

# Department of Population Studies



**ANNAMALAI UNIVERSITY**

**M.A. POPULATION STUDIES**

**Programme Code : APOP21**

**(Two Year)**

**REGULATIONS, CURRICULUM AND SYLLABI  
2023-2024**

# ANNAMALAI UNIVERSITY

## FACULTY OF ARTS

### DEPARTMENT OF POPULATION STUDIES

#### M.A. POPULATION STUDIES

(Two Year Programme)

### REGULATIONS FOR THE TWO-YEAR POST GRADUATE PROGRAMMES

These Regulations are common to all the students admitted to the Two-Year Master's Programmes in the Faculties of Arts from the academic year 2023-2024 onwards.

#### 1. Definitions and Nomenclature

- 1.1 **University** refers to Annamalai University.
- 1.2 **Department** means any of the academic departments and academic centers at the University.
- 1.3 **Discipline** refers to the specialization or branch of knowledge taught and researched in higher education. For example, Botany is a discipline in the Natural Sciences, while Economics is a discipline in Social Sciences.
- 1.4 **Programme** encompasses the combination of courses and/or requirements leading to a Degree. For example, M.A., M.Sc.
- 1.5 **Course** is an individual subject in a programme. Each course may consist of Lectures/Tutorials/Laboratory work/ Seminar/ Project work/ Experiential learning/ Report writing/viva-voce etc. Each course has a course title and is identified by a course code.
- 1.6 **Curriculum** encompasses the totality of student experiences that occur during the educational process.
- 1.7 **Syllabus** is an academic document that contains the complete information about academic programme and defines responsibilities and outcomes. This includes course information, course objectives, policies, evaluation, grading, learning resources and course calendar.
- 1.8 **Academic Year** refers to the annual period of sessions of the University that comprises two consecutive semesters.
- 1.9 **Semester** is a half-year term that lasts for a minimum duration of 90 days. Each academic year is divided into two semesters.
- 1.10 **Choice Based Credit System** A mode of learning in higher education that enables a student to have the freedom to select his/her own choice of elective courses across various disciplines for completing the Degree programme.
- 1.11 **Core Course** is mandatory and an essential requirement to qualify for the Degree.
- 1.12 **Elective Course** is a course that a student can choose from a range of alternatives.
- 1.13 **Value-added Courses** are optional courses that complement the students' knowledge and skills and enhance their employability.
- 1.14 **Extension activities** are the activities that provide a link between the University and the community such as lab-to-land, literacy, population education, and health awareness programmes. These are integrated within the curricula with a view to sensitize the students about Institutional Social Responsibility (ISR).
- 1.15 **Credit** refers to the quantum of course work in terms of number of class hours in a semester required for a programme. The credit value reflects the content and duration of a particular course in the curriculum.
- 1.16 **Credit Hour** refers to the number of class hours per week required for a course in a semester. It is used to calculate the credit value of a particular course.
- 1.17 **Programme Outcomes (POs)** are statements that describe crucial and essential knowledge, skills and attitudes that students are expected to achieve and can reliably manifest at the end of a programme.
- 1.18 **Programme Specific Outcomes (PSOs)** are statements that list what the graduate of a specific programme should be able to do at the end of the programme.
- 1.19 **Learning Objectives (LOs)** also known as **Course Objectives** are statements that define the expected goal of a course in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction.

- 1.20 Course Outcomes (COs)** are statements that describe what students should be able to achieve/demonstrate at the end of a course. They allow follow-up and measurement of learning objectives.
- 1.21 Grade Point Average (GPA)** is the average of the grades acquired in various courses that a student has taken in a semester. The formula for computing GPA is given in section II.3
- 1.22 Cumulative Grade Point Average (CGPA)** is a measure of overall cumulative performance of a student over all the semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters.
- 1.23 Letter Grade** is an index of the performance of a student in a particular course. Grades are denoted by the letters S, A, B, C, D, E, RA, and W.

## 2. Programmes Offered and Eligibility Criteria

- 2.1** The Department of Population Studies offers a Two Year M.A. Population Studies Programme, and the eligibility criteria for the programme is detailed below.

<b>Faculty of Arts</b>	
<b>Programme</b>	<b>Eligibility</b>
<b>M.A. Population Studies</b>	A Pass in Bachelor's Degree(10+2+3 pattern) in any subject including the Professional courses of this University or an examination of any other University accepted by the Syndicate as equivalent there to.

- 2.2** In the case of SC/ST and Differently-able candidates, a pass is the minimum qualification for the above Programme.

## 3. Reservation Policy

- 3.1** Admission to the above programme will be strictly based on the reservation policy of the Government of Tamil Nadu.

## 4. Programme Duration

- 4.1** The Two-Year Master's Programmes consist of two academic years.
- 4.2** Each academic year is divided into two semesters, the first semester being from July to November and the second semester from December to April.
- 4.3** Each semester will have 90 working days (18 weeks).

## 5. Programme Structure

- 5.1** The Two-Year Master's Programme consists of Core Courses, Elective courses (Departmental & Interdepartmental), and Project

### 5.2 Core courses

5.2.1 These are a set of compulsory courses essential for each programme.

5.2.2 The core courses include both Theory (Core Theory) and Practical (Core Practical) courses.

### 5.3 Elective courses

5.3.1 Departmental Electives (DEs) are the Electives that students can choose from a range of Electives offered within the Department

5.3.2 Interdepartmental Electives (IEs) are Electives that students can choose from amongst the courses offered by other departments of the same faculty as well as by the departments of other faculties.

5.3.3 Students shall take a combination of both DEs and IEs.

### 5.4 Internship

5.4.1 The final semester students need to attend the internship programme.

5.4.2 The minimum duration of Internship programme is 15 days.

5.4.3 Students shall visit either NGO or Research Institute.

5.4.4 Regarding marks awarded 25 marks is for Internal Assessment and 75 marks for External Assessment. An internal mark 25 consists of the process of applying to the programme and the acceptance letter received from the institution concerned. External Assessment marks 75 consists of Attendance (25 marks) and Report presentation (50 marks).

## **5.5 Project**

5.5.1 Each student shall undertake a Project in the final semester

5.5.2 The Head of the Department shall assign a Research Supervisor to the student

5.5.3 The Research Supervisor shall assign a topic for research and monitor the progress of the student periodically.

5.5.4 Students who wish to undertake project work in recognized institutions /industry shall obtain prior permission from the University. The Research Supervisor will be from the host institute, while the Co-Supervisor shall be a faculty in the parent department

## **5.6 Skill Enhancement Courses (SEC)**

5.6.1 Skill Enhancement Courses are value-based and/or skill-based and are aimed at providing hands-on- training, competencies, skills, etc.

5.6.2 SECs enables the students to enhance their practical skills and ability to pursue a vocation in their subject of specialization.

5.6.3 This course designed to provide value-based or skill-based knowledge and should contain both theory and lab/hands-on/training/fieldwork. The main purpose of these courses is to provide students with life-skills in the hands-on mode to increase their employability.

## **5.7 Extension Activities**

5.7.1 These are communities outreach service learning projects.

5.7.2 These outreach activities would be parallel to teaching as they have to be able to practice which includes: Interaction with rural community, Building skills like communication, time management, etc., Designing the activity Raising awareness through the activity.

5.7.3 Report writing.

## **5.8 Value Added Courses (VACs)**

5.8.1 Students may also opt to take Value Added Courses beyond the minimum credits required for award of the Degree. VACs are outside the normal credit paradigm.

5.8.2 These courses impart employable and life skills. VACs are listed in the University website and in the Handbook on Interdepartmental Electives and VACs.

