Estimating Fertility

Reverse survival methods of estimating fertility, stable population methods, estimating fertility from children ever-born data, Own children method of estimating fertility, estimating

fertility from survey data on births and children-ever-born, current fertility estimate from pregnancy histories.

UNIT - 5

Measuring Migration

Place of birth approach, place of last residence approach, duration of stay-approach, combinations of the three, indirect methods of estimating migration; growth rate method, vital statistics method, life table and census survival ratio methods.

TEXT BOOKS:

- 1. *Barclay, G.W., Techniques of Population Ananlysis 2nd Ed., London: J.Wiley & Sons, 1996.
- 2. Coale, A.J. and Demeny, P. Regional Model Life Table and Stable Population, 2nd Ed., New York: Academic Press, 1983.
- 3. *ESCAFE, Population Division; Projection of Population of Sub-National Areas, Asian Population Studies Seies, Bankok, ECAFE, 1969.

SUPPLEMENTARYR EADINGS

- 1. Pathack K.B., and Fauzdar Ram., Techniques of Demographic Analysis. Bombay: Himalaya Publishing House, 1992.
- 2. Srinivasan K., Basic Demographic Techniques and Applications, New Delhi: Stge, 1998.
- 3. United Nations: Manual II: Methods for Population Projections Sex and Age, New York: United Nations, 1956.
- 4. *United Nations: Manual IV, Methods of Estimating Basic Demographic Measures from Incomplete Data, New York: United Nations, 1967.
- 5. United Nations: Manual V, Methods of Projection Economically Active Population, ST/SOA/Series A/A/43, New York U.N., 1971.
- *United Nations: Model Life Table for Developing Countries, Population Studies No.77.
 Department of International Economic and Social Affairs, New York: U.N., 1982.
- United Nations: Manual X: Indirect Techniques for Demographic Estimation, Population Studies No.77. Department of International Economic and Social Affairs, New York: U.N., 1982.
- 8. UN/UNES: Estimating Future School Enrolment in Developing Countries.
- 9. Population Studies No.40, New York: United Nations, 1966.

After completion of the course students will be able to:

CO1. Acquire the knowledge about Life-table and its types.

CO2. Understand the steps to compute the intrinsic rate of natural increase.

CO3.Explore to Estimate the fertility by indirect methods

CO4.Explore the Indirect Methods of Estimating Mortality.

CO5. Provide the relevant method of Migration estimation.

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
																<u> </u>
CO1	✓	-	_	✓	_	-	✓	✓	_	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	1	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-VI 91IPOSC64 DATABASE MANAGEMENT AND ANALYSIS USING SPSS Credits: 4
Hours:4

LO1: Identify SPSS main menus and functions **LO2:** Categorize files in SPSS and Edit data. **LO3:** Illustrate the data and interpretate.

UNIT-1

SPSS Main Menus and Functions:

Operation commands, Data definition and manipulation commands, Procedure commands

UNIT-2

Creating Data Files in SPSS

Data File Types, Opening data file options, Reading Database files, Saving data files **UNIT-3**

Editing Data

Data View, Variables, Variables View, Editing data in Data view, Identifying missing values and replacement, Consistency checking - checking of range of codes for variable

UNIT-4

Data Transformation

Compute Variable, Creating new variable by transformation, Recoding values, Categorize variables, Select Cases, Weight Cases

UNIT-5

Elementary Analysis of Data and Interpretation

Working With Command Syntax. Frequencies, Description. Cross-tabs, Summarize, Means, Correlations, Chi-Square, t-Test. Introduction to Linear Regression and Interpretation.

TEXT BOOKS:

- 1. Asthna, Hari Shankar and Braj Bhushan. 2007. Statistics for Social Sciences. New Delhi: Prentice-Hall of India Private Limited.
- Gaur. S. Ajai and Gaur. S. Sanjaya. 1977. Statistical Methods for Practice and Research: A Guide to Data Analysis Using SPSS. New Delhi: Sage Publications.
- 3. George, Darren and Paul Mallery. 2006. SPSS for Windows Step by Step: A Simple Guide and Reference. New Delhi: Pearson Education Inc.

SUPPLEMENTARY READINGS

- 1. Shajahan. S. 2004. Research Methods for Management. Mumbai: Jaico Publishing House.
- 2. SPSS Inc. SPSS Base 11.0 User's Guide. Chicago: SPSS Inc., 1988.

After completion of the course students will be able to:

CO1: Acquire the knowledge of SPSS main menus and functions

CO2: Create the data files in SPSS.

CO3: Bring an understanding to Edit data

CO4: Understand the data transformation

CO5: Analyse the data and interpretate

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	-	_	✓	_		✓	✓	_	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	√	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	•	-	✓	-	ı	√	✓	-	✓	✓	✓	ı	•	✓	✓

Semester-VI 91IPOSC65 COMMUNIRTY OUT REACH ACTIVITY

Credits: 4 Hours:4

The students will be enable to

LO1 Identify the life status of rural masses

LO2 Understand the design and conduct a survey

LO3 Analyze the data and suggest solutions to issues

After completion of the course students will be able to :

CO1.Understand the life status of the rural community

CO2. Design and conduct survey

CO3. Discuss the conclusions from the findings

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	-	-	✓	-	1	✓	✓	ı	✓	✓	✓	-		✓	✓
CO2	✓	•	-	✓	•	ı	✓	✓	ı	✓	✓	✓	•	ı	✓	✓
CO3	✓	•	-	✓	•	ı	✓	✓	ı	✓	✓	✓	•	ı	✓	✓
CO4	✓	•	•	✓	•	ı	✓	✓	ı	✓	✓	✓	•	ı	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester-I
Course Title VALUE EDUCATION

Course Code: APOP51C66

Credits: 5

- **LO1:** Identify the importance of value education.
- **LO2:** Explain conscientiousness and conscience.
- **LO3:** Appraise the relevance of ethics and value of life.

UNIT - 1

- 1. Value education Meaning Nature and Purpose
- 2. Importance of Value Education

UNIT - 2

- 1. Basic Features of Rational Ethics
- 2. Moral Consciousness and Conscience
- 3. Love The Ultimate Moral Norm

UNIT - 3

- 1. Morality and Freedom Human Freedom and Moral Responsibility
- 2. God, Religion and Morality
- 3. Sanction for Moral Life.

UNIT - 4

- 1. Social Ethics: Value of Life and Human Beings
- 2. Liberty, Equality and Fraternity

UNIT - 5

- 1. Ethical Issues Today: Religious Ethics, Family Ethics
- 2. Political Ethics Business Ethics
- Ethics and Culture.

TEXT BOOKS:

- 1. Heroled Titus. Ethics of Today. New Delhi: Eurasia Publishing House, 1964.
- 2. Madan, G.R. Indian Social Problems. New Delhi: Allied Publishers Pvt. Ltd., 1966.
- 3. Sharma, R.N. Principles of Sociology. Meerut: Educational Publishers, 1968.

SUPPLEMENTARY READINGS

- 1. Bhaskaran, G. Social Philosophy (Tamil). Tanjore: Tamil University, 1955.
- 2. William K. Frankena. Ethics. Delhi: Prentice Hall of India Pvt. Ltd., 1999.

After completion of the course students will be able to:

- **CO1:** Acquire knowledge on importance of value education.
- **CO2:** Recognize conscientiousness and conscience.
- CO3: Interpretate human freedom and moral responsibility
- CO4: Engage on comparison of value of life and human beings
- **CO5**: Show an appreciation of the relevance of ethics.

CO/	РО	РО	РО	РО	PO	РО	РО	PO	PO	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	02	О3	04	O 5	O6

CO1	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	√	-	-	✓	-	-	✓	√	-	✓	✓	√	-	-	✓	✓

Semester- VII 19IPOSC71: RESEARCH METHODOLOGY

Credits:5

Hours: 5

Learning Objective (LO):

The student will be able to

- > Recall the Scientific research.
- Draw research design and sampling techniques
- Classify the methods of processing and analysis

UNIT – 1 Scientific Research and Hypothesis

Social Research: Meaning, Nature, Scope Assumptions: Utilities of research; Types of research: Pure, Applied and Action Research: Theory and facts; Major steps in Social Research; Formulation of a Research Problem; Framing of Objectives;

Hypothesis: concepts, definition, types, sources, characteristics of a usable hypothesis problem in the formulation of hypothesis, Testing of Hypothesis.

UNIT – 2 Research Design and Sampling Techniques

Research Design: Meaning, importance and Types: Exploratory, Descriptive and Experimental; Method of investigation: Social Survey method, Experimental methods, Statistical methods, Case study method; Sampling techniques: Meaning, Definition, Need; Types of Probability: Single, Random, Systematic and Stratified, cluster, multistage Non-Probability Sampling: purposive, quota, snow ball etc.

UNIT – 3 Data Collection and Scaling Techniques

Data Collection: Type of data: Primary and Secondary; Method of data collection; Observation: Participant and Non-participant, Interview Technique, Focus Group Discussion, Case Study, Tools of data collection: Schedule and Questionnaire; Construction Problems; Advantages and disadvantages; Scaling Techniques: Problems of Measurement; Types of Scales used in Social Research; Organization of Field Survey and Data Collection.

UNIT – 4 Processing and Analysis

Editing, Coding and Tabulation; Analysis of data; The use of Computer Choice of Statistical tools:

UNIT – 5 Interpretations and Report Preparation

Interpretation of results and Report Writing; Purpose, Writing style and content; Uses of reference materials; Bibliography and its compilation; Research Proposals preparation; Techniques of Preparation of research article.

TextT Books

- 1. Misra, R.P. Research Methodology. Concept, Publishing Company, New Delhi. 2002.
- 2. Pat Cox, Thomas Geisen and Roger Green Qualitative Research and Social Change, Palgrave Maxcri Millan. 2016
- 3. Dharmesh P. Patel Research Methodology in the Shree Niwas Publication, Jaipur, India.2013

Supplementary Readings:

- 1. Rajit Kumar. Research Methodology, Sage Publication, India Pvt., Ltd.2011
- 2. Petti Alasuctions, Leonard Bickman and Julia Prannen Social Research Methods. Sage Publishers, 2008.
- 3. Micheal Armer and Allen D.Grimshow (Eds.), Comparative Social Research Methodological Problem and Strategies (New Delhi: John Wiley and Sons, 1973)
- 4. T.S. Wilkinson, and P.L Bhandarkar, Methodology, Techniques of the Social Research (Bombay: Himalaya Publishing House, 1979)

Course Outcomes

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

CO1:	Acquire the knowledge of scientific research.
CO2:	Understand research design and sampling techniques
CO3:	Recognize data collection and scaling techniques
CO4:	Identify the methods of processing and analysis.
CO5:	Explore the knowledge of interpretation and report preparation.

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	-	-	✓	-	-	✓	✓		✓	✓	✓	-		✓	✓
CO2	✓	-	-	✓	-	-	√	✓	1	✓	✓	✓	-	1	√	✓
CO3	✓	-	-	✓	-	-	>	✓	ı	✓	✓	✓	-	ı	✓	✓
CO4	✓	-	-	✓	-	-	>	✓	ı	✓	✓	✓	-	ı	✓	>
CO5	✓	-	-	✓	-	-	√	✓	•	✓	✓	✓	-	•	✓	~

Semester-VII 19IPOSC72: ENVIRONMENTAL MANAGEMENT Credits:5

Hours: 5

Learning Objective (LO):

The student will be able to

- 1. Know the basic knowledge of ecology
- 2. Explain the environmental hazards
- 3. Describe the management of resources

UNIT-1 Introduction

Basic concepts of ecology, Ecosystem and its Functions, Biosphere; Atmosphere, Hydrosphere and Lithosphere, ecology and environment. Meaning and concepts of environment, Types of Environment; Physical and cultural environment, Environmental Degradation and Conservation

UNIT-2 Environmental Hazards

Hazards; Meaning and types, Causes and effects of environmental hazards, effect of human activities on environment - environmental pollution - global and local (Soil pollution, water pollution, air pollution, noise pollution) Green House effect –Ozone layer depletion –acid rain, pillar melting, rise of sea level and their implications -. El-nino effect.

UNIT- 3 Management of Resources

Concept and scope of Environmental Management, Environmental Management of Resources: Water, forest, biological, mineral and agricultural; Environmental management of chemical, mining and manufacturing industries –petroleum, coal, cement, paper, fertilizer.

UNIT-4 Approaches to Management

Approaches to environmental management, Pollution Management, Waste Management. Waste water treatment process, industrial waste management, Hospital waste management, nuclear waste management, National acid precipitation assessment programmes. Strategies adopted to manage the health problems caused by environmental hazards in India.

UNIT-5 Environmental Policy

History, constitutional provisions and the environment, environmental protection and fundamental rights, judicial remedies and procedures, Emerging environmental issues. Government Agencies & Programs –The Tiwari committee creation of NCEPC, Department of Environment & Forest Function of State Pollution Control Board.

TextT Books

- 1. Beychok, Milton R. Aqueous wastes from petroleum and petrochemical plants (Ist Edition ed.) John widey & sons, 1967.
- 2. Beychok, Milton R. "A data base for dioxin and furan emissions from refuse incinerators" Atmospheric Environment, January 1987
- **3.** Bowler, Cabherine and peter Brimblecome, "Control of Air Pollution in Manchester prior to the Public health act, 1875" Environment and History, 2000

Supplementary Readings:

- 1. Brimblecombe, P, "History of air pollution', in H.B. Singh (ed) Composition Chemistry and Climate of the Atmosphere, New York; VNR Publishers, 1995.
- 2. Brimblecombe, P, "The Globalization of Local Air pollutions, 2, December 2005.
- 3. De Rothschild, David, The Global warming survival handbook, Rodale, 2007.
- 4. Gandy, Matthew, Recycling and the politics of urban waste, London, Earth scan publications 1994.

Course Outcomes

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

CO1:	Acquire the knowledge of ecology
CO2:	Recognize the environmental hazards
CO3:	Understand the management of resources
CO4:	Enlighten the approaches of environmental management
CO5:	Provide an overview of the environmental policy

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	PO	РО	РО	PO1	PS O4	PS	PS O2	PS O4	PS OF	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	_	-	✓	-	-	✓	✓	-	✓	✓	✓		-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓		-	✓	✓
CO3	√	-	•	√	-	-	√	✓	ı	✓	√	✓	ı	•	✓	✓
CO4	✓	-	-	√	-	-	√	√	-	✓	✓	✓		-	√	✓

CO5 / / /	✓ - ✓	✓ ✓ ✓ ✓
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Semester- VII 19IPOSC73: DEMOGRAPHY OF AGEING Credits:4
Hours:5

Learning Objective (LO):

The student will be able to

- Find the basic aspects of ageing.
- Categorize the social aspects of ageing.
- Classify the Economic and health aspects of ageing

UNIT-1: Basic Aspects

Concepts and measures of ageing. Components of population ageing and their interrelation with age structure; Ageing trends and patterns in India.

UNIT - 2: Social Aspect of Ageing

Social Status and Roles of Elderly, Family Structure, Intergenerational relations, Kinship and family support, Social Security; Living Arrangements of Elderly, Old Age Homes, Social Networks, and Contribution of elderly; Dependency, Gender Dimensions and Discrimination, Widows, elderly abuse, Vulnerability, Legislations to protect elderly in India.

UNIT- 3: Economic aspects of Ageing Population

Implications of population ageing on labor force, pressures on public finance - government health expenditure, health insurance and health financing for elderly, health care costs, housing, pension and social security.

UNIT- 4: Health Aspects of Ageing

Ageing and life expectancy, pattern of mortality, health adjusted life expectancy; Ageing and burden of chronic diseases, burden of non- communicable diseases, disabilities, mental health problems, cognition and memory loss; Ageing and health risk factors -nutrition, diet and physical activities; Ageing health care utilization, public and private health services availability and accessibility, institutional care, health care costs.

UNIT- 5: Policies and Programmes for Ageing

Pensions, Retirement and Social Security Policies for elderly in Asian Countries. National Policies and programmes for elderly in India.

TextT Books

- 1. Barbara Berkman, K.L. Sharma and Daniel B. Kaplan, Social Work in Health and Ageing Global Perspectives. Rawat Publication, Jaipur, Delhi. 2015,
- 2. Irudaya Rajan, Social Security for the Elderly Experiences from South Asia, Routledge, New Delhi2007
- 3. Bose, A.B. Social Security for the Old. New Delhi: Concept Publishing, 2006

Supplementary Readings:

- 1. Bloom, D.E., D. Canning, et.al. The Demographic Dividend: A New Perspective on The Economic Consequences of Population Change. Santa Monica, CA, RAND. 2002
- 2. Jones, A.M., Rice, N., d'Uva, T.B. and Balia, S., Applied Health Economics. New York: Routledge. 2007
- 3. Linda J. Waite (ed.) Aging, Health, and Public Policy: Demographic and Economic Perspectives, Supplement to Population and Development Review 2004
- 4. Mason, A. (2000). Population Change and Economic Development in East Asia: Challenges Met, Opportunities Seized. Stanford: Stanford University Press.

Course Outcomes

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

CO1:	Acquire the basic knowledge of basic aspects of ageing
O2:	Understand the social aspects of ageing
CO3:	Enlighten the economic aspects of ageing
CO4:	Highlights the health aspects of ageing
CO5:	Provide an overview of the policies and programmes for ageing

Outcome Mapping

CO/	PO	PO1	PS	PS	PS	PS	PS	PS								
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6

CO1	✓	-	-	✓	-	-	✓	✓	_	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	√	-	-	✓	-	-	✓	√	-	✓	✓	✓	-	-	✓	✓

Semester- VII 19IPOSC74: PRINCIPLES OF PUBLIC HEALTH Credits: 5
Hours:5

Learning Objective (LO):

The student will be able to

- > Define the mortality and health transitions.
- Classify the theories of mortality and child survival framework.
- > Recognize the cause of death.

UNIT-1: Public Health

Definition of public health, importance of public health, History of public health, planning implementing and evaluating public health programs, various health aspects. Curative, promotive and preventive. Indicators of public health.

UNIT- 2 Community Health

Definitions of community health, purpose of community health, scope of community health, objectives of community health, Determinants of community health, health care services in rural community, principles of community health.

UNIT-3: Communicable Disease and Public Health

Definition of communicable and non communicable disease, history, causes and epidemiology of communicable diseases from a broad public health perspective, Methods to prevent and control infection diseases management using surveillance, screening aand vaccination strategies.

UNIT-4: Health Education Programs

Basic concepts of health education, Difference Between information Education and propaganda, Aims of health education, principles of health education, Approaches to health education, Steps in carrying out a health education programme in community, Methods of Health education, Administration of health education in India.

UNIT-5: Immunization Programme

Definition of Immunization, historical Background of immunization, classification of immunity, universal immunization program, the national immunization schedule, immunization of pregnant women, immunization of children, preservation of vaccines in cold chain system.

TextT Books

- 1. Piyush Gupta Amir and Maroof Khan. Community Medicine, CBS Publisher and Distributors. 2016
- Catherine Rush and Thompson. Prevention of Practice and Health Promotion. Slack Incorporated. 2007
- 3. Park, K Park's Text Book of Preventive and Social Medicine. 16th edition. (M/s Banarsidas Bhanot Publishers, Jalalpur), 2000

Supplementary Readings

- 1. Haroutune K. and Armenian Sam Shapiro Epidemiology and Health Service. Oxford University Press, New York. 1998
- 2. Kumar. A.. Health and Nutritional Status of Indian Women, Anmol Publication Pvt Ltd., New Delhi. 2006
- 3. Johanna Hanefeld. Globalization and Health, Rawat Publications. 2017
- 4. Lakshmana, C.M.. Population Change and Health Care, Rawat Publications. 2011

Course Outcomes

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

CO1:	Impart the knowledge about the mortality and health transitions
CO2:	Understand the theories of mortality and child survival framework
CO3:	Acquaint the knowledge about the causes of death
CO4:	Bring an understanding about the morbidity and disease burden
CO5:	Explore the concept public health and Epidemiology

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	02	О3	04	O5	O6
CO1	✓	_	_	✓	_	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

ELECTIVE COURSE

Semester- VII 19IPOSE75: ELECTIVE

Credits: 3

Hours:3

Semester- VIII 19IPOSC81: BUSINESS DEMOGRAPHY

Credits: 5

Hours: 5

Learning Objective (LO):

The student will be able to

- > Describe population dynamics and business studies.
- Detect business organizations and its functions.
- > Differentiate the marketing research process

UNIT -1 Introduction

Meaning, Scope and Nature, Relevance of Population Dynamics in business studies and marketing; Population as producer and consumer; Market for consumer goods and labour market; Population Dynamics and its implications on sizes and composition of business organizations.

UNIT -2 Demographic Database

Population size, Growth rate, Sex ratio, Composition of population by age, Educational levels, Occupational categories. Household size and composition; Relevance of these factors for marketing different products.

UNIT -3 Business Organizations

Evolution, Role and functions; Marketing; Different levels; Types; Population factor in marketing activity, Life style and consumer behavior, marketing strategies.

UNIT –4 Market Analyses

Spatial distribution of population and market location; Geo-Demographic System; Geographic methods of market analysis; Size Analysis, process - product planning & market segmentation.

UNIT – 5 Marketing Research Process

Market forecast; Population projection total and sub-national; Suitable methods; Market forecast for products and activities related to children, aged and Gender specific needs.

TextT Books

- 1. Thomas C.Kinnear, James R. Taylor, Marketing Research, John Wiley & Sons, Inc. New Delhi.
- 2. David S., Lnck, Ronald S. Rubin, Marketing Research, Prentice Hall of India, New Delhi, 1987.
- 3. Rajendra Paul, Business Communication, Sultan Chand, New Delhi.

Supplementary Readings

- 1. Rajendra Paul, Business Communication, Sultan Chand, New Delhi.
- 2. United Nations, The Determinants and Consequences of Population Trends, Vol. I (New York: Dept. of Economic and Social Affairs, 1973).
- 3. David S., Lnck, Ronald S. Rubin, Marketing Research, Prentice Hall of India, New Delhi, 1987.
- 4. Thomas C.Kinnear, James R. Taylor, Marketing Research, John Wiley & Sons, Inc. New Delhi.

Course Outcomes

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

CO1:	Able to get the knowledge of population dynamics and business studies
CO2:	Provide an overview of demographic data base with relevance on marketing.
CO3:	Familiarize business organizations and its functions
CO4:	Bring an understanding about market analysis
CO5:	Highlight the marketing research process,

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	02	O3	04	O5	O6
CO1	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	√	-	-	✓	-	-	√	✓	1	✓	✓	✓	-	1	√	✓
CO4	>	•	•	✓	•	ı	>	✓	ı	✓	✓	✓	•	ı	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	•	✓	✓	✓	-	•	✓	✓

Semester- VIII

19IPOSC81: HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT

Credits: 4

Hours: 4

Learning Objective (LO):

The student will be able to

- > Identify Human Resource Management
- > Draw the relevance of training and personal development
- > Develop grievance handling procedures.

UNIT-1 Human Resource Management

Concept, definition, scope and functions; human resource planning. Need and scope for human resource planning, recruitment and selection.

UNIT-2 Communication and Motivation

Communication Techniques and Barriers; Motivation theories - Maslow's Hierarchy of Needs, Herzberg's Two factor model, Alderfer's E-R-G Model.

UNIT-3 Training and Development

Training and Personnel Development, training policies. Wage structure - Wages, wage fixation, allowances, bonus fixation procedures.

UNIT-4 Grievances Handling

Grievance procedure, enquiries and disciplinary action, industrial standing orders.

UNIT-5 Performance Appraisal

Personnel records, performance appraisal and counselling; Personnel Problems - Health, absenteeism, productivity.

Text Books

- 1. Aswathappa, K. Human Resource and Personnel Management.New Delhi: Tata McGraw-Hill, 2000.
- 2. William, P. Anthony et. al. Strategic Human Resource Management. New Delhi: Dryden Press, 1993.
- 3. Yoder, Dale. Personnel Management and Industrial Relations. New Delhi: Prentice Hall of India. 1975.

Supplementary Reading:

- 1. John, W. Newstran and Keith Davis. Organizational Behaviour at Work Organizational Behaviour. New Delhi: McGraw-Hill,1993.
- 2. Miner, J.B. and Miner, M.G. Personnel and Industrial Relations. New Delhi: Macmillan, 1985.
- 3. Venkataratnam, C.S. and Srivastava, B.K. Personnel Management and Human Resources. New Delhi: Tata McGraw-Hill Publishing Co., 1991
- 4. Terry, L. Leap. Michael D.Crino. Personnel/Human Resource Management. New Delhi: Macmillan & Co., 1990.

Course Outcomes

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

CO1:	Acquire the knowledge of Human Resource Management
CO2:	Understand communication techniques and barriers through various models
CO3:	Understand the relevance of training and personal development
CO4:	Identify grievance handling procedures
CO5:	Recognize personal appraisal methods

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PS 01	PS O2	PS O3	PS O4	PS O5	PS O6
CO1	✓	_	-	✓	_		√	✓	-	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	√	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester- VIII 19IPOSC83 : MORBIDITY AND EPIDEMIOLOGY

Credits: 5

Hours: 5

Learning Objective (LO):

The student will be able to

- > Describe the basic concepts of mortality and changing pattern.
- Explain the epidemiology and the measurements

> . classify the communicable and non communicable diseases and the relevant health programs.