5.8.3 Each VAC carries 2 credits with 30 hours of instruction, of which 60% (18hours) shall be Theory and 40% (12 hours) Practical.

5.8.4 Classes for a VAC are conducted beyond the regular class hours and preferably in the II and III Semesters.

## **5.9 Online Courses**

5.9.1 The Heads of Departments shall facilitate enrolment of students in Massive Open Online Courses (MOOCs) platform such as SWAYAM to provide academic flexibility and enhance the academic career of students.

5.9.2 Students who successfully complete a course in the MOOCs platform shall be exempted from one elective course of the programme

**5.10 Credit Distribution :** The credit distribution is organized as follows:

	<b>Credits</b>
<b>Core Courses</b>	<b>57</b>
<b>Elective Courses</b>	<b>18</b>
<b>Project</b>	<b>07</b>
<b>Internship</b>	<b>02</b>
<b>Skill Enhancement Courses</b>	<b>06</b>
<b>Extension Activity</b>	<b>01</b>
<b>Total (Minimum requirement for award of Degree)</b>	<b>91</b>

### **5.11 Credit Assignment**

Each course is assigned credits and credit hours on the following basis:

1 Credit is defined as

1 Lecture period of one hour per week over a semester

1 Tutorial period of one hour per week over a semester

1 Practical /Project period of two or three hours (depending on the discipline) per week over a semester.

## **6. Attendance**

**6.1** Each faculty handling a course shall be responsible for the maintenance of Attendance and Assessment Record for candidates who have registered for the course.

**6.2** The Record shall contain details of the students' attendance, marks obtained in the Continuous Internal Assessment (CIA) Tests, Assignments and Seminars. In addition, the Record shall also contain the organization of lesson plan of the Course Instructor.

**6.3** The record shall be submitted to the Head of the Department once a month for monitoring the attendance and syllabus coverage.

**6.4** At the end of the semester, the record shall be duly signed by the Course Instructor and the Head of the Department and placed in safe custody for any future verification.

**6.5** The Course Instructor shall intimate to the Head of the Department at least seven calendar days before the last instruction day in the semester about the attendance particulars of all students.

**6.6** Each student shall have a minimum of 75% attendance in all the courses of the particular semester failing which he or she will not be permitted to write the End Semester Examination..The student has to redo the semester in the next year

**6.7** Relaxation of attendance requirement up to 10% may be granted for valid reasons such as illness, representing the University in extracurricular activities and participation in NCC/NSS/YRC/RRC

## **7. Mentor-Mentee System**

**7.1** To help the students in planning their course of study and for general advice on the academic programme, the Head of the Department will attach certain number of students to a member of the faculty who shall function as a Mentor throughout their period of study.

**7.2** The Mentors will guide their mentees with the curriculum, monitor their progress and provide intellectual and emotional support.

**7.3** The Mentors shall also help their mentees to choose appropriate electives and value-added courses, apply for scholarships, undertake projects, prepare for competitive examinations such as NET/SET, GATE etc., attend campus interviews and participate in extracurricular activities

## 8. Examinations

8.1 The examination system of the University is designed to systematically test the student's progress in class, laboratory and field work through Continuous Internal Assessment (CIA) Tests and End-Semester Examination(ESE).

8.2 There will be two CIA Tests and one ESE in each semester.

8.3 The Question Papers will be framed to test different levels of learning based on Bloom's taxonomy viz. Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation/Creativity.

8.4 Continuous Internal Assessment Tests

8.4.1 The CIA Tests shall be a combination of a variety of tools such as class tests, assignments, seminars, and viva-voce that would be suitable to the course. This requires an element of openness.

8.4.2 The students are to be informed in advance about the assessment procedures.

8.4.3 The pattern of question paper will be decided by the respective faculty.

8.4.4 The CIA Test-I will cover the syllabus of the first two UNITS while CIA Test-II will cover the last three UNITS.

8.4.5 The CIA Tests will be for two to three hours duration depending on the quantum of syllabus.

8.4.6 A student cannot repeat the CIA Test-I and CIA Test-II. However, if for any valid reason, the student is unable to attend the test, the prerogative of arranging a special test lies with the teacher in consultation with the Head of the Department.

8.5 End Semester Examinations (ESEs)

8.5.1 The ESE for the first/third semester will be conducted in November and for the second /fourth semester in May.

8.5.2 A candidate who does not pass the examination in any course(s) of the first, second and third semesters will be permitted to reappear in such course(s) that will be held in April and November in the subsequent semester/year.

8.5.3 The ESE will be of three hours duration and will cover the entire syllabus of the course.

## 9. Evaluation

9.1 Marks Distribution

9.1.1. Each course, Theory and Practical as well as project/Internship/Field work/In- plant training shall be evaluated for a maximum of 100 marks.

9.1.2. The theory courses, CIA Tests will carry 25% and the ESE 75% of the marks.

9.1.3. The Practical courses, the CIA Tests will constitute 25% and the ESE 75% of the marks

9.2 Assessment of CIA Tests

9.2.1. The CIA Tests, the assessment will be done by the Course Instructor

9.2.2. The Theory Courses, the break-up of marks shall be as follows:

	Marks
Test-I & Test-II	15
Seminar	05
Assignment	05
Total	25

9.2.3. The Practical Courses (wherever applicable), the break-up of marks shall be as follows:

	Marks
Test-I	7.5
Test-II	7.5
Record	10
Total	25

### 9.3 Assessment of End-Semester Examinations

9.3.1 Evaluation for the ESE is done by the Internal Examiner.

9.3.2 In case of grievance received from the student, second evaluation will be done as per the rules.

#### 9.3.3 Assessment of Project/Dissertation

9.3.3.1 The Project Report/Dissertation shall be submitted as per the guidelines laid down by the University.

9.3.3.2 The Project Work/Dissertation shall carry a maximum of 100 marks

9.3.3.3 The CIA for Project will consist of a Review of literatures survey, Experimentation/ field work attendance etc.

9.3.3.4 The Project Report evaluation and viva-voce will be conducted by a committee constituted by the Head of the Department.

9.3.3.5 Project Evaluation Committee will comprise the Head of the Department, Project Supervisor and a senior faculty.

9.3.3.6 The marks shall be distributed as follows:

Continuous Internal Assessment (25 Marks)		End Semester Examination (75 Marks)	
		Project / Dissertation Evaluation	Viva-voce
Review-I 10	Review-II: 15	50	25

### 9.4 Assessment of Value-Added Courses

9.4.1 VACs shall be evaluated completely by Internal Examiners.

9.4.2 Two CIA Tests shall be conducted during the semester by the Department(s) offering VAC.

9.4.3. A committee consisting of the Head of the Department, faculty handling the course and a senior faculty member shall monitor the evaluation process.

9.4.4. The grades obtained in VACs will not be included for calculating the GPA.

### 9.5 Passing Minimum

9.5.1 A student is declared to have passed in each course if he/she secures not less than 40% marks in the ESE and not less than 50% marks in aggregate taking CIA and ESE marks together.

9.5.2 A candidate who has not secured a minimum of 50% of marks in a course (CIA + ESE) shall reappear for the course in the next semester/year

## 10. Conferment of the Master's Degree

A candidate who has secured a minimum of 50% marks in all courses prescribed in the programme and earned the minimum required credits shall be considered to have passed the Master's Programme.

## 11. Marks and Grading

11.1 The performance of students in each course is evaluated in terms Grade Point (GP).

11.2 The sum total performance in each semester is rated by Grade Point Average (GPA) while Cumulative Grade Point Average (CGPA) indicates the Average Grade Point obtained for all the courses completed from the first semester to the current semester.