UNIT-I: Introduction

Morbidity: Concepts, definition Need and importance of study, sources of data, factors of disease, International classification of disease, components of disease process, monitoring and surveillance: definition, objectives, different levels of prevention of disease, changing pattern of diseases in developed and developing countries.

UNIT-2 Epidemiology

Concepts, definition, history of epidemiology, components of epidemiology, Aims of epidemiology, epidemiological approach.

Measurements in epidemiology: Measurement of mortality, morbidity, disability, natality .Tools of measurement: Rates, ratios, proportion, Epidemiological methods: Analytical epidemiology and experimental epidemiology, uses of epidemiology.

UNIT-3 Epidemiology of Communicable Diseases

Definition, concepts, types of infectious diseases, determinants, Dynamics of disease transmission, modes of transmission, clinical features, Disease control measures, immunization programmes, investigation of an epidemic, screening and its uses.

UNIT-4 Epidemiology of Non-Communicable Diseases

Epidemiology of non-communicable disease: Definitions, concepts, history, types of non-communicable diseases, determinants, transmission, clinical features, signs, symptoms, risk factors, strategies for prevention & control.

UNIT-5 Health Programmes

National Vector Borne disease control programme – Malaria control activities, strategic action plan, surveillance and case management. Filarial control strategy, strategies to control Dengue, chikungunya, Leprosy eradication programme, Tuberculosis Control Programme, National AIDS control programme. in India

Text Books

1. Park, K Park's Text Book of Preventive and Social Medicine. 16th edition. (M/s Banarsidas Bhanot Publishers, Jalalpur), 2000

- 2. *Pathack K.B., and Fauzdar Ram., Techniques of Demographic Analysis. Bombay: Himalaya Publishing House, 1992
- 3. Asha A Bhenda and Tara K.Kanitkar, Principles of Population Studies, (Bombay: Himalaya Publishing House, 2014)

Supplementary Reading

- 1. Caldwell, J, Sally Findley, Pat Caldwell and Gigi Santow What we know about health transition: The cultural, social and behavioural determinants of health. The proceedings of an international workshop, Vol.1&2, ANU, Canberra, Health Transition Centre1990).
- 2. Mosley, W. H. and L. C. Chen Analytical framework for the study of child survival in developing countries, Population and Development Review 10 (Supplementary Copy). 1984
- 3. Murray, C. J. L., (1994): Quantifying the Burden of Disease: The Technical Basis for Disability Adjusted Life Years, Bulletin of the WHO, Vol. 72(3), pp.429-445.
- 4. Pugh, Thomas F. and Brian MacMohan): Epidemiology: Principles and Methods, Little Brown Publishers, Boston 1970.

Course Outcomes

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

CO1:	Acquire the knowledge about mortality
CO2:	Understand the measurements in epidemiology
CO3:	Identify the communicable and non communicable diseases
CO4:	Identify the diseases control measures
CO5:	Enlighten the various health programmes

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6
CO1	1			1			1	1		1	1	1			1	/
	•	-	-	,	-	-	,		-	,	,	,	-	-	•	
CO2	✓	-	-	√	-	-	√	✓	-	✓	√	√	•	-	√	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	•	-	✓	✓

CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	•	-	✓	-	-	✓	✓	-	✓	✓	√	•	-	√	✓

Semester- VIII 19IPOSC84: GENDER EQUITY AND WOMEN EMPOWERMENT

Credits: 5

Hours: 5

Learning Objective (LO):

The student will be able to

- Describe the gender issues and theories of feminism.
- > Recognize the autonomy, empowerment and women status
- Identify the different forms of gender based violence.

UNIT -1 Gender Equity

Difference between sex and gender, Importance of the study, definition of concepts (gender, unequal gender relations, gender equity, gender disparities, gender inequalities, gender main streaming, gender sensitive planning and gender balance).

Patriarchy and Matriarchy, Kinship Structure and gender roles; Gender stratification in traditional and modern societies; Theories of feminism.

UNIT -2 Autonomy, Empowerment and Status of Women

Definition of concepts, measurement, various indicators; Status of Women and Population Dynamics: Inter-linkages; Gender Sensitive Development; Gender and Social Institutions in India; Marriage customs and patterns, dowry system, segregation and seclusion of women; Purdha system; Sex preference, Implications for sex ratio trends and patterns in India, sex selective abortion.

UNIT -3 Gender Inequalities

Gender inequalities in education, employment, decision-making, mortality (children, adults, and aged), morbidity, nutrition, and health care utilization;

Implications of gender inequalities for development - equal access to and utilization of services; equal participation in social development, equal access and control over capital for economic development; equal participation in policy and decision making process; equal distribution of political power.

UNIT -4 Gender based violence

Different forms of gender-based violence during life time; Gender mainstreaming, gender sensitive financing and budgeting; National and international programme, policies and laws favoring empowerment of women. National Policy of Women Empowerment.

UNIT -5 Gender Equity Approach

Right-based approach to gender equity and Reproductive Health and HIV/AIDS; Human rights related to gender, reproductive health rights; Gender as a key determinant of vulnerability to poverty, gender and HIV/AIDS vulnerability and its demographic impact;

Gender and mass media: Language, image and portrayal of women in different mass media and the changes over the time

Text Books

- 1. Anjali Sharma Human rights of women in India. Regal Publ. Delhi. 2013,
- 2. Nitinjohri Population Statistics. Random Pub-Delhi. 2014,
- 3. Dr. Sugitha, M. and Dr. Subramanian, C. Human Rights Aspectrum. Serials Publication, Delhi. 2015,

Supplementary Reading

- 1. Gupta, B.L. Women and Child Trafficking and Social work. Galary Book Company, Jaipur. 2016,
- 2. Rohit Balyani Women's Economic Empowerment in India. Adhyayan Pub-Delhi. 2015,
- 3. Abida Samiuddin Women Socio-economic Empowerment. Global Vision Publication, Delhi. 2013.
- 4. R. Khanam and Rakesh Kumar Women Society and Law. Crescent Pub., Delhi. 2015,
- 5. Sarita Singh Domestic Violence and Women. Omega Publication, Delhi. 2015

Course Outcomes

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

CO1:	
	Learn the gender issues and theories of feminism.
CO2:	Understand autonomy, empowerment and women status
CO3:	Identify gender inequalities.

CO4:	Enlighten the human equity approach
CO5:	Explore the different forms of gender based violence

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	_	-	✓	_	-	✓	✓	_	✓	✓	✓	-		✓	✓
CO2	✓	-	-	✓	-	-	√	✓	-	✓	✓	✓	1	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

ELECTIVE COURSE

Semester- VIII 19IPOSE85: ELECTIVE

Credits: 3

Hours: 3

Semester- IX 19IPOSC91: BIO STATISTICS

Credits: 4

Hours: 4

Learning Objective (LO):

The student will be able to

- Indicate the issues and epidemiological study designs
- > Recognize the clinical trials
- Classify the infectious diseases

UNIT -1 Introduction and Measuring Health and Disease

Definition of epidemiology, historical context and contributions; Incidence, prevalence rates, attack rates, risk rates, odds ratios, absolute and relative risk.

UNIT -2 Issues and Epidemiological Study Designs

Ecological, Cross-Sectional, Case-Control, Cohort Studies, Randomized Intervention Studies. Association, Causality, Causal inference, Errors, Bias, Validity, Generalizability, Confounding, Exposure Association.

UNIT -3 Clinical Trails

Phase I, II, III, and IV trails; Randomized Control trails; Ethical Issues

UNIT-4 Modeling of Infectious Disease Process

Infectious diseases of human – malaria, tuberculosis, Hepatitis, HIV/AIDs; Deterministic modeling of infectious diseases

UNIT -5 Probit and Survival Analysis

Concepts and definition; Survival analysis - Kaplan-Meir, Life table method, Mantel-Haensal, method, Cox-proportional hazards method. Dose respose analysis.

Text Books

- 1. Gurumani, N An Introduction to Biostatistics. MJP Publication, Chennai. 2005,
- 2. Kulkarni, A.P. Basics of Bio-Statistics. CBC Publisher, New Delhi. 2016,
- 3. Pat Bazeley Qualitative Data Analysis Practical Strategies, Saga Publication, Delhi 2014,

Supplementary Reading

- **1.** Malley, Malley and Pajeric Statistical Learning for Biomedical data. Cambridge, New York. 2011
- 2. Mould, Richard, F., . Introductory Medical Statistics, 3rd edition, Overseas Press, New Delhi,2005
- 3. Kirkwood,B. and J. Sterne Essential Medical Statistics, 2nd edition, Blackwell Science Ltd. (2003).
- 4. Rockett, R.H. Ian, (1999). Population and Health: An Introduction to Epidemiology, Second Edition, Population Bulletin, Vol. 54(4), A Publication of the Population Reference Bureau, Washington.

Course Outcomes

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

CO1:	Acuire the knowledge of measuring the health and diseases
CO2:	Explore the epidemiological study designs
CO3:	Enlighten the clinical trials
CO4:	Identify the modeling the infectious diseases
CO5:	Explain the survival analysis

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O 5	O6
CO1	✓	-	_	✓	_	_	✓	✓	_	✓	✓	✓	_	-	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	√	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓

Semester- IX 19IPOSC92: TAMIL NADU DEMOGRAPHY

Credits: 5

Hours: 5

Learning Objective (LO):

The student will be able to

- > Describe population situation and future prospects of future Tamilandu
- > Recognize family welfare programmes
- Analyse socio-economic status and welfare policies

UNIT – 1 Population Situation

Tamil Nadu and Tamil Culture; Population Data availability and their quality. History of population growth, present situation and future prospects; Demographic profile of Tamil Nadu.

UNIT – 2 Mortality and Health Transition

Mortality levels, trends and differentials, in Tamil Nadu; sex, age patterns of mortality. Infant and child mortality - levels and trends; causes of death; Incidence of female feticide and infanticide Health situation, Health policies and programmes.

UNIT – 3 Fertility and Family Welfare

Fertility levels, trends and differentials in Tamil Nadu state, customs and practices affecting fertility, value of children and women status, factors responsible for the recent decline in birth rates, Family welfare programme performance, Practices related to age at marriage and MTP, Birth Averted due to family welfare programme.

UNIT – 4 Migration and Urbanization

Migration transition in Tamil Nadu; inter and intra-state migration; inter and intra-district migration factors; urbanization in Tamil Nadu: Levels and trends Problems and policies; problems of slums and related policies.

UNIT – 5 Socio-Economic Status and Policies & Programmes

Per Capita Income and Poverty - Trends policies and programmes; Literacy and Education, Trends policies and Programmes; Women's status and policies and programmes; Economic activity rates - trends, occupational categories and policies programmes; Nutritional Status; Nutrition Programmes; Suppliemntry Nutrition Programme: Applied Nutrition Programme, Chief Ministers Noon-Meal Programme, ICDS, Anganwadi and Balwadi Centres etc.

Text Books

1. Asha A Bhenda and Tara K.Kanitkar, Principles of Population Studies, (Bombay: Himalaya Publishing House, 2014)

- 2. IIPS & ORG Macro, 2002, National Family Health Survey (NFHS-2), India, 1998-99: Tamil Nadu, Mumbai:IIPS.
- 3. MIDS, 1988, Tamil Nadu Economy: performance and issues, New Delhi: oxford and IBH publishing co., pvt Ltd. on Human Development Report, India for various year.

Supplementary Reading

- 1. Mahadevan.K., M.Sumangala, 1997, Welfare Model of Development and Demographic Transition Delhi: B.R. Publishing Corporation, 1977.
- 2. Tamil Nadu Government, 1995-96, Policy Note on Medical and Public Health, Chennai: Government of Tamil Nadu.
- **3.** Venketaragan.L.B., and P.Elango, 1992, Baseline Survey of Tribals in Kalrayan Hills, DANIDA Health Care Report, Unpublished

Course Outcomes

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

CO1:	Impart the knowledge of population situation and future prospects of future Tamilandu
CO2:	Understand the mortality levels and trends differentials
CO3:	Provide an overview of fertility and family welfare programmes
CO4:	Identify the migration transition in Tamilnadu
CO5:	Engage in closely analysis socio-economic status and policies & Programmes

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	02	О3	04	O5	O6
CO1	✓	_	_	✓	_	-	✓	√	-	✓	✓	√	-	-	√	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	1	-	√	✓
CO4	✓	-	-	✓	-	-	✓	√	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	-	✓	-	•	✓	✓	-	✓	✓	✓	1	•	✓	✓

Semester- IX 19IPOSC93: PRACTICAL - II

Credits: 5

Hours: 5

Learning Objective (LO):

The student will be able to

- > Estimate of population projections
- > Explain the construction of life table
- Interpretate mortality estimates through various techniques

Content

- 1. Assessment of digit preference Computation of Whipples' index and Myers' indexes.
- 2. Computation of age ratios and U.N Age Sex Accuracy Index.
- 3. Computation of U.N and Coale Demney model life tables
- 4. Chandrasekar Deming method
- 5. Interpolation, graphical, and mathematical methods
- 6. Indirect estimation of Mortality Children ever born and children surviving
- 7. Population Projections by Component Methods & Mathematical Methods
- 8. Technique of construction of life table from age specific death rates.
- 9. Construction of Life table on the basis of single Census and two censuses;
- 10. Computation of Intrinsic Rate of Natural Increase and Construction of stable age distribution;
- 11. Estimation of vital rates through stable Population technique.
- 12. Standardization of birth rates and death rates and infant mortality rates.
- 13. Mortality estimates from children ever born and children surviving
- 14. Indirect measures of internal migration: Natural growth rate method and Life Table and census survival ratio method

Semester- IX 19IPOSC94: FIELD STUDY REPORT

Credits: 4

Hours: 4

Learning Objective (LO):

The student will be able to

- > Identify the life status of rural masses
- > Design to conduct survey
- > Provide policy suggestions on various issues

Course Outcomes

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

CO1:	Understand the life status of rural masses
CO2:	Understand to design, conduct survey
CO3:	Formulate and provide policy suggestions on various issues

Outcome Mapping

CO/	РО	РО	РО	РО	РО	РО	РО	РО	РО	PO1	PS	PS	PS	PS	PS	PS
РО	1	2	3	4	5	6	7	8	9	0	01	O2	О3	04	O5	O6
CO1	✓	_	-	✓	_	-	✓	✓	_	✓	✓	✓	_	_	✓	✓
CO2	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO3	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO4	✓	-	-	✓	-	-	✓	✓	-	✓	✓	✓	-	-	✓	✓
CO5	✓	-	1	✓	-	1	√	√	1	✓	✓	✓	-	-	✓	✓

Semester- IX 19IPOSE95: ELECTIVE

Credits: 3

Hours: 3

Semester- IX 19IPOSS96: SOFT SKILLS

Credits: 3

Hours: 3

Learning Objective (LO):

The student will be able to

- Describe personality development
- > Extend communication and inter personal skill
- > Follow the employability and professional skills

UNIT -1 Soft Skills and Personality Development

Soft Skills: Meaning and Importance - Hard Skills versus Soft Skills - Self Concept: Self Awareness, Self Development and Self Realisation – Power of Positive Attitude – Etiquette and Manners.

Listening: Types of Listening, Effective Listening and Barriers to Listening – Assertive Communication.

UNIT -2 Communication Skills

Oral Communication: Forms, Types of Speeches and Public Speaking – Presentation: Elements of Effective Presentation and Use of Visual Aids in Presentation.

Written Communication: Strategies of Writing – Business Letters: Form, Structure and Formats – Types of Business Letters – Memos – Agenda and Minutes.

Non-verbal Communication: Body Language and Proxemics.

UNIT -3 Interpersonal Skills

Interpersonal Skills: Relationship Development and Maintenance and Transactional Analysis. Conflict Resolution Skills: Levels of Conflict and Handling Conflict - Persuasion – Empathy – Managing Emotions – Negotiation: Types, Stages and Skills – Counselling Skills.

UNIT -4 Employability Skills

Goal Setting – Career Planning – Corporate Skills – Group Discussion – Interview Skills – Types of Interview - Email Writing – Job Application – Cover Letter - Resume Preparation.

UNIT -5 Professional Skills

Decision Making Skills – Problem Solving – Emotional Intelligence – Team Building Skills – Team Spirit – Time Management – Stress Management: Resolving Techniques.

Text Books

- 1. Ghosh, B.N. Managing Soft Skills for Personality Development. (Ed). New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.
- 2. Krishna Mohan and Meera Banerji. Developing Communication Skills. (2nd Edition). New Delhi: MacMillan Publishers India Ltd., 2009.
- 3. Neera Jain and Shoma Mukherji. Effective Business Communication. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.

Supplementary Reading

- 1. Rao, M.S. Soft Skills Enhancing Employability: Connecting Campus with Cororate. New Delhi:I.K International Publishing House Pvt. Ltd., 2011.
- 2. Ashraf Rizwi, M. Effective Technical Communication. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2010.
- 3. Bretag Tracey, Crossman Joanna and Bordia Sarbari. Communication Skills. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012

Course Outcomes

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

CO1:	To acquire the knowledge on soft skills and personality development
CO2:	Understand the communication skills
CO3:	Explain the inter personal skills
CO4:	Classify the employability skills
CO5:	Identify the professional skills

Semester- X

19IPOSC101: SOCIO-ECONOMIC AND DEMOGRAPHIC IMPLICATIONS OF HIV/AIDS

Credits: 5

Hours: 5

Learning Objective (LO):

The student will be able to

- > Describe the components and determinants of reproductive health
- Recognize the levels and trends of HIV/AIDS
- Classify the role of agencies involved in HIV/AIDS control programs

UNIT - 1

Reproductive Health: Concepts, Components and reproductive health rights. Socio and cultural determinants of Reproductive Health

UNIT -2

HIV/AIDS: Definition, importance of study; Problem statement: At global and National level, Estimation of HIV infection among adult population; Mode of transfusion: Sexual transmission, Blood contact, maternal – foetal transmission, injecting drugs

UNIT -3

Diagnosis of AIDS: Clinical and Laboratory diagnosis; Prevention of HIV/AIDS: IEC strategy, Targeted intervention, Care of HIV/AIDs patients

UNIT -4

HIV Risk and vulnerability: Risk and vulnerability, High risk situation, behaviour; Health and demographic effects, Social and economic impact; Living with HIV/AIDS: Nutritional care and Support of people living with HIV/AIDS

UNIT -5

Agencies involved in HIV/AIDS programme: Governmental and Non-Governmental Organisations, Role of International originations in HIV/AIDS programme

Text Books

- 1. WHO/UNAIDS/UNICEF (2009) 'towards universal access: scaling up priority HIV/AIDS interventions in the health sector'
- 2. .Kiran Prasad and Somayajulu (edited) 2008. HIV and AIDS, Vulnerability of Women Asia and Africa, the Women Press, New Delhi
- 3. J.E. Park and K. Park, Preventive and Social Medicine (India: Banneridas Bhanat and Company Limited, India 2012.

Supplementary Reading

- 1. UNAIDS 2008 Report of the global AIDS epidemic
- 2. Asha A Bhenda and Tara K.Kanitkar, Principles of Population Studies, (Bombay: Himalaya Publishing House, 2014)
- 3. Srivasta, S.K., Vipin Kumar, and Veena Katyal (2010). Health Care Management in India. New Century Publication, New Delhi.

Course Outcomes

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

CO1:	Acquire the knowledge the components and determinants of reproductive health
CO2:	Understand the levels and trends of HIV/AIDS
CO3:	familiarize HIV/AIDS
CO4:	Identify the preventive and curative steps to control HIV/AIDS
CO5:	Highlight the role of agencies involved in HIV/AIDS control programme

Semester- X 19IPOSC102: POPULATION LAW AND HUMAN RIGHTS

Credits: 4

Hours: 4

Learning Objective (LO):

The student will be able to

- Label population law and its historical views
- Define UN charter of human rights
- Outline the various farms of human rights

UNIT – 1 Population Law

Meaning, definition, nature, and its scope; Relevance of legal studies to population dynamics; Need for population law; Historical and contemporary views; population law: World and in India.

UNIT – 2 Constitutional provisions

Constitutional provisions relating to population issues; legislations relating to population issues, Law-making bodies: Parliament and legislative Assembly; functions and obligations.

UNIT -3 Human Rights

Meaning, definition, nature and scope; Basic principles, Human rights and population dynamics; Historical and contemporary views on Human rights;

UNIT -4 UN and Human Rights

UN Charter of Human rights; Human rights standard setting; International bodies; Associations and Human rights; Rights and Duties; Citizen, Child, Youth, Adolescent, Adult, Married and the aged; Quality of life; Gender issues.

UNIT -5 Human Rights and Population Dynamics

Human rights and Fertility, Human rights and Mortality, Human rights and Morbidity and Health, Human rights and International Migration, Human rights and Refugees, Human rights and Reproductive Health and Abortion.

Text Books

- 1. Chandrasekar, S, 1977. Population and law in India.
- 2. Bankowski, Z, (ed.) 1989, Ethics and Human Values in Family Planning, Geneve: C10MS.
- *Daniel G. Pandian, 1979, "Human Rights Aspects of Population Progeamme" in philip M.Hauser (ed.) World Population and Developments challenges and prospects, syracuse, New York: University Press.

Supplementary Reading

- 1. United Nations, Proclamation of Teheran Report of Conference on Human Rights, 1968, United Nations Publications, Sales No. E.68XIV.
- 2. United Nations, Human Rights: A complications of International Instruments, UN Publications, Sales No. E.78/XIV.
- **3.** Elango.P, 2002, Population and Human Rights Issues , Mayiladuthurai, Vasuki Publications.

Course Outcomes

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

CO1:	Acquire the knowledge of population law and its historical views
CO2:	Impart the knowledge of constitutional provision
CO3:	Bring an understanding of human rights
CO4:	Explain the UN charter of human rights
CO5:	Identify the various farms of human rights

Semester- X 19IPOSC103: COMPUTER APPLICTIONS IN DEMOGRAPHIC ANALYSIS

Credits: 4

Hours: 4

Learning Objective (LO):

The student will be able to

- > Identify the aspects of computer and its applications
- > Explain the internet accessing & browsing
- > Develop techniques in data analysis

UNIT – 1 Introduction

Computer: importance and applications; Organization of a Computer; input, output devices; CPU, Hardware and Software; Computer packages for Demographic Analysis. Mortpack

UNIT – 2 Computer Applications

Introduction to Personal Computer, Operating System - Windows, MS-Word, MS-Excel - Creating a spreadsheet, entering data, editing, preparing data sheet suitable for SPSS, saving and printing, formulae, drawing graphics, preparation of age and sex pyramid using Excel.

UNIT – 3 Internet

Internet - Basic; Accessing & Browsing, E-mail Messaging (sending, receiving) techniques of searching, e. book; POPLINE - Bibliographical database.

UNIT - 4 Techniques of Data Analysis - I

Multivariate analysis in demography - data requirements - Review of univariate and bivariate techniques of data analysis - correlation matrix - Multi Collinearity, Auto Correlation, Homo Scedasticity, Hetero - Scedasticity - Multiple Regression - Dummy Variable Regression - Partial correlation. Test of significance - logistic Regression - Log Linear Models.

UNIT - 5 Techniques of Data Analysis - II

Factor Analysis, Path Analysis - Multiple classifications Analysis - Hazard Model - Introduction - Computer Software for Multivariate Analysis - Introduction and Application.

Text Books

Katzan, Henry, Jr. Introduction to Computer Data Processing, (New York: Vonnstrand, 2000).

Supplementary Reading

Course Outcomes

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

CO1:	Acquire the knowledge of basic aspects of computer and importance
CO2:	Understand the computer application and operating systems.
CO3:	Explore the internet accessing & browsing
CO4:	Bring an understanding of techniques of data analysis
CO5:	Understand the software for multivariate analysis

Semester- X 19IPOSC104: PROJECT AND VIVA-VOCE

Credits: 5 Hours: 5

Learning Objective (LO):

The student will be able to

- > Define Field Study and methods to evaluate a task.
- > : Recognize the conclusions from the findings.
- > Determine to contribute for research

Field Trip Submission of Dissertation

Course Outcomes

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

CO1:	Develop in -depth knowledge of Field Study.
CO2:	Understand the plan and use adequate methods to evaluate a task.
CO3:	Acquire the capability to present and discuss the conclusions from the findings
CO4:	Attain capability to contribute to research

Semester- X 19IPOSE105: ELECTIVE

Credits: 3 Hours: 3

IPDC - 71: RESEARCH METHODOLOGY

UNIT - I

Scientific Research and Hypothesis

Social Research: Meaning, Nature, Scope Assumptions: Utilities of research; Types of research: Pure, Applied and Action Research: Theory and facts; Major steps in Social Research; Formulation of a Research Problem; Framing of Objectives; Hypothesis: concepts, definition, types, sources, characteristics of a usable hypothesis problems in the formulation of hypothesis, Testing of Hypothesis.