11.3 The GPA is calculated by the formula

$$\text{GPA} = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

where  $C_i$  is the Credit earned for the Course  $i$  in any semester;  $G_i$  is the Grade Point obtained by the student for the Course;  $i$  and ' $n$ ' is the number of Courses passed in that semester.

11.4 CGPA is the Weighted Average Grade Point of all the Courses passed starting from the first semester to the current semester.

$$\text{CGPA} = \frac{\sum_{l=1}^m \sum_{i=1}^n C_i G_i}{\sum_{l=1}^m \sum_{i=1}^n C_i}$$

Where,  $C$  - is the Credit earned for the Course in any semester;  $G$ - is the Grade Point obtained by the student for the Course and  $n$  - is the number of Courses passed in that semester;  $m$ - is the number of semesters.

11.5 Evaluation of the performance of the student will be rated as shown in the Table.

Letter Grade	Grade Points	Marks %
S	10	90 and above
A	9	80-89
B	8	70-79
C	7	60-69
D	6	55-59
E	5	50-54
RA	0	Reappear
AB		Absent *
CF		Carry Forward

\*Excluded for GPA

11.6 Classification of Results. The successful candidates are classified as follows:

11.6.1 First Class with Distinction: : Candidates who have passed all the courses prescribed in the Programme in the first attempt with a CGPA of 8.25 or above within the programme duration. Candidates who have withdrawn from the End Semester Examinations are still eligible for First Class with Distinction (See Section 12 for details).

11.6.2. First Class: Candidates who have passed all the courses with a CGPA of 6.5 or above.

11.6.3. Second Class: Candidates who have passed all the courses with a CGPA between 5.0 and less than 6.5.

11.6.4 .Candidates who obtain highest marks in all examinations at the first appearance alone will be considered for University Rank.

### 11.7. Course-Wise Letter Grades

11.7.1 The percentage of marks obtained by a candidate in a course will be indicated in a letter grade.

11.7.2 A student is considered to have completed a course successfully and earned the credits if he/she secures an overall letter grade other than RA

11.7.3 A course successfully completed cannot be repeated for the purpose of improving the Grade Point.

11.7.4 A letter grade RA indicates that the candidate shall reappear for that course. The RA Grade once awarded stays in



the grade card of the student and is not deleted even when he/she completes the course successfully later. The grade acquired later by the student will be indicated in the grade sheet of the Odd/Even semester in which the candidate has appeared for clearance of the arrears.

11.7.5 If a student secures RA grade in the Project Work/ Field Work/ Practical Work/ Dissertation, he/she shall improve in and resubmit if it involves only rewriting / incorporating the clarifications suggested by the evaluators or he/she can re-register and carry out the same in the subsequent semesters for evaluation

## **12. Provision for Withdrawal from the End Semester Examination**

- 12.1 The letter grade W indicates that a candidate has withdrawn from the Examination
- 12.2 A candidate is permitted to withdraw from appearing in the ESE for one course or courses in ANY ONE of the semesters ONLY for exigencies deemed valid by the University authorities
- 12.3 Permission for withdrawal from the examination shall be granted only once during the entire duration of the programme
- 12.4 Application for withdrawal shall be considered only if the student has registered for the course(s), and fulfilled the requirements for attendance and CIA tests
- 12.5 The application for withdrawal shall be made ten days prior to the commencement of the examination and duly approved by the Controller of Examinations. Notwithstanding the mandatory prerequisite of ten days' notice, due consideration will be given under extraordinary circumstances
- 12.6 Withdrawal is not granted for arrear examinations of courses in previous semesters and for the final semester examinations
- 12.7 Candidates who have been granted permission to withdraw from the examination shall reappear for the course(s) when the course(s) are offered next.
- 12.8 Withdrawal shall not be taken into account as an appearance for the examination when considering the eligibility of the candidate to qualify for First Class with Distinction.

## **13. Academic misconduct**

Any action that results in an unfair academic advantage/interference with the functioning of the academic community constitutes academic misconduct. This includes but is not limited to cheating, plagiarism, altering academic documents, fabrication/falsification of data, submitting the work of another student, interfering with other students' work, removing/defacing library or computer resources, stealing other students' notes/assignments, and electronically interfering with other students'/University's intellectual property. Since many of these acts may be committed unintentionally due to lack of awareness, students shall be sensitized on issues of academic integrity and ethics.

## **14. Transitory Regulations**

Wherever there has been a change of syllabi, examinations based on the existing syllabus will be conducted for two consecutive years after implementation of the new syllabus in order to enable the students to clear the arrears. Beyond that, the students will have to take up their examinations in equivalent subjects, as per the new syllabus, on the recommendation of the Head of the Department concerned.

15. Notwithstanding anything contained in the above pages as Rules and Regulations governing the Two-Year Master's Programmes at Annamalai University, the Syndicate is vested with the powers to revise them from time to time on the recommendations of the Academic Council.

**ANNAMALAI  UNIVERSITY**

**DEPARTMENT OF POPULATION STUDIES**

M.A. POPULATION STUDIES (Two Year)

Programme Code: APOP21

**Programme Structure**

(For Students Admitted from the Academic Year 2023-2024)

Course Code	Course Title	Hours/ Week			C	Marks		
		L	T	P		CIA	ESE	Total
<b>SEMESTER-I</b>								
23POPC101	<b>Core 1:</b> Introduction to Population Studies	5			5	25	75	100
23POPC102	<b>Core 2:</b> Demographic Data: Sources, Evaluation and Adjustment	5			5	25	75	100
23POPC103	<b>Core 3:</b> Nuptiality and Fertility	5			4	25	75	100
23POPE104 23POPE105	<b>Departmental Elective 1</b> Gender Issues or Population Sociology	3			3	25	75	100
	<b>Inter-Departmental Elective 1</b> Population Dynamics or Population Research Dimensions	3			3	25	75	100
<b>Total Credits I Semester</b>					<b>20</b>			
<b>SEMESTER-II</b>								
23POPC201	<b>Core 4:</b> Morbidity and Mortality	5			5	25	75	100
23POPC202	<b>Core 5:</b> Migration and Urbanization	5			5	25	75	100
23POPC203	<b>Core 6:</b> Population Theories and Policies	4			4	25	75	100
23POPE204 23POPE205	<b>Departmental Elective 2</b> Population Ageing or Population and Development	3			3	25	75	100
	<b>Inter-Departmental Elective 2</b> Tamil Nadu Demographic Scenario or Health Planning and Policies	3			3	25	75	100
23TSSC200	<b>Academic Writing Skills</b>	2			2	25	75	100
<b>Total Credits II Semester</b>					<b>22</b>			
<b>SEMESTER-III</b>								
23POPC301	<b>Core 7:</b> Demographic Models, Indirect Estimations and Population Projection	5			5	25	75	100
23POPC302	<b>Core 8:</b> Research Methodology & Statistical Techniques	5			5	25	75	100
23POPC303	<b>Core 9:</b> Population Programmes and Evaluation	5			5	25	75	100
23POPC304	<b>Core 10:</b> Bio-Statistics	4			4	25	75	100
23POPE305 23POPE306	<b>Departmental Elective 3</b> Practical or Health and Population Education	3			3	25	75	100
	<b>Employability Skills</b>	2			2	25	75	100
23POPI307	Internship				2	25	75	100
<b>Total Credits III Semester</b>					<b>26</b>			