UNIT - II

Research Design and Sampling Techniques

Research Design: Meaning, importance and Types: Exploratory, Descriptive and Experimental; Method of investigation: Social Survey method, Experimental methods, Statistical methods, Case study method; Sampling techniques: Meaning, Definition, Need; Types of Probability: Single, Random, Systematic and Stratified, cluster, multistage Non-Probability Sampling: purposive, quota, snow ball etc.

UNIT - III

Data Collection and Scaling Techniques

Data Collection: Type of data: Primary and Secondary; Method of data collection; Observation: Participant and Non-participant, Interview Technique, Focus Group Discussion, Case Study, Tools of data collection: Schedule and Questionnaire; Construction Problems; Advantages and disadvantages; Scaling Techniques: Problems of Measurement; Types of Scales used in Social Research; Organization of Field Survey and Data Collection.

UNIT - IV

Processing and Analysis

Editing, Coding and Tabulation; Analysis of data; The use of Computer Choice of Statistical tools;

UNIT - V

Interpretation and Report Preparation

Interpretation of results and Report Writing; Purpose, Writing style and content; Uses of reference materials; Bibliography and its compilation; Research Proposals preparation; Techniques of Preparation of research article.

REFERENCES:

- 1. Bernard S.Philips, Social Research Strategy and Tactics (New York: Macmillan Publishing Co., Incl 1971)
- 2. *U.V Cocharan, Sampling Techniques (New York: John Wiley and Sons, 1963)
- 3. Eari R.Babbie, The Practice of Social Research (California: Wordsworth Publishing Company Inc. 1979)
- 4. Fred N.Kerlinger, Fundamentals of the Behaviours, Research in Education and Psychological Enquiry (New York: Halt Ranchart and winston, 1965)
- 5. W.J Goode and Hatt, Methods in Social Research (Tokyo, McGraw Hill Book Co., 1952).
- 6. A.Kalpan, The Conduct of Inquiry Methodology for Behavioural Science (Jaipur: Sahhin Publications, 1980).
- 7. *D.Kenneth and Bailey, Methods of Social Research (New York: Longman's Green Co., 1942).
- 8. Lastre Bish, Survey Sampling (New York, John Wiley Inc., 1964).
- 9. G.A Landberg, Social Research: (New York: Longman's Green and Co., 1942).
- 10. Manheim, Sociological Research Philosophy and Methods (Illinois: The Dorsey Press, 1977).
- 11. Michael Armer and Allen D.Grimshow (Eds.), Comparative Social Research Methodological Problem and Strategies (New Delhi: John Wiley and Sons, 1973).
- 12. *Nan Lin, Fundamantals of Social Research (New York: The Free Press, 1976).
- 13. *T.S Wilkinson, and P.L Bhandarkar, Methodology, Techniques of the Social Research (Bombay: Himalaya Publishing House, 1979).
- 14. *P.V Young, Scientific Social Survey and Research (New York: Prentice Hall, 1949).
 - * May be treated as text book.

IPDC - 72: STATISTICAL DEMOGRAPHY

UNIT I- Statistical Demography-Meaning and Scope

Meaning and Scope,

UNIT II- Fertility Analysis

Measures of Fertility:- Crude Birth Rate, General Fertility Rate, Age Specific Fertility Rate, Total Fertility Rate, Gross Reproduction Rate, Net Reproduction Rate, Standardised Fertility Measures, Cohort Measures. Indirect methods for estimating fertility.

UNIT III- Mortality Analysis

Measures of Mortality:- Crude Death Rate, Age Specific Death Rate, Infant Mortality Rate, Standardised death rate, standardised infant mortality rate. Life Table: - Complete and Abridged, Construction of Abridged Life Table. Uses of Life Tables

UNIT IV- Migration Analysis

Measures of Migration: - Crude Migration Rate, Age Specific Migration Rate, Migration Stream, efficiency of migration streams. Indirect estimation of internal migration: - National Growth rate method, vital statistics method, Census survival ratio method and Life table Survival ratio method.

UNIT V- Population Estimation and Projection

Different methods of population estimation and projection: - Mathematical methods, Component method of population projection.

REFERENCES:

- 1. R. Ramakumar. Technical Demography. New Delhi. Wiley Eastern Ltd.
- 2. K.B. Pathak and F. Ram. Techniques of Demographic Analysis. Himalaya Publications.
- 3. Relevant U.N. Manuals
- 4. Keyfitz N. Introduction to Mathematics of Population, London Addison Wesley.

IPDC - 73: DEMOGRAPHY OF AGEING

UNIT I: Basic Aspects

Concepts and measures of ageing. Components of population ageing and their interrelation with age structure; Ageing trends and patterns in India.

UNIT II: Social Aspect of Ageing

Social Status and Roles of Elderly, Family Structure, Intergenerational relations, Kinship and family support, Social Security; Living Arrangements of Elderly, Old Age Homes, Social Networks, and Contribution of elderly; Dependency, Gender Dimensions and Discrimination, Widows, elderly abuse, Vulnerability, Legislations to protect elderly in India.

UNIT III: Economic aspects of Ageing Population

Implications of population ageing on labor force, pressures on public finance - government health expenditure, health insurance and health financing for elderly, health care costs, housing, pension and social security.

UNIT IV: Health Aspects of Ageing

Ageing and life expectancy, pattern of mortality, health adjusted life expectancy; Ageing and burden of chronic diseases, burden of non- communicable diseases, disabilities, mental health problems, cognition and memory loss; Ageing and health risk factors -nutrition, diet and physical activities; Ageing health care utilization, public and private health services availability and accessibility, institutional care, health care costs.

UNIT V: Policies and programmes for Ageing

Pensions, Retirement and Social Security Policies for elderly in Asian Countries. National Policies and programmes for elderly in India.

REFERENCES:

1. Bloom, D.E., D. Canning, et.al., (2002): The Demographic Dividend: A New Perspective on The Economic Consequences of Population Change. Santa Monica, CA, RAND.

- 2. Bose, A.B.(2006). Social Security for the Old. New Delhi: Concept Publishing
- 3. Irudaya Rajan, (2007) Social Security for the Elderly Experiences from South Asia, Routledge, New Delhi.
- 4. Jones, A.M., Rice, N., d'Uva, T.B. and Balia, S. (2007). Applied Health Economics. New York: Routledge.
- 5. Linda J. Waite (ed.) (2004) Aging, Health, and Public Policy: Demographic and Economic Perspectives, Supplement to Population and Development Review
- 6. Mason, A. (2000). Population Change and Economic Development in East Asia: Challenges Met, Opportunities Seized. Stanford: Stanford University Press.
- 7. Prskawetz, Bloom, and Lutz, eds., 2008 Population Aging, Human Capital Accumulation, and Productivity Growth, A Supplement to Population and Development Review.
- 8. United Nations (1994), Ageing and the Family, United Nations, New York
- 10. United Nations (1998), Economic and Social Implications of Population Ageing,

IPDC - 74: PRINCIPLE OF PUBLIC HEALTH

UNIT -I: Mortality and health transitions

Levels and trends in mortality by regions, with special reference to India; age and sex specific mortality with a focus on excess female mortality; differentials by residence and socio-economic factors (occupation, income, education, etc); historic mortality transitions as experienced by developed countries (Europe); Factors responsible for mortality transition; Prospects for transition in developing countries including India; Relationship between mortality and health transition.

UNIT -II: Theories of Mortality and Child survival framework

Theories: Benjamin Gompertz law, Makeham's law, Perks law and Beard's law.

Estimation of Child Mortality rates using data classified by age and duration of marriage. Mahadevan's conceptual model on mortality; Mosely and Chan's Conceptual Model on the Child Survival.

UNIT -III: Causes of death

Importance of causes of death statistics; definition and sources of causes of death statistics; a brief history of the International statistical classification of diseases, injuries and causes of death (ICD); an overview of ICD – X (1990); global leading causes of death (with a focus on Asia and India); cause of death statistics in India (RG: Rural and MCCD); distribution of deaths by main causes by age, development, life expectancy (UN).

UNIT -IV: Morbidity and Disease Burden

Need and importance of the morbidity study; sources of morbidity data; concepts and definitions of health and morbidity; conditions as proposed by WHO and other social scientists.

Need for morbidity indices; various measures of morbidity: incidence and prevalence rates; interrelationships between measures of morbidity; other measures related to working day loss etc.

Burden of Diseases: Need for the study; basic concepts; measurement and current global scenario.

UNIT -V: Public Health and Epidemiology

Basic concepts of community health; principles of Epidemiology- basic concepts and definitions; types of Epidemiology: descriptive and analytical; epidemiology of communicable and non-communicable diseases; Disease cycle, Spectrum of disease, Levels of prevention, Sources of infection and modes of transmission; Pathogenesis of causes of death (sexually transmitted Diseases); nutrition and health, environment and health; occupation and health.

REFERENCES:

- 1. Administrative Staff College of India (2002): A comparative assessment of the Burden of Disease in selected states: Methodology, results, policy and program intervention. Research Paper No. 2.
- 2. Caldwell, J, Sally Findley, Pat Caldwell and Gigi Santow (1990): What we know about health transition: The cultural, social and behavioural determinants of health. The proceedings of an international workshop, Vol.1&2, ANU, Canberra, Health Transition Centre.
- 3. Mosley, W. H. and L. C. Chen (1984): Analytical framework for the study of child survival in developing countries, Population and Development Review 10 (Supplementary Copy).
- 4. Murray, C. J. L., (1994): Quantifying the Burden of Disease: The Technical Basis for Disability Adjusted Life Years, Bulletin of the WHO, Vol. 72(3), pp.429-445.
- 5. Park J.E, and Park.K, Essentials of Community Health Nursing (Second Edition), Jabalpur: M/s Banarsidas Bhanot, 1995. (For Epidemiology discussion).
- 6. Park, J.E. and K. Park (1989): Text Book of Preventive and Social Medicine (Twelfth Edition), M/S Banarsidas Bhanot Publishers, Jabalpur (Chapters 2 & 3).
- 7. *Pathack K.B., and Fauzdar Ram., Techniques of Demographic Analysis. Bombay: Himalaya Publishing House, 1992
- 8. Pugh, Thomas F. and Brian MacMohan (1970): Epidemiology: Principles and Methods, Little Brown Publishers, Boston (Chapters 1 through 5).
- 9. Office of the Registrar General of India (2007). Medical Certification of Cause of Death 2001. Ministry of Home Affairs, New Delhi.
- 10. Omran, A. R. (1971): The epidemiologic transition: a theory of the epidemiology of population change, Milbank Memorial Fund Quarterly, Vol. XLIX, pp. 509-538.
- 11. Ram, F. and K.B. Pathak (1998): Techniques of Demographic Analysis,2nd Ed, Himalaya Publishing house, Bombay.
- 12. Shryock, Henry S. Jacob Siegel and Associates (1980): The Methods and Materials of Demography Vol. 2, US Department of Commerce. Washington DC, pp. 389-393,
- 13. United Nations (1973): The Determinants and Consequences of Population Trends, Vol. I, Population Studies No.50, Dept. of Economic and Social Affairs, United Nations, New York (Chapter 5).
- 14. United Nations (1999): Health and Mortality Issues of Global Concern, Proceeding of the Symposium on Health and Mortality, Brussels, 19-22 November 1997.
- 15. WHO (1992): International Statistical Classification of Diseases and related Health Problems, Tenth Revision, Vol. 1, Geneva.
- 16. Weeks, John R. 2005. Population: An Investigation to concepts and Issues. 9th Edition, Wadsworth Publishing Co. CA.
- 17. Yaukey, David. 1985. Demography: The study of Human population. St. Martins, New York.

IPDC - 75: ELECTIVE

IPDC - 81: BUSINESS DEMOGRAPHY

UNIT – I: Introduction

Meaning, Scope and Nature, Relevance of Population Dynamics in business studies and marketing; Population as producer and consumer; Market for consumer goods and labour market; Population Dynamics and its implications on sizes and composition of business organizations.

UNIT – II: Demographic Database

Population size, Growth rate, Sex ratio, Composition of population by age, Educational levels, Occupational categories. Household size and composition; Relevance of these factors for marketing different products.

UNIT – III: Business Organization

Evolution, Role and functions; Marketing; Different levels; Types; Population factor in marketing activity, Life style and consumer behavior, marketing strategies.

UNIT - IV: Market Analysis

Spatial distribution of population and market location; Geo-Demographic System; Geographic methods of market analysis; Size Analysis, process - product planning & market segmentation.

UNIT - V: Marketing Research Process

Market forecast; Population projection total and sub-national; Suitable methods; Market forecast for products and activities related to children, aged and Gender specific needs.

REFERENCES:

- *David S., Lnck, Ronald S. Rubin, Marketing Research, Prentice Hall of India, New Delhi, 1987.
- Thomas C.Kinnear, James R. Taylor, Marketing Research, John Wiley & Sons, Inc. New Delhi
- 3. *Rajendra Paul, Business Communication, Sultan Chand, New Delhi.
- 4. *Bhebnde, AshaA., and Tara Kanitkar, Principles of Population studies, 13th Edition, (Bombay: Himalaya Publishing House, 2000).
- 5. United Nations, The Determinants and Consequences of Population Trends, Vol. I (New York: Dept. of Economic and Social Affairs, 1973).
 - * May be treated as text book.

IPDC - 82: HUMAN RESOURCE MANAGEMENT AND DEVELOPMENT

Objectives

To teach the students the importance of human resources in the developmental process.

UNIT-I

Human Resource Management - Concept, definition, scope and functions; human resource planning. Need and scope for human resource planning, recruitment and selection.

UNIT-II

Communication and Motivation - Communication Techniques and Barriers; Motivation theories - Maslow's Hierarchy of Needs, Herzberg's Two factor model, Alderfer's E-R-G Model.

UNIT-III

Training and Development - Training and Personnel Development, training policies. Wage structure - Wages, wage fixation, allowances, bonus fixation procedures.

UNIT-IV

Grievances Handling - Grievance procedure, enquiries and disciplinary action, industrial standing orders.

UNIT-V

Performance Appraisal - Personnel records, performance appraisal and counselling; Personnel Problems - Health, absenteeism, productivity.

TEXT BOOKS

- 1. Aswathappa, K. Human Resource and Personnel Management.New Delhi: Tata McGraw-Hill, 2000.
- 2. Yoder, Dale. Personnel Management and Industrial Relations. New Delhi: Prentice Hall of India. 1975.

REFERENCES:

1. John, W. Newstran and Keith Davis. Organizational Behaviour at Work - Organizational Behaviour. New Delhi: McGraw-Hill, 1993.

- 2. Miner, J.B. and Miner, M.G. Personnel and Industrial Relations. New Delhi: Macmillan, 1985.
- 3. Terry, L. Leap. Michael D.Crino. Personnel/Human Resource Management. New Delhi: Macmillan & Co., 1990.
- 4. William, P. Anthony et. al. Strategic Human Resource Management. New Delhi: Dryden Press, 1993.
- 5. Venkataratnam, C.S. and Srivastava, B.K. Personnel Management and Human Resources. New Delhi: Tata McGraw-Hill Publishing Co., 1991

IPDC - 83: ADVANCES STUDIES IN MORTALITY & EPIDEMIOLOGY

UNIT – I: Mortality

Levels and trends in mortality by regions, with special reference to India; age and sex specific mortality with a focus on excess female mortality; differentials by residence and socio-economic factors (occupation, income, education, etc); mortality transitions as experienced by developed countries (Europe); Factors responsible for mortality transition; Prospects for transition in developing countries including India.

UNIT - II: Theories of Mortality

Theories: Benjamin Gompertz law, Makeham's law, Perks law and Beard's law.
Estimation of Child Mortality rates using data classified by age and duration of marriage.
Mahadevan's conceptual model on mortality; Mosely and Chan's Conceptual Model on the Child Survival.

UNIT - III: Causes of death

Importance of causes of death statistics; definition and sources of causes of death statistics; a brief history of the International statistical classification of diseases, injuries and causes of death (ICD); an overview of ICD – X (1990); global leading causes of death (with a focus on Asia and India); cause of death statistics in India (RG: Rural and MCCD); distribution of deaths by main causes by age, development, life expectancy (UN).

UNIT – IV: Morbidity

Need and importance of the morbidity study; sources of morbidity data; concepts and definitions of health and morbidity; conditions as proposed by WHO and other social scientists.

Need for morbidity indices; various measures of morbidity: incidence and prevalence rates.

UNIT - V: Epidemiology

Principles of Epidemiology- basic concepts and definitions; types of Epidemiology: descriptive and analytical; epidemiology of communicable and non-communicable diseases; Disease cycle, Spectrum of disease, Levels of prevention, Sources of infection and modes of transmission; Pathogenesis of causes of death (sexually transmitted Diseases).

- Administrative Staff College of India (2002): A comparative assessment of the Burden of Disease in selected states: Methodology, results, policy and program intervention. Research Paper No. 2.
- 2. Caldwell, J, Sally Findley, Pat Caldwell and Gigi Santow (1990): What we know about health transition: The cultural, social and behavioural determinants of health. The proceedings of an international workshop, Vol.1&2, ANU, Canberra, Health Transition Centre.
- 3. Mosley, W. H. and L. C. Chen (1984): Analytical framework for the study of child survival in developing countries, Population and Development Review 10 (Supplementary Copy).
- 4. Murray, C. J. L., (1994): Quantifying the Burden of Disease: The Technical Basis for Disability Adjusted Life Years, Bulletin of the WHO, Vol. 72(3), pp.429-445.
- 5. Park J.E, and Park.K, Essentials of Community Health Nursing (Second Edition), Jabalpur: M/s Banarsidas Bhanot, 1995. (For Epidemiology discussion).
- 6. Park, J.E. and K. Park (1989): Text Book of Preventive and Social Medicine (Twelfth Edition), M/S Banarsidas Bhanot Publishers, Jabalpur (Chapters 2 & 3).
- 7. *Pathack K.B., and Fauzdar Ram., Techniques of Demographic Analysis. Bombay: Himalaya Publishing House, 1992
- 8. Pugh, Thomas F. and Brian MacMohan (1970): Epidemiology: Principles and Methods, Little Brown Publishers, Boston (Chapters 1 through 5).
- 9. Office of the Registrar General of India (2007). Medical Certification of Cause of Death 2001. Ministry of Home Affairs, New Delhi.
- 10. Omran, A. R. (1971): The epidemiologic transition: a theory of the epidemiology of population change, Milbank Memorial Fund Quarterly, Vol. XLIX, pp. 509-538.
- 11. Ram, F. and K.B. Pathak (1998): Techniques of Demographic Analysis,2nd Ed, Himalaya Publishing house, Bombay.
- 12. Shryock, Henry S. Jacob Siegel and Associates (1980): The Methods and Materials of Demography Vol. 2, US Department of Commerce. Washington DC, pp. 389-393,
- 13. United Nations (1973): The Determinants and Consequences of Population Trends, Vol. I, Population Studies No.50, Dept. of Economic and Social Affairs, United Nations, New York (Chapter 5).
- 14. United Nations (1999): Health and Mortality Issues of Global Concern, Proceeding of the Symposium on Health and Mortality, Brussels, 19-22 November 1997.
- 15. WHO (1992): International Statistical Classification of Diseases and related Health Problems, Tenth Revision, Vol. 1, Geneva.
- 16. Weeks, John R. 2005. Population: An Investigation to concepts and Issues. 9th Edition, Wadsworth Publishing Co. CA.
- 17. Yaukey, David. 1985. Demography: The study of Human population. St. Martins, New York.

IPDC - 84: GENDER ISSUES AND WOMEN EMPOWERMENT

UNIT I: Gender Issues

Difference between sex and gender, Importance of the study, definition of concepts (gender, unequal gender relations, gender equity, gender disparities, gender inequalities, gender main streaming, gender sensitive planning and gender balance).

Patriarchy and Matriarchy, Kinship Structure and gender roles; Gender stratification in traditional and modern societies; Theories of feminism.

UNIT II: Autonomy, Empowerment and Status of Women

Definition of concepts, measurement, various indicators; Status of Women and Population Dynamics: Inter-linkages; Gender Sensitive Development; Gender and Social Institutions in India; Marriage customs and patterns, dowry system, segregation and seclusion of women; Purdha system; Sex preference, Implications for sex ratio trends and patterns in India, sex selective abortion.

UNIT III: Gender inequalities

Gender inequalities in education, employment, decision-making, mortality (children, adults, and aged), morbidity, nutrition, and health care utilization;

Implications of gender inequalities for development - equal access to and utilization of services; equal participation in social development, equal access and control over capital for economic development; equal participation in policy and decision making process; equal distribution of political power.

UNIT IV: Gender Equity Approach

Right-based approach to gender equity and Reproductive Health and HIV/AIDS; Human rights related to gender, reproductive health rights; Gender as a key determinant of vulnerability to poverty, gender and HIV/AIDS vulnerability and its demographic impact;

Gender and mass media: Language, image and portrayal of women in different mass media and the changes over the time

UNIT V: Gender based violence

Different forms of gender-based violence during life time; Gender mainstreaming, gender sensitive financing and budgeting; National and international programme, policies and laws favoring empowerment of women. National Policy of Women Empowerment.

- 1. Agnes, Flavia. (2000). Law and gender inequalities: the policies of women's right in India. Oxford, New Delhi.
- 2. Anker, R.(1997). Gender and Jobs: Sex Segregation of Occupations in the World, ILO, Geneva.

- 3. Basu, Alaka M., (1992): Culture, The Status of Women and Demographic Behaviour, Oxford University, New York.
- 4. Bhasin K. (2000). Understanding Gender, Kali for Women Publishers, New Delhi.
- 5. Das Gupta, Monica, 1987. Selective discrimination against female children in rural Punjab, India. Population and Development Review, 13(1): 77-100.
- 6. Dyson, Tim and Mick Moore, (1983). "On Kinship structure, female autonomy, and demographic behaviour in India", Population and Development Review vol. 9(1), pp. 35-60.
- 7. Ellsberg Mary and Heise Lori L. (2005) Researching violence against women: A practical guide for researchers and activists. WHO and Path, Washington D.C.
- 8. Folbre, Nancy. (1992). Improper arts: Sex in classical political economy. Population and Development Review. 18(1): 105-112.
- 9. Gita Sen, Adreinne Germain and Lincoln C. Chen, (Eds.), (1994): Population Policies Reconsidered: Health and Empowerment and Rights, Harvard University Press, Harvard.
- 10. Jeffery Patricia and R. Jeffery. 1997. Population Gender and Politics: Demographic change in rural north India. Cambridge University, Cambridge.
- 11. Jejeebhoy S. 1996. Women's Education, Autonomy and Reproductive Behavior: Assessing what we have learned. East West Centre, Hawaii.
- 12. Hess, B.B. and M.M. Ferree. (1987). Analyzing Gender: A Handbook of Social Science Research. Sage Publication, London.
- 13. Reeves Hazel and Baden Sally (2000): Gender and Development: Concepts and Definitions, Report No. 55, Bridge (development- gender) Institute of Development Studies, University of Sussex, Brighton BN1 9RE, UK.
- 14. Sonya, Andermahr, Lovell Terry and Wolkowitz, Carol, (1997): A Glossary of Feminist Theory, Arnold-Hodder Headline Group, London.
- 15. Miller, Barbara, D.(ed) (1993) Sex and Gender Hierarchies, Cambridge University Press, New York.
- 16. United Nation. 2001. Population, Gender and Development: A Concise Report. UN, Economic and Social Affairs (Dept. of), New York
- 17. World Health Organization. (1998). Gender and Health. Technical paper WHO/FRH/WHD/98. (Website: www.who.int)
- 18. World Bank. (1991). Gender and Poverty in India. World Bank, Washington.
- 19. World Health Organization (2003): Comparative Evaluation of Indicators for Gender Equity and Health, Women and Health Programme, Centre for Health Development, Kobe, Japan.
- 20. William Joan. 1989. Deconstructing Gender, 87 Michigan L Rev. 797. Law Journal Article

IPDC - 85: ELECTIVE

IPDC - 91: BIOSTATISTICS

UNIT I:

Introduction and Measuring Health and Disease

Definition of epidemiology, historical context and contributions; Incidence, prevalence rates, attack rates, risk rates, odds ratios, absolute and relative risk.

UNIT II:

Issues and Epidemiological Study Designs

Ecological, Cross-Sectional, Case-Control, Cohort Studies, Randomized Intervention Studies. Association, Causality, Causal inference, Errors, Bias, Validity, Generalizability, Confounding, Exposure Association.

UNIT III:

Clinical Trails

Phase I, II, III, and IV trails; Randomized Control trails; Ethical Issues

UNIT IV:

Modeling of Infectious Disease Process

Infectious diseases of human – malaria, tuberculosis, Hepatitis, HIV/AIDs; Deterministic modeling of infectious diseases

UNIT V:

Probit and Survival Analysis

Concepts and definition; Survival analysis - Kaplan-Meir, Life table method, Mantel-Haensal, method, Cox-proportional hazards method. Dose respose analysis.