SEMESTER-IV								
23POPC401	Core 11: Demographic and Statistical Software	5			5	25	75	100
23POPC402	Core 12: Reproductive and Child Health	5			5	25	75	100
23POPP403	Project	5			7	25	75	100
	<b>Departmental Elective 4</b>							
23POPE404	NGO Management	3	or		3	25	75	100
23POPE405	Women Entrepreneurship and Development							
23POPPCS3	Project Planning and Proposal Development	2			2	25	75	100
23POPX406	Extension Activity				1	25	75	100
<b>Total Credits IV Semester</b>					<b>23</b>			
<b>Total Credits (I-IV Semester)</b>					<b>91</b>			

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

### Programme Outcomes (POs)

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

- 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: Upholding ethical standards
- PO8: Acting local while thing global
- PO9: Commitment to gender equality
- PO10: Commitment to sustainable development
- PO11: Lifelong learning
- PO12: Ability to work individually and as members in a team

### Programme Specific Outcomes (PSOs)

At the end of the programme, the students 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 analyze the Population Data.
- PSO4: Exhibit the knowledge through survey research.
- PSO5: Recognize to develop an aptitude for research.
- PSO6: Familiarize the Population issues and Development

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC101	CORE 1 : INTRODUCTION TO POPULATION STUDIES	5	-	-	5

### Learning Objectives (LOs)

The students will be able to

**LO1:** Describe the basic components of population change.

**LO2:** Acquire knowledge on the levels, trends, differentials and future prospect of population in India and World regions

**LO3:** Comprehend the age and sex structure, distribution and characteristics Dimensions of human Population.

### Course Outcomes (COs)

After completion of the course the students will be able to

**CO1:** Understand the basic concepts, scope and nature of demography and population studies and the growth of population

**CO2:** Understand the distribution of population in various regions and the population characteristics.

**CO3:** Comprehend the role of age and sex structure of population change

### UNIT-I: Introduction

Demography and Population Studies: Definition, Concepts, Nature, Scope, and its interdisciplinary nature; Historical background; Demographic determinants of Population Change: Fertility, Mortality and Migration; Development of Population Studies in India.

### UNIT-II: World Population Growth

World Population Situation and its distribution, population Growth in world, Developed and Developing Countries; Causes for rapid population growth in developing countries; Reasons for decline population growth in developed countries, World Population Prospects.

### UNIT-III: India's Population Growth

India's Population Growth, Situation and Distribution; Level, Trends and differentials of population growth among Indian States and Union Territories; Factors responsible for rapid population growth in India; Current population situation in India, Future Prospects of population growth in India and its States and UT's.

### UNIT-IV: Population Structure (Age & Sex)

Age Structure: Definition, Uses, Sources and Classification of age data; Measures; Factors affecting age structure in Developing and Developed Countries including India; level and trends in age structure in India; Aging and Younging Populations and their impact and problems.

Sex Structure: Sex and Gender: Definition, Uses and Sources of sex-data; Measures: Factors affecting sex structure in Developing and Developed Countries including in India; Trends in sex ratios in India; Impact of changing sex-ratios.

### UNIT-V: Population Characteristics

Religion: Sources of data, uses and limitations; Languages & Mother Tongue: Sources of data, uses and limitations; Educational Attainment: Definition, Sources of data, Uses, Measures and Limitations; Marital Status: Concepts, sources of data, uses, classification, Measures and limitations; Manpower: Definitions, Concepts, Sources of data, Importance of study, Measures and Limitations

### TEXT BOOKS:

1. Agarwala S.N India's Population Problems, New Delhi, (TataMcGrawHill,1981)
2. Baskar D. Misra, The Study of Population (New Delhi: South Asian Publishers (P) Ltd.,1980)
3. Bhende Asha A. and Kanitkar Tara, Principles of Population Studies (Mumbai: Himalaya Publishing House, 2017)
4. John Weeks Population: An Introduction to Concepts and Issues, Wordsworth Learning. Singapore 9th edition,2005

5. Edith Gray, Zhongwei Zhao, Population Studies, 2013
6. W.T.S. Gould, Introduction to Population Studies, 2009.
7. Sarah Harper, Demography: A very short Introduction, 2019

**SUPPLEMENTARY READINGS:**

1. Barclay George W., Techniques of population Analysis (New York: John Wiley and Sons, 1958)
2. Chandrasekhar S., Infant Mortality, population Growth and Family planning in India: (London George Allen and Unwin, 1972)
3. Charles Nam, Population and Society (Boston: Houghton Mifflinco., 1969)
4. Henry Shnycock, et.al., The Methods and Materials of Demography (Washington: Bureau of Census, 1971) Vols., I and II
5. Srivastava, O.C., A Text Book of Demography (Delhi: Vikas Publishing House Pvt. Ltd. 1982)
6. United Nations, The Determinants and Consequences of Population Trends (New York: Department of Economics and Social Affairs, 1973)
7. Harper, Sarah: Demography: A very short introduction UK: Oxford University Press, 2018.
8. Dyson, Tim: Population History of India: From the first modern people to the present day, (New Delhi: Oxford University Press, 2018)

**Outcome Mapping**

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	3	1	3	3	3	1	3	2	2	1	1	3	1	3	2	1
CO2	2	1	3	1	3	3	3	1	3	3	2	2	3	1	2	2	3	3
CO3	1	3	1	3	3	3	1	2	2	1	1	3	3	3	3	1	3	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC102	CORE 2 DEMOGRAPHIC DATA: SOURCES, EVALUATION AND ADJUSTMENT	5	-	-	5

**Learning Objectives (LOs)**

The students will be able to

- LO1 : Understand Population Census and Registration Systems in India and the World.
- LO2 : Comprehend the Important Demographic and Health Surveys in India and the World.
- LO3 : Understand the Important Sources of Demographic Data Available at International Level.
- LO4 : Comprehend the Important Techniques Used for Evaluating and Adjusting Demographic Data.

**Course Outcomes (COs)**

After completion of the Course, the Students would be able to

- CO1 : Identify the Utilities of Population Census as a Major Source of Demographic Data
- CO2 : Recognize Different Types of Registration Systems in India and the World
- CO3 : Identify the Utilities of important Demographic and Health Surveys in India and the World
- CO4 : Recognize Important Demographic Data Available at International level
- CO5 : Realize the Important Techniques Used for Evaluating and Adjusting Demographic data

**UNIT-I: Population Census**

Population Census: Concept, Definition, Utilities and Limitations; Population Census in the World and in India: Evolution, Objectives, Utilities and Limitations; Population Census Questions in Indian Population Censuses (1872-2011): Definition, Meaning and its Comparability; Methods of Population Enumeration in the latest Population Census in India; Post-enumeration Survey; Population Census Publications in India.

## **UNIT- II: Registration System**

Vital Statistics System: Concept, Utility and UN Recommendations; Civil Registration Systems in India and the World: Evolution, Objectives, Utilities and Limitations; Model Registration of Births and Death Rules in India; Sample Registration System (SRS) in India: Concept, Evolution, Objectives, Utilities and Limitations. Population Registers in the World; National Population Register (NPR) in India.

## **UNIT -III: Sample Surveys and Other International Sources**

Demographic and Health Surveys (DHS); World Fertility Survey (WFS); National Sample Survey (NSS) in India; National Family Health Survey (NFHS) in India; Longitudinal Ageing Study in India (LASI); United Nation's (UN) Data: Demographic Year Book, Statistical Year Book. Other Sources: World Health Organization (WHO); International Labour Organization (ILO); International Organization for Migration (IMO); World Bank; Population Reference Bureau (PRB): World Population Data Sheet.

## **UNIT-IV: Evaluation Techniques**

Types and Sources of Coverage and Content Errors in Population Census Data; Types of Errors in Age Data; Measurements of Errors: Inspection of Data, Comparison with Expected Configuration, Analysis of Ratios, Graphical Representation of Age Data, Whipple's Index, Myer's Index, United Nation's (UN) Age-Sex Accuracy Index. Types and Source of Coverage and Content Errors in Vital Registration Data; Balancing Equation Method; Chandrasekhar - Deming Method.

## **UNIT -V : Adjustment and Graduation Techniques**

Adjustment of Data: Meaning, Need and Uses; Adjustment Techniques: Smoothing of Data, Interpolation, Newton's Forward and Backward Formula, Application of Model Life Tables, Sex-Age Adjusted Birth Rate (SAABR). Graduation of Data: Meaning, Need and Uses; Graduation Techniques: Newton's Formula, Karup-King's Formula. Greville's Formula. U.N. Secretariat Formula.

### **TEXT BOOKS:**

1. Bhaskar Dutt Misra (2004), An Introduction to the Study of Population, South Asian Publishers Pvt Ltd, New Delhi.
2. Bhende, A. and T. Kanitkar (2019), Principles of Population Studies, Himalaya Publishing House, Mumbai.
3. Bose, Ashish (2001), Population of India: 2001 Census Results and Methodology, B. R. Publishing Corporation, Delhi.
4. Hauser, Philip M. and O. D. Duncan (eds.) (1959), The Study of Population, University of Chicago Press, Chicago.
5. Pathak, K. B. and F. Ram (1998), Techniques of Demographic Analysis, 2nd Edition, Himalaya Publishing House, Bombay.
6. Ramakumar, R. (2006), Technical Demography, New Age International (P) Limited Publishers, New Delhi.
7. Srinivasan, K. (1998), Basic Demographic Techniques and Applications, Sage Publications, New Delhi.

### **SUPPLEMENTARY READINGS:**

1. Crook, Nigel (1997), "Principles of Population and Development: With Illustrations from Asia and Africa", in Ian Timaeus and Nigel Crook (eds.), Population and Subsistence: Theories and Evidences: Part-I, Oxford University Press, London.
2. Demeny, Paul (2003), Population Policy: A Concise Summary, Policy Research Division Working Paper No. 173, Population Council, New York.
3. Stauffer, Cheryl Lynn (ed.) (2000), Human Population: Fundamentals of Growth and Change, Population Reference Bureau, Washington, D.C.

## Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	2	2	2	2	3	2	3	1	1	1	2	2	2	3	1	2	3
CO2	2	2	2	2	2	2	2	2	3	2	1	2	1	3	2	2	2	2
CO3	3	2	3	3	3	2	3	1	2	3	2	2	3	2	2	2	3	1
CO4	1	2	2	1	1	3	1	2	3	1	3	3	1	1	1	3	3	3
CO5	3	3	3	2	3	1	2	2	1	2	2	1	2	2	1	1	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC103	CORE 3 : NUPTIALITY AND FERTILITY	5	-	-	4

### Learning Objectives (LOs)

The students will be able to

**LO1** : Acquire the basic knowledge about nuptiality and fertility

**LO2** : Understand the levels, trends and differentials of nuptiality and fertility

**LO3** : Have broad spectrum or understanding of fertility theories

### Course Outcomes (COs)

After completion of the course the students will be able to :

**CO 1** : Understand the basic concepts and importance of nuptiality and fertility

**CO2** : Acquire levels, trends and differentials of nuptiality and fertility

**CO3** : Impart the knowledge on various theories related to fertility

### UNIT-I : Introduction

Nuptiality; Definitions and Concepts; Fertility and Nuptiality: data sources and quality of data  
Fertility: Meaning, Definitions, Importance and Basic Concepts; Factors important in the analysis of Nuptiality and Fertility; Historical background; Physiology and Anatomy of Human Reproduction.

### UNIT-II: Measures

Measures of Nuptiality: Measures of incidence of age at first marriage; Widowhood, Divorce, Separation and Remarriage; Singulate Mean Age at Marriage (SMAM) Measures of Fertility: Crude Birth Rate, General Fertility Rate, Age Specific Fertility Rate, Total Fertility Rate, Rates Adjusted for Age and Sex; Cohort Fertility; Birth Probabilities; Child Woman Ratios, Children ever born, Children living; Childlessness; Duration Specific Rates: Rates specific of parity and duration of marriage; parity progression ratios; Cohort measures; Measures of Reproduction: Gross Reproduction Rate; Net Reproduction Rates.

### UNIT-III: Factors Affecting Nuptiality and Fertility

Physiological, Social, Economic, Demographic, Psychological, Cultural factors affecting Nuptiality and Fertility; Value of Children; Davis-Blake's Intermediate Variables Framework; Bongart's; Their relevance to Indian situation Proximate Variables.

### UNIT-IV: Level, Trends and Differentials in Nuptiality and Fertility

Age at Marriage: Level and Trends in World, Developed and Developing countries and in India; Determinants of Age at Marriage; Differentials in Age at Marriage ; Level and Trends in Fertility in World, Developed and Developing countries and in India; Causes and Consequences; Fertility Differentials By age, religion, literacy and by residence, occupation, income, employment of wife and Status of women.

## UNIT -V: Theories of Fertility

Theories of Demographic Transition, Threshold Hypothesis, Social Capillarity theory, Theory of change and Response, Theory of Diffusion or cultural Lag, Leibenstien, Becker, Ronald Freedman`s and Caldwell`s Conceptual Models.

### TEXT BOOKS:

1. Bhende Asha A. and Tara Kanitkar, "Principles of Population Studies", 13<sup>th</sup> ed. (Bombay: Himalaya Publishing House, 2001).
2. Preston, Samuel H Henuvelio, Patrick and Guillot, Michael, "Demography: Meaning and Modelling Process" (Oxford: Blackwell Publishers, 2001)
3. Atals Anwar Maybeal Shaikh, "Nuptiality and Fertility", (Population and Development Review,2018)
4. Bongaarts J and Robert C. Potter, "Fertility, Biology and Behaviour: Analysis of the Proximate Determinants" (California: Academic Press, INC, 1983)

### SUPPLEMENTARY READINGS:

1. Jacob S. Siegal and David A Swarnum, "The Methods and Materials of Demography" (USA: Elsevier, 2004)
2. John Weeks, "Population: An Introduction to Concepts and Issues" (Singapore: Wordsworth Learning, 2005.
3. Bulatao, R.B., and R.D. Lee (eds.) "Determinants of Fertility in Developing Countries" Vol. I (New York: Academic Press, 1983).
4. 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.
5. Driver, Edwin, D. Differential Fertility in Central India, (Princeton University Press, 1963).

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	3	2	1	3	3	2	1	2	1	2	3	3	2	3	1	3	1
CO2	3	2	3	1	3	3	3	1	3	2	1	2	1	3	3	3	3	3
CO3	1	3	3	2	2	3	3	3	1	3	1	3	2	1	3	3	3	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPE104	DEPARTMENTAL ELECTIVE 1 : GENDER ISSUES	3	-	-	3

### Learning Objective (LOs)

The students will be able to

- LO1 : To understand the difference between sex and gender
- LO2 : To understand the social construction of gender
- LO3 : To explain the changes of gender sensitization and status

### Course Outcome (COs)

After completion of the course the students will be able to :

- CO1 : Acquire the knowledge on the difference between sex and gender
- CO2 : Acquire the knowledge to the social construction of gender.
- CO3 :. Acquire the knowledge to the changes of gender sensitization and status

## UNIT-I : Introduction to Gender Studies

Gender Studies: Definition - Scope of gender studies - Differences between sex and gender, Interdisciplinary nature of Gender studies, Gender studies Vs Women`s studies, Need for Gender as an analytical variable.



## UNIT-II: Gender Role and Sensitization

Gender concepts: Social construction of gender, Stereotypes, Gender roles, Gender Ideology, Sexual Minorities, LBGTQ Understanding patriarchy; Gender issues in development, Gender sensitization and training.

## UNIT-III: Gender and Institutions

Gendering institutions: Individual, Family, class, caste, religion, Society: Patriarchal, Matrilineal; Women and Culture; Role Status: Socialization, Internalization; Changing Scenario: Power relations, Decision making, Female Headed Households

## UNIT-IV: Gender and Work Participation

Gender and work: Gender Segregation class ceiling-pipeline leakage- Unpaid labour - invisibility – organized and Unorganized Sectors – Wage Discrimination – Production – Reproduction-Deindustrialization and Business.

## UNIT-V: Gender and Politics

Gender: Politics and Social Theory, Gender and Power Dynamics, Female Powerlessness: Cultural Preparedness, Existential base for Power Relationship; Political Theory: Sex, Gender and Power

### TEXT BOOKS:

1. Gokilavani. (2000). Women's Studies: Principles, theories and Methodologies.
2. Department of Women's Studies: Alagappa University. Krishna raj, Maithreyi. (1995). Remaking Society for Women: Visions Past and Present. New Delhi: Indian Association for Women's Studies.
3. Saraswati, Ayu. L., Shaw, Barbara & Rellihan, Heather. (2017). Introduction To Women's, Gender and Sexuality Studies: Interdisciplinary and Inter sectiona Approaches, Oxford University Press.

### SUPPLEMENTARY READINGS:

4. UNDP. (2006). Human Development Report, Fighting Climate Change: Human Solidarity in A Divided World. New York: Palgrave.
5. Hunt, J. (2004). Introduction to gender analysis concepts and step. Development Bulletin.
6. Moser, A. (2005). Gender Mainstreaming Since Beijing: A Review of Success and Limitations in International Institutions. New York.
7. Manasi Sinha, (2013). Gender-Mainstreaming: Bridging Gender Inequality in India. New Delhi: Grin Publishing

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	3	3	3	3	1	1	2	1	2	1	2	3	3	3	3	2
CO2	3	1	3	3	3	3	1	1	2	1	1	2	2	3	3	3	3	3
CO3	3	1	2	2	1	2	2	3	3	1	2	2	1	1	2	2	3	3

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPE105	DEPARTMENTAL ELECTIVE 1 : POPULATION SOCIOLOGY	3	-	-	3

### Learning Objectives (LOs)

The students will be able to

- LO 1: Identify the basic knowledge of social institution
- LO2: Outline the issues of status of women
- LO3: interpret the sociological theories of fertility

## Course Outcomes (COs)

After completion of the course the students will be able to

**CO1** : Acquire the elements of sociology

**CO2** : Explore the relationship between social institution and social development

**CO3** : Identify the role of women in society and gender equity

### UNIT-I: Basic Concepts

Sociology: Definitions, nature, scope and its relation to other Social Sciences; Its role in understanding Demographic behaviour; Basic concepts; Culture, Society, Community, Associations, Institutions, Values and Norms; Role and Status, Socialization and Groups; Types: Primary and Secondary reference Groups

### UNIT-II: Population and Society

Social Stratification; Social Processes; Social Control; Social Structure: Class, Caste System and Gender roles: legislative, normative and behavioral context; Tibe and Minorities; Social Change and Modernization; Factors; Rural and Urban Communities: their characteristics and differences.

### UNIT-III: Social Institutions

Marriage: Forms of Marriage; Social Change and Marriage Practices; Family: Types of family; functions and changes; Relevance of study of marriage and family in population dynamics; Religion: Origin, religious ideas; role of religion in individual and society; Religion and population growth; Education: Role in social development.

### UNIT- IV: Social Consequences

Social Consequences of Demographic Change: Demographic Change affecting society; Effects of changes in fertility, mortality and migration on marriage, family, Kinship, life-cycle and society, social legislation and social change; Social Problems: Beggary, Prostitution, problems of slums, crimes, Juvenile delinquency, Dowry, poverty and unemployment.

### UNIT- V: Demographic Behaviour

Demographic Behaviour in Social Context: Family Size Desires, Norms, Family Building Decisions, Choice of Contraception, Socio-cultural taboos relating to fertility and contraception; value of children and Gender discrimination in fertility and health behaviour; Women in society: role and status; Population Aging and Problems old Aged.

### TEXT BOOKS:

1. Desai, A.R *Rural Sociology in India* (Mumbai: Popular Books, 1978)
2. Shankar Rao C.N. *Sociology* (New 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. Bhende Asha A and Tara Kanitkar, *Principles of population studies*, 13<sup>th</sup>ed (Bombay: Himalaya Publishing House, 2001).
2. United Nations., *The Determinants and consequences of Poulation Trends*. (New York: United Nations Publications, 1973)
3. Veena Dass et al; (Eds), *Contributions to Indian Sociology*, (New Delhi; Sage Publications, 1995).

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	1	3	3	3	3	1	1	2	2	1	1	1	3	3	3	2
CO2	2	1	1	3	3	3	3	1	1	2	1	1	2	2	1	3	3	2
CO3	1	3	3	2	2	3	2	3	1	2	2	1	1	1	3	1	2	2

Course Code	Course Title	Hours / Week			Credit
		L	T	P	
23APOPX01	INTER - DEPARTMENTAL ELECTIVE 1: POPULATION DYNAMICS	3	-	-	3

### Learning Objectives (LOs)

The student will be able to

**LO1** : Know the concepts, scope and importance of demography

**LO2** : Understand the concepts of fertility, mortality, migration and urbanization

**LO3** : Have clear cut idea about family welfare programmes.

### Course Outcomes (COs)

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

**CO1** : Explore the concept, scope and importance of demography

**CO2** : Understand the measures and factors affecting fertility, mortality, and migration theories

**CO3** : Understand about the family welfare programmes

### UNIT-I: Demography

Demography and Population Studies: Definition, concepts, nature and scope and its Interdisciplinary nature; Determinants of population change; Sources of demographic data: Population Census, Registration systems, sample survey, Types of demographic data; population growth in India.

### UNIT-II: Fertility

Fertility: Definition, concepts, sources of data and basic measures; Fertility level, trends and differentials in India. Factors affecting fertility; Theories of fertility, Theory of Demographic Transition.

### UNIT- III: Mortality

Mortality: definition, concepts, sources and basic measures; factors affecting mortality mortality level, trends and differentials in India.; maternal mortality; Infant mortality: Definition, meaning, measures, factors affecting infant mortality; Infant mortality level, trends and differentials in India.

### UNIT-IV: Migration and Urbanization

Migration: Definition, meaning, concepts and types of Migration, characteristics of migrants, Migration theories: Push and Pull factors theory; Urbanization: Definition, concepts, measures; level, trends and differentials; problems of over urbanization In India.

### UNIT-V: Family Welfare Programmes

Population Policy: Definition, meaning, goals and objectives, types, Population responsive policies; Pro-natalist and anti-natalist policies; Population policy in India; Family welfare Programmes: Methods, approaches, targets and achievements; Reproductive and Child health components.

### TEXT BOOKS:

1. Agarwala S. N India's Population Problems, (New Delhi: Tata McGraw Hill, 1981).
2. Bhende Asha A. and Kanitkar Tara, Principles of Population Studies (Bombay: Himalaya Publishing House, 2017)
3. Basker D. Misra, The Study of Population (New Delhi: South Asian Publishers (P Ltd., 1980)

- Chandrasekhar, S. Infant Mortality, Population Growth and Family Planning in India:(London: George Allen and Unwin,1972)
- Charles Nam, Population and Society(Boston: Houghton Mifflin Co.,1969)
- John Weeks, Population: An Introduction to Concepts and Issues, WordsworthLearning,Singapore9thedition, 2005
- Edith Gray, Zhongwei Zhao,, Population Studies,2013
- W.T.S. Gould, Introduction to Population Studies, 2009.
- Sarah Harper, Demography: A very short Introduction,2019

#### SUPPLEMENTARY READINGS:

- Henry Shryock, etal., The Methods Material of Demography (Washington: Bureau of Census, 1971Vols, I and II
- Srivastava, O.C.,A Text Book of Demography (Delhi: Vikas Publishing House Pvt, Ltd.1982)
- United Nations, The Determinants and Consequences of Population Trends (New York :Department of Economics and Social Affairs,1973)
- ESCAP, Population of India: Country Monograph Series Number 10,(NewYork: United Nations, 1982).
- Warren Thompson, and David Lewis, Population Problems (New York: Macmillan, 1968)
- Rajan, S. Irudaya & Sumeetha, M.: Hand book of internal migration in India.(New Delhi: Sage Publications,2020)
- Harper, Sarah: Demography: A very short introduction (UK: Oxford University Press, 2018.8780198725732299.00--(312Har/Dem) 087306
- Dyson, Tim: Population history of India: From the first modern people to the present Day (New Delhi. Oxford University Press,2019).

#### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	3	2	1	3	3	2	1	2	1	2	1	3	2	3	1	3	2
CO2	3	3	2	1	2	1	3	1	2	2	1	3	1	3	3	3	1	2
CO3	2	3	3	2	2	3	2	3	1	2	1	3	2	1	3	3	1	2

1-Low 2-Medium 3-Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23APOPX02	INTER - DEPARTMENTAL ELECTIVE I POPULATION RESEARCH DIMENSIONS	3	-	-	3

#### Learning Objective (LOs)

The student will be able to

- LO1 : Understand the major stages in social research by scientific method.
- LO2 : Learn the important factors embodied in a research design and the techniques involved in framing it
- LO3 : Have detailed discussion about data classification and tabulation, analysis and report writing
- LO4 : Have a knowledge on Integrating theory and methods in health research

#### Course Outcomes (COs)

At the end of the course the students will be able to

- CO1 : Acquire the knowledge of scientific research
- CO2 : Understand research design and sampling techniques
- CO3 : Explore the knowledge of processing data and analysis
- CO4 : Apply the know-how of methods in health research

### **UNIT- I: Social Research and Research Design**

Scientific Research: meaning, nature, scope, objectives and basic assumptions: Utilities of research; Types of research: Pure, Applied and Action Research; Major steps in Social Research; Formulation of a Research Problem; Framing of objectives; Hypothesis: concepts, definitions, characteristics types, sources, formulation and Testing of Hypothesis: Null hypothesis and alternative hypothesis; Research Design: meaning, need, features of good design, components of research design and Types: Exploratory, Descriptive, Diagnostic and Experimental; Method of investigation: Social Survey method, Experimental methods, statistical methods, Case study method.

### **UNIT-II: Sampling, Data Collection and Processing**

Sampling techniques: Meaning, Definition, need; Types: Probability and Non-Probability Sampling; Data Collection: Methods and tools: Observation: Participant and Non-Participant, Interview Technique, Focus Group Discussion, Case Study, In-depth interviews; Schedule and Questionnaire; Advantages and disadvantages; Processing of Data: Editing, Coding, Classification and Tabulation; Analysis of data; Use of Computer in the Processing and Analysis of data. Diagrammatic and Graphical Representation of data: Scaling Techniques: Problems of Measurement; Types of Scales used in Social Research

### **UNIT-III: Interpretation and Report Writing**

Interpretation of results and report writing; Elements and Pre-caution of writing research report; Uses of reference materials; Proposals preparation; Preparation of Manuscripts for a Scientific Journal.

### **UNIT-IV: 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 behavior; Intra individual 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.

#### **TEXT BOOKS:**

1. C. R. Kothari and Gaurav Garg, "Research Methodology: Methods and Techniques" (New Delhi: New Age International (P) Ltd., 2014)
2. Dharmesh P. Patel, "Research Methods in Social Sciences", (Jaipur: SreeNivas Publications, 2013)
3. Gerard Guthrie, Basic Research Methods, (New Delhi: Sage Publications India (P) Ltd, 2014).
4. Misra, R.P. "Research Methodology, Concept, Publishing Company, New Delhi. 2002.
5. Pat Cox, Thomas Geisen and Roger Green "Qualitative Research and Social Change", (U.K: Palgrave Max Millan. 2016)
6. Catherine Berglund, "Health Research" (USA: Oxford University Press, 2002)
7. Frances Griffiths, "Research Methods for Health Care Practice" (New Delhi: Sage Publication (P) Ltd, 2009)

#### **SUPPLEMENTARY READINGS:**

1. Rajit Kumar. "Research Methodology", (New Delhi: Sage Publication India Pvt., Ltd., 2011)
2. Petti Alasuctions, Leonard Bickman and Julia Prannen "Social Research Methods" (New Delhi: Sage Publishers, 2008)
3. Sangvai, Devdutta, "Population Health" (Amsterdam, Netherlands: Elsevier Publication, 2019)
4. Dean Kathryn (ed.), Population Health Research: Linking Theory and methods, New Delhi: Sage Publications, 1993.
5. Goode W.J and Hatt, Methods in Social Research (Tokyo, McGraw Hill Book Co., 1952)

## Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	1	2	3	1	1	2	1	1	1	2	3	3	3	1	1	3
CO2	3	3	3	1	1	2	1	2	1	3	2	3	3	3	2	1	3	2
CO3	3	1	1	2	1	1	3	3	3	2	1	3	1	1	1	2	1	1
CO4	3	1	1	1	2	1	1	2	1	1	2	1	3	1	1	2	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC201	CORE 4 : MORBIDITY AND MORTALITY	5	-	-	5

### Learning Objectives (LOs)

The students will be able to

**LO1** : Understand the basic concepts of morbidity and mortality and their importance

**LO2** : Have a clear-cut understanding measures of morbidity, mortality, infant and maternal mortality

**LO3** : Explain the level, trends, and differentials in mortality and functions of the life table

### Course Outcomes (COs)

After completion of the course, the students will be able to

**CO1** : Understand the basic concepts and measures of morbidity and mortality

**CO2** : Analyses the level, trends, and differentials of mortality

**CO3** : Understand the importance and measures of Infant mortality, child mortality, and also functions of life table

### UNIT-I: Morbidity

Morbidity :Concepts, Definition, and Importance of study; Sources of data; Types: Communicable and Non- communicable diseases ; Measures: Incidence and Prevalence; Epidemiology of diseases: Agents, Environment and Host Factors; Sources of Infection and Modes of Transmission; Pathogenesis and Level of Prevention; WHO Classification of Causes of death; Changing patterns of Causes of death in developing and developed countries and in India; Epidemiological transition ;Health transition; Reproductive and Child Health(RCH) and AIDS

### UNIT-II: Mortality

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

### UNIT-III: Level, Trends and Differentials

Level and trends in mortality in developed and developing countries and in India; Causes of Mortality decline in developed, developing countries and India; Future prospects of mortality decline in developed and developing countries and in India; Mortality differentials by age, sex, residence , and socio-economic characteristics

### UNIT-IV: Infant, Childhood and Maternal Mortality

Infant and Child Mortality: Importance of study; Measures: Peri- natal, neo-natal and post-neo-natal mortality rates; Adjusted Infant Mortality rate; Causes: endogenous and exogenous; Trends, and differentials in developed and developing countries and in India; reasons for high IMR in India; Future prospects of decline in IMR ; Maternal mortality rates: Concepts and definitions; data sources and limitations; Measures: Direct and Indirect methods; Causes of high MMR in India; level, trends and differentials ; future prospects for MMR decline.

## UNIT- V: Life Table

Life Table: Concepts, definition, Importance, Assumptions and Columns; Type: 1. Current and Cohort Life-tables, 2. Complete and Abridged; Method of Construction of Life Tables from Age Specific Death Rates; Construction from Single and Two Censuses; Conversion of Abridged Life Table into Complete life table; Uses of Life Tables.

### TEXT BOOKS:

1. Piyush Gupta & Amir Maroot Khan, Text book of Community Medicine (CBS Publishers& Distributors Pvt Ltd,2 016)
2. Bhende,AshaA.,and Tara Kanitkar Principles of Population Studies (28<sup>th</sup> Edition, Bombay: HimalayaPublishingHouse,2014)
3. K.Park, Preventive and Social Medicine (India: Bannersidas Bhanot and Company Limited, 2005)

### SUPPLEMENTARY READINGS:

1. Srivastava, Swati: Spatial patterns and inequalities in childhood malnutrition in districts of India. Mumbai. IIPS, 2020.--(312.3Sri/Spa)
2. Yadav, Rajaram: Study on regional pattern of morbidity and healthcare utilization in India. Mumbai. IIPS, 2020.--(312.3Yad/Stu)
3. K. Mahadevan, et al, Culture, Nutrition and Infant and Child Mortality: A Study in South Central India (Mimeo-graphed) 1981
4. Padmanabha, P. Use of Sample Registration Systems for Studying levels, "Trends and Differentials in Mortality: The Experience of India, in United Nations, Data Base for Mortality Measurement, Population Studies No.84,NewYork;U.N1984)
5. Barclay, George, Techniques of Population Analysis, (New York: John Wiley & Sons, Inc. 1958).

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	1	3	1	1	3	3	1	3	3	2	3	3	2	2	1	3
CO2	3	1	1	3	1	1	3	3	1	3	3	2	3	3	2	2	1	3
CO3	3	3	3	2	1	1	2	3	1	3	3	1	2	3	3	3	3	1

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC202	CORE 5 : MIGRATION AND URBANISATION	5	-	-	5

### Learning Objectives (LOs)

The students will be able to

- LO1 : Understand the basic concepts of migration and urbanization
- LO2 : Describe the measures of migration and urbanization
- LO3 : Discuss the factors influencing migration and urbanization

### Course Outcomes (COs)

After completion of the course the students will be able to:

- CO1 : Acquire knowledge migration and urbanization
- CO2 :: Describe the various forms of migration, urbanization and its related policies.
- CO3 : Explore the theories of migration

## UNIT-I : Migration

Migration: Definitions, concepts, importance, sources of migration data; forms and types of migration; Measures; factors influencing migration; trends and differentials and pattern of migration in India; characteristics of migrants; causes and consequences of migration.

## UNIT- II: Internal and International

Internal migration: patterns and characteristics in developing countries with a special focus on India. Determinants of internal migration: Causes of migration at the place of origin and at the place of destination. Consequences of internal migration: demographic, economic, social and political consequences at the individual, household and community level.

International migration: Sources of international migration data and problems. Patterns of International migration: Historical and recent trends, permanent immigrants, labour migration, brain drain, refugee migration and Illegal migration. Causes and consequences of international migration.

## UNIT-III: Migration Theories

Migration Theories: Push and Pull Factors, Everett Lee's theory of migration, Ravenstein's law of migration, Petersen's Typology of migration, Hypotheses related to volume of migration, streams and counter streams, Mobility Field Theory, Todaro's Model of Rural-Urban migration.

## UNIT-IV: Urbanization

Urbanization; Definition, Meaning, Measures: Degree of Urbanization and tempo of urbanization, process of urbanization; Levels and Trends of Urbanization in India and Developed and developing Countries ; Urban-rural growth differentials; Problems of urbanization and over-urbanization; Policies and Programmes. Determinants of urbanization;

## UNIT-V: Urban Planning

Approaches and choice of a suitable strategy; Demographic considerations in urban planning; urbanization and multi-level planning; Relationship to economic growth, urban growth, rural growth, etc

### TEXT BOOKS:

1. Bhende, Asha A and Tara Kanitkar, Principles of Population Studies, 13<sup>th</sup> Edition, (Bombay: Himalaya Publishing House, 2000).
2. P.S. Aaradhana, Population Ecology, Rajat Publication, New Delhi, 2001
3. Mohan Advani Urbanisation, Displacement and Rehabilitation, Rawat Publication, New Delhi, 2010
4. P.N. Prasad and T.R. Amarnath, Environmental Pollution Causes, Effects and control, Crescent Publishing Corporation, New Delhi, 2010.
5. H.M. Saxena, Environmental Management, Second Edition, Rawat Publications, New Delhi, 2010

### SUPPLEMENTARY READINGS;

1. A.K. Shrivastava, Population Development, Environment and Health, (APH Publishing Corporation Ansari Road, Darya Ganj, New Delhi ,2012)
2. Himanshu Pandey Population Growth and Migration Models, Radha Publications New Delhi. 2001
3. B. Bhattacharya Urbanization Urban Sustainability and the Future of Cities Concept Publishing company (P) Ltd., 2010
4. Kalpana Markandey S. Simhadri 2010, Urban Environment and Geo Informatics.

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 7	PO 6	PO 8	PO 9	PO 10	PO 11	PO 12	PO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	1	3	3	3	3	1	1	1	2	1	1	3	3	3	3	2
CO2	2	1	1	3	3	3	3	1	1	1	1	2	2	1	1	3	3	1
CO3	3	1	1	2	1	1	3	3	3	3	2	3	1	2	1	1	2	2



Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC203	CORE 6 : POPULATION THEORIES AND POLICIES	4	-	-	4

### Learning Objectives (LOs)

The students will be able to

**LO1** : Understand the classical and neo-classical writers' views on Population issues

**LO2** : Have a clear understanding of socio-economic theories of population.

**LO3** : Learn modern theories of Population

### Course Outcomes (COs)

After completion of the course the students will be able to :

**CO1** : Acquire knowledge about early views on Population issues

**CO2** : Understand Malthusian, Neo-Classical theories and modern Population theories

**CO3**: Familiarize Population policies and India's Population policy

### UNIT-I: Early Views 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: Ancient and medieval writings on Population: Mercantilists; Physiocrats and others.

### UNIT-II: Malthusian, Neo-Classical, Biological and Social Theories on Population

Malthusian theory, criticism and relevance; The Neo-classical school and the Population issues; Marxian views on Population issues; Biological Theories: Sadler's theory; Doubleday's Diet Theory, Carrodo Gini's Theory, Herbert Spencer's theory; Castro's theory of Protein consumption; Social capillarity theory; theory of change and Response, theory of diffusion or cultural lag, Optimum population theory, Threshold hypothesis