REFERENCES:

1. Beaglehole, R., R. Bonita, and T. Kjellstrom, (1993). Basic Epidemiology, World Health Organization.

- 2. Breslow, N.E. and N.E. Day, (1980). Statistical Methods in Cancer Research, Volume I. Lyon: International Agency for Research on Cancer
- 3. Breslow, N.E. & N.E. Day, (1987). Statistical Methods in Cancer Research, Volume II. Lyon: International Agency for Research on Cancer.
- 4. Kirkwood,B. and J. Sterne (2003). Essential Medical Statistics, 2nd edition, Blackwell Science Ltd.
- 5. Finney, D.J., (1971). Probit Analysis, Cambridge University.
- 6. Ghys, P.D., T. Brown, N.C. Grassly, G. Garnett, K.A. Stanecki, J. Stover and N Walker, (2004). The UNAIDS Estimation and Projection Package: A software package to estimate and project national HIV epidemics, Sexually Transmitted Infections, 80: i5-i9.
- 7. Lee Elisa, T., (1992). Statistical Methods for Survival Data Analysis, 2nd edition, John wiley & Sons, New York.
- 8. Mould, Richard, F., (2005). Introductory Medical Statistics, 3rd edition, Overseas Press, New Delhi.
- 9. Parmar, Mahesh K.B. and Machin David, (1995). Survival Analysis: A Statistical Approach: John-wiley & sons, New York.
- 10. Pocock, Stuart J., (1983). Clinical Trials: A practical approach, John Wiley & Sons.
- 11. Rockett, R.H. Ian, (1999). Population and Health: An Introduction to Epidemiology, Second Edition, Population Bulletin, Vol. 54(4), A Publication of the Population Reference Bureau, Washington.
- 12. Rosner, Bernard, (2000): Fundamentals of Bio-statistics, Duxbury Thomson Learning.
- 13. Thomas, C. Timmreck, (1998). An Introduction to Epidemiology, Jones and Barlett Publishers International, London.
- 14. Trottier, Helen and Philippe, Pierre, (2001). Deterministic modeling of infectious Diseases: Theory and methods, The International Journal of infectious Diseases, Vol. 1(2).
- 15. Walker, N., J. Stover, K.A. Stanecki, A Zaniewski, N. Grassly, J Garcia-Calleja and P.D. Ghys, (2004). The workbook approach to making estimates and projecting future scenarios of HIV/AIDS in countries with low level and concentrated epidemics, Sexually Transmitted Infections, 80: i10-i13.

IPDC - 92: TAMIL NADU DEMOGRAPHY

UNIT - I

Population Situation

Tamil Nadu and Tamil Culture; Population Data availability and their quality. History of population growth, present situation and future prospects; Demographic profile of Tamil Nadu.

UNIT - II

Mortality and Health Transition

Mortality levels, trends and differentials, in Tamil Nadu; sex, age patterns of mortality. Infant and child mortality - levels and trends; causes of death; Incidence of female feticide and infanticide Health situation, Health policies and programmes.

UNIT - III

Fertility and Family Welfare

Fertility levels, trends and differentials in Tamil Nadu state, customs and practices affecting fertility, value of children and women status, factors responsible for the recent decline in birth rates, Family welfare programme performance, Practices related to age at marriage and MTP, Birth Averted due to family welfare programme.

UNIT - IV

Migration and Urbanization

Migration transition in Tamil Nadu; inter and intra-state migration; inter and intra-district migration factors; urbanization in Tamil Nadu: Levels and trends Problems and policies; problems of slums and related policies.

UNIT - V

Socio-Economic Status and Policies & Programmes

Per Capita Income and Poverty - Trends policies and programmes; Literacy and Education, Trends policies and Programmes; Women's status and policies and programmes; Economic activity rates - trends, occupational categories and policies programmes; Nutritional Status; Nutrition Programmes; Suppliemntry Nutrition Programme: Applied Nutrition Programme, Chief Ministers Noon-Meal Programme, ICDS, Anganwadi and Balwadi Centres etc.

REFERENCES:

1. IIPS & ORG Macro, 2002, National Family Health Survey (NFHS-2), India, 1998-99: Tamil Nadu, Mumbai:IIPS.

- 2. MIDS, 1988, Tamil Nadu Economy: performance and issues, New Delhi: oxford and IBH publishing co., pvt Ltd. on Human Development Report, India for various year.
- 3. Elango.P, 2002, Demographic Transition in Tamil Nadu, Mayiladuthurai, Vasuki Publications.
- 4. Elango, P., 1983, Population Growth and Socio-Economic Development in Tamil Nadu., M.Phil Thesis, (Unpublished).
- 5. *Mahadevan.K., M.Sumangala, 1997, Welfare Model of Development and Demographic Transition Delhi: B.R. Publishing Corporation, 1977.
- 6. *Tamil Nadu Government, 1995-96, Policy Note on Medical and Public Health, Chennai: Government of Tamil Nadu.
- 7. *Tamil Nadu Government,1995-96, Policy note on Education, Chennai: Government of Tamil Nadu and other Reports on Social Welfare.
- 8. Venketaragan.L.B., and P.Elango, 1992, Baseline Survey of Tribals in Kalrayan Hills, DANIDA Health Care Report, Unpublished.

^{*} May be treated as text book.

IPDC - 93: PRACTICALS - III

Overall Objectives: To Train in various techniques of demographic tools and procedures and develop skills to apply them in appropriate situation.

- 1. Technique of construction of life table from age specific death rates.
- 2. Construction of Life table on the basis of single Census and two censuses;
- 3. Computation of Intrinsic Rate of Natural Increase and Construction of stable age distribution;
- 4. Estimation of vital rates through stable Population technique.
- 5. Standardization of birth rates and death rates and infant mortality rates.
- 6. Mortality estimates from children ever born and children surviving.
- 7. Indirect measures of internal migration: Natural growth rate method and Life Table and census survival ratio method.
- 8. Computation of population growth rates and fitting population growth curves: Linear, Geometric, exponential and calculation of doubling time and location of events in time.
- 9. Population projection under mathematical method
- 10. Population projection under component method

IPDC - 94: FIELD WORK: - COMMUNITY OUTREACH ACTIVITIES

Objectives:

- 1. To help understand the demographic, souci-economic, health, nutritional, habitat status of rural areas.
- 2. Providing practical training in designing, conducting and analyzing survey data and
- 3. To formulate and provide community education on various issues.

Tasks:

- 1. To plan and conduct a census survey of all the households in one Panchayat ward, demographic, souci-economic, health, nutritional and habitat characteristics of the households and felt needs of the community.
- 2. To analyse and interpret the data.
- 3. To formulate educational themes for the community.
- 4. To derive policy implications and provide a link between the community and services providers.

IPDC - 95: ELECTIVE

ISSC-96: Soft Skills

Objective:

To train students in soft skills in order to enable them to be professionally competent.

UNIT -I: Soft Skills and Personality Development

Soft Skills: Meaning and Importance - Hard Skills versus Soft Skills - Self Concept: Self Awareness, Self Development and Self Realisation - Power of Positive Attitude - Etiquette and Manners.

Listening: Types of Listening, Effective Listening and Barriers to Listening – Assertive Communication.

UNIT -II: Communication Skills

Oral Communication: Forms, Types of Speeches and Public Speaking – Presentation: Elements of Effective Presentation and Use of Visual Aids in Presentation.

Written Communication: Strategies of Writing – Business Letters: Form, Structure and Formats – Types of Business Letters – Memos – Agenda and Minutes.

Non-verbal Communication: Body Language and Proxemics.

UNIT -III: Interpersonal Skills

Interpersonal Skills: Relationship Development and Maintenance and Transactional Analysis. Conflict Resolution Skills: Levels of Conflict and Handling Conflict - Persuasion – Empathy – Managing Emotions – Negotiation: Types, Stages and Skills – Counselling Skills.

UNIT -IV: Employability Skills

Goal Setting – Career Planning – Corporate Skills – Group Discussion – Interview Skills – Types of Interview - Email Writing – Job Application – Cover Letter - Resume Preparation.

UNIT -V: Professional Skills

Decision Making Skills – Problem Solving – Emotional Intelligence – Team Building Skills – Team Spirit – Time Management – Stress Management: Resolving Techniques.

REFERENCES:

1. Ghosh, B.N. Managing Soft Skills for Personality Development. (Ed). New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.

- 2. Krishna Mohan and Meera Banerji. Developing Communication Skills. (2nd Edition). New Delhi: MacMillan Publishers India Ltd., 2009.
- 3. Neera Jain and Shoma Mukherji. Effective Business Communication. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.
- 4. Rao, M.S. Soft Skills Enhancing Employability: Connecting Campus with Cororate. New Delhi: I.K International Publishing House Pvt. Ltd., 2011.
- 5. Ashraf Rizwi, M. Effective Technical Communication. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2010.
- 6. Bretag Tracey, Crossman Joanna and Bordia Sarbari. Communication Skills. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.

IPDC - 101: SOCIO-ECONOMIC AND DEMOGRAPHIC IMPLICATIONS OF HIV/AIDS

UNIT - I

Reproductive Health: Concepts, Components and reproductive health rights. Socio and cultural determinants of Reproductive Health

UNIT - II

HIV/AIDS: Definition, importance of study; Problem statement: At global and National level, Estimation of HIV infection among adult population; Mode of transfusion: Sexual transmission, Blood contact, maternal – foetal transmission, injecting drugs

UNIT - III

Diagnosis of AIDS: Clinical and Laboratory diagnosis; Prevention of HIV/AIDS: IEC strategy, Targeted intervention, Care of HIV/AIDs patients

UNIT - IV

HIV Risk and vulnerability: Risk and vulnerability, High risk situation, behaviour; Health and demographic effects, Social and economic impact; Living with HIV/AIDS: Nutritional care and Support of people living with HIV/AIDS

UNIT - V

Agencies involved in HIV/AIDS programme: Governmental and Non-Governmental Organisations, Role of International originations in HIV/AIDS programme

REFERENCES:

- 1. UNAIDS 2008 Report of the global AIDS epidemic
- 2. WHO/UNAIDS/UNICEF (2009) 'towards universal access: scaling up priority HIV/AIDS interventions in the health sector'
- 3. Park and Park
- 4. Kiran Prasad and Somayajulu (edited) 2008. HIV and AIDS, Vulnerability of Women Asia and Africa, the Women Press, New Delhi
- 5.* J.E. Park and K. Park, Preventive and Social Medicine (India: Banneridas Bhanat and Company Limited, India 1997.

IPDC - 102: POPULATION LAW AND HUMAN RIGHTS

UNIT – I: Population Law

Meaning, definition, nature, and its scope; Relevance of legal studies to population dynamics; Need for population law; Historical and contemporary views; population law: World and in India.

UNIT – II: Constitutional provisions

Constitutional provisions relating to population issues; legislations relating to population issues, Law-making bodies: Parliament and legislative Assembly; functions and obligations.

UNIT – III: Human Rights

Meaning, definition, nature and scope; Basic principles, Human rights and population dynamics; Historical and contemporary views on Human rights;

UNIT – IV: UN and Human Rights

UN Charter of Human rights; Human rights standard setting; International bodies; Associations and Human rights; Rights and Duties; Citizen, Child, Youth, Adolescent, Adult, Married and the aged; Quality of life; Gender issues.

UNIT – V: Human Rights and Population Dynamics

Human rights and Fertility, Human rights and Mortality, Human rights and Morbidity and Health, Human rights and International Migration, Human rights and Refugees, Human rights and Reproductive Health and Abortion.

REFERENCES:

- 1. *Chandrasekar, S, 1977. Population and law in India.
- 2. Bankowski, Z, (ed.) 1989, Ethics and Human Values in Family Planning, Geneve: C10MS.
- 3. *Daniel G. Pandian, 1979, "Human Rights Aspects of Population Progeamme" in philip M.Hauser (ed.) World Population and Developments challenges and prospects, syracuse, New York: University Press.
- 4. United Nations, Proclamation of Teheran Report of Conference on Human Rights, 1968, United Nations Publications, Sales No. E.68XIV.
- 5. United Nations, Human Rights: A complications of International Instruments, UN Publications, Sales No. E.78/XIV.
- 6. *Elango.P, 2002, Population and Human Rights Issues , Mayiladuthurai, Vasuki Publications.
 - * May be treated as text book.

IPDC - 103: COMPUTER APPLICTION IN DEMOGRAPHIC ANALYSIS

UNIT – I Introduction

Computer: importance and applications; Organization of a Computer; input, output devices; CPU, Hardware and Software; Computer packages for Demographic Analysis. Mortpack

UNIT – II Computer Applications

Introduction to Personal Computer, Operating System - Windows, MS-Word, MS-Excel - Creating a spreadsheet, entering data, editing, preparing data sheet suitable for SPSS, saving and printing, formulae, drawing graphics, preparation of age and sex pyramid using Excel.

UNIT - III Internet

Internet - Basic; Accessing & Browsing, E-mail Messaging (sending, receiving) techniques of searching, e.book; POPLINE - Bibliographical database.

UNIT - IV

Techniques of Data Analysis - I

Multivariate analysis in demography - data requirements - Review of univariate and bivariate techniques of data analysis - correlation matrix - Multi Collinearity, Auto Correlation, Homo Scedasticity, Hetero - Scedasticity - Multiple Regression - Dummy Variable Regression - Partial correlation. Test of significance - logistic Regression - Log Linear Models.

UNIT - V

Techniques of Data Analysis - II

Factor Analysis, Path Analysis - Multiple classifications Analysis - Hazard Model - Introduction - Computer Software for Multivariate Analysis - Introduction and Application.

REFERENCES:

Katzan, Henry, Jr. Introduction to Computer Data Processing, (New York: Vonnstrand, 2000).

IPDC - 104: PROJECT and VIVA-VOCE

ELECTIVES OFFERED

19IPOSX75 POPULATION AND HEALTH RESEARCH (3 CREDITS)

UNIT-I: Social Research

Scientific Method; Types of research: Pure, Applied and Action Research; Theory and facts; Major steps in Social Research; Selection of research problems, Formulation of Hypothesis.

UNIT-II: Research Design and Sampling

Research Design; Sampling techniques: Data collection: methods and tools; data processing, Scaling techniques, qualitative and quantitative methods

UNIT-III: Interpretation and Report Writing

Interpretation of results and report writing; Purpose of a Report, Writing style and content; Uses of reference materials; Bibliography and its compilation; Research Proposals preparation; Preparation of Manuscripts for a Scientific Journal.

UNIT-4: Integrating theory and methods in health research

A Theoretical basis for research on health; Integrating theory and Methods in population health research; age, period and cohort analyses of health-related behaviour; Intraindividual variability: Methodological issues for population health research

UNIT-V: Index scales and statistical modeling

A methodological approach for assessing the stability of variables used in population research on health; validation of index scales for analysis of survey data: the symptom index; graphical interaction models: a new approach for statistical modeling.

REFERENCES:

- 1. Bernard S.Philips, Social Research Strategy and Tactics (New York: Macmillan Publishing Co., Incl 1971)
- 2. U.V Cocharan, Sampling Techniques (New York: John Wiley and Sons, 1963)
- 3. Eari R.Babbie, The Practice of social Research (California: Wordswoth Publishing Company Inc. 1979)
- 4. Fred N. Kerlinger, Fundamentals of the Behaviours, Research in Education and Psychological Enquiry (New York: Halt Ranchart and Winston, 1965)
- 5. W.J Goode and Hatt, Methods in Social Research (Tokyo, McGraw Hill Book Co., 1952)
- 6. T.S. Wilkinson, and P.L Bhandarkar, Methodology, Techniques of the Social Research (Bombay: Himalaya Publishing House, 1979)
- 7. P.V Young, Scientific Social Survey and Research (New York: Prentice Hall, 1949)
- 8. 8. Dean Kathryn (ed.), Population Health Research: Linking Theory and methods, New Delhi: Sage Publications, 1993.

19IPOSX85 POPULATION DYNAMICS (3 CREDITS)

UNIT-I: Demography

Nature and Scope, Interdisciplinary Nature; Determinants of population change; sources of demographic data: Population Census, Registration systems, sample surveys, Secondary sources; population growth, population structure and characteristics in India.

UNIT-II: Fertility

Fertility, concepts, Basic measures of fertility. Fertility trends and differentials in India. Factors affecting fertility; Davis-Blake and Bongarts models; Theories of fertility: Threshold hypothesis and Social Capillarity theory and Theory of Demographic Transition;

UNIT-III: Mortality

Mortality: concepts, factors, basic measures of mortality; infant mortality: meaning, measures, factors affecting infant mortality; Mortality trends and differentials in India; Life Table: meaning, functions, and uses.

UNIT-IV: Migration and Urbanization

Migration: Meaning, concepts, types of Migration, migration streams, characteristics of migrants, trends in internal migration; Migration theories,; urbanization: concepts, measures; levels, trends and differentials; problems of over urbanization;

UNIT-V: Population Policies and Programmes

Population Policy: goals and objectives; types: Population responsive policies; mortality, migration and fertility influencing policies: Pro-natalist and anti-natalist policies: direct and indirect policies; Population policy in India; Family Welfare Programmes: approaches, targets and achievements; Reproductive and Child health components.

REFERENCES:

- 1. Agarwala S.N India's Population Problems, (New Delhi: Tata McGraw Hill, 1981).
- 2. *Bhen0de Asha A. and Tara kanitkar, Principles of Population Studies, (Bombay: Himalaya Publishing House, 1978)
- 3. *Basker D. Misra, The study of Population (New Delhi: South Asian Publishers (P) Ltd., 1980)
- 4. Chandrasekhar S., Infant Mortality, Population Growth and Family Planning in India: (London: George Allen and Unwin, 1972)
- 5. *Charles Nam, Population and Society (Boston: Houghton Mifflin Co., 1969) (New York: John Wiley and Sons, 1958)
- 6. *Henry Shnycok, et. al., The Methods Material of Demography (Washington: Bureau of Census, 1971 Vols,. I and II
- 7. Srivastava, O.C., A Test Book of Demography (Delhi: Vikas Publishing House Pvt. Ltd. 1982)
- 8. United Nations, The Determinants and Consequences of Population Trends (New York: Department of Economics and Social Affairs, 1973)
- 9. -----, ESCAP, Population of India: Country Monograph Series Number 10, (New York: United Nations, 1982).
- 10. Warren Thompson, and David Lewis, Population Problems (New York: Macmillan, 1968)

19IPOSX95 HEALTH PLANNING AND POLICY (3 CREDIT)

UNIT – I: Health Situation

Historical review of origin of various branches of public Health, Health services in India, Indicators of Health Morbidity & Mortality, Health in the context of development and Five Year Plan.

UNIT – II: Health Planning

Planning process: Decision making, qualitative and quantitative decisions, Policies Strategies, budget: Health planning in India, National Health Policy, goals, objectives and target setting, assessment of Health situation, Resource analysis, priorities, design of programme.

UNIT – III: Health Organization

Design, Structure, Principles, formal/informal types, Coordination within and outside. Span of control, centralization and decentralization, Staffing, job description, outlining role and responsibilities, Training, Placement and Evaluation.

UNIT - IV: Health Care Service

Preventive, promotive and curative services: Approaches adults in health care service: Risk and Epidemiological Health care services for Mother, adults and aged population & Children, industrial workers, Health legislation and social welfare.

UNIT – V: Health Programmes

National Health Programmes – National leprosy eradication programme, National Tuberculosis Control Programme, National Malaria Eradication Programme, Universal Immunization Programme, National Programme for control and prevention of blindness, National programme for prevention of AIDS, National Filariasis Control Programme, STD control Programmes. National programme for control of Iodine Deficiency Diseases, National Family Welfare Programme.

Non-Governmental organization, Indian Red Cross, DANIDA Tuberculosis Association in India. International health agencies – UNICEF, WHO, USAID, Rock Feller & Ford Foundation. **REFERENCES:**

- *Dutt P.R., rural Health Service in India, Primary Health Services (H.E.P, 1965).
- *Ghosh B.N. Hygiene and public Health, Scientific Publishing Company, 1972.
- *Park J.E., Park K, Preventive and Social Medicine (Jabalpur Bannersidas Bhanot and company Ltd., 1995).
- Ashok shan et.al., Community Paricipation In Health and Family Welfare Programme, Innovative Experience in India, Indian Society of Health Administrators, Bangalore, 1990.
- *Freeman R.B. and Holmes E.M., Administration of Public Health Services, W.B. Sanuders Company, 1960.
- National Institute of Health and Family Welfare Management Training Modules for District level Health officers, New Delhi, 1990.

19IPOSX04 TAMIL NADU DEMOGRAPHY

UNIT – I: Population Situation

Tamil Nadu and Tamil Culture; Population Data availability and their quality. History of population growth, present situation and future prospects; Demographic profile of Tamil Nadu.

UNIT – II: Mortality and Health Transition

Mortality levels, trends and differentials, in Tamil Nadu; sex, age patterns of mortality. Infant and child mortality - levels and trends; causes of death; Incidence of female feticide and infanticide Health situation, Health policies and programmes.

UNIT – III: Fertility and Family Welfare

Fertility levels, trends and differentials in Tamil Nadu state, customs and practices affecting fertility, value of children and women status, factors responsible for the recent decline in birth rates, Family welfare programme performance, Practices related to age at marriage and MTP, Birth Averted due to family welfare programme.

UNIT – IV: Migration and Urbanization

Migration transition in Tamil Nadu; inter and intra-state migration; inter and intra-district migration factors; urbanization in Tamil Nadu: Levels and trends Problems and policies; problems of slums and related policies.

UNIT – V: Socio-Economic Status and Policies & Programmes

Per Capita Income and Poverty - Trends policies and programmes; Literacy and Education, Trends policies and Programmes; Women's status and policies and programmes; Economic activity rates - trends, occupational categories and policies programmes; Nutritional Status; Nutrition Programmes; Suppliemntry Nutrition Programme: Applied Nutrition Programme, Chief Ministers Noon-Meal Programme, ICDS, Anganwadi and Balwadi Centres etc.

- 9. IIPS & ORG Macro, 2002, National Family Health Survey (NFHS-2), India, 1998-99: Tamil Nadu, Mumbai: IIPS.
- 10. MIDS, 1988, Tamil Nadu Economy: performance and issues, New Delhi: oxford and IBH publishing co., pvt Ltd. on Human Development Report, India for various Years.
- 11. Elango.P, 2002, Demographic Transition in Tamil Nadu, Mayiladuthurai, Vasuki Publications.
- Elango, P., 1983, Population Growth and Socio-Economic Development in Tamil Nadu.,
 M.Phil Thesis, (Unpublished).
- 13. *Mahadevan.K., M.Sumangala, 1997, Welfare Model of Development and Demographic Transition Delhi: B.R. Publishing Corporation, 1977.
- 14. *Tamil Nadu Government, 1995-96, Policy Note on Medical and Public Health, Chennai: Government of Tamil Nadu.
- 15. *Tamil Nadu Government, 1995-96, Policy note on Education, Chennai: Government of Tamil Nadu and other Reports on Social Welfare.
- 16. Venketaragan.L.B., and P.Elango, 1992, Baseline Survey of Tribals in Kalrayan Hills, Danida Health Care Report, Unpublished.

19IPOSE05 POPULATION AND ENVIRONMENT (3 CREDITS)

UNIT - I: Ecology and Eco-System

Ecology and Ecosystem; Human Geography and its relevance to Population Studies; Residential and Social Environment: Elements of Social Environment; Patterns of Social contact, Examination of the relationship among these factors. Human Ecology and its relevance to population studies.

UNIT – II: Population Distribution

Special distribution of population: Importance of the study, measures of density, factors affecting special distribution. Population distribution in India and in the World.

UNIT – III: Land and other Resources

Land use: Changing patterns, conservation and management of resources. Policies and programmes for better management.

UNIT – IV: Environmental Degradation

Environmental crisis; Air-pollution, water pollution and Noise pollution depletion of biotic resources, ecological imbalances etc.

UNIT – V: Population Growth and Ecological imbalance

Global warming, Green house effect, El-nino effect, Soil erosion, Deforestation Desertification, Salinity and water logging. Man's Perception and adjustment to ecological imbalances;

- *Demko et.al: 1970. Population Geography: A Reader, New York: McGraw Hill.
- 6. Sharma, R.C., Population Trends, Resources and Environment, Hand Book on Population Education. Delhi: Dhampet Rai & Sons.
- 7. *United Nations, 1983. Population Resources, Environment and development: Proceedings of the expert group on Population and Resources, Environment and development Geneva.
- 8. Population Reports, Series M, No. 15, Special Topics on Population and Environment: The Global Challenge, Feb. 2001.

- 9. Charles Kendigh, S., Ecology with special reference to Animals and Man (New Delhi: Prentice Hall of India pvt. Limited, 1980)
- 10. *Ehrlich, Paul R., et al. Ecoscience, Population Resources, Environment (San Francisco: W.N Freeman and Company, 1977).
- 11. *Murdock, William, Environmental, Resources, Pollution and Society, (New York: 1974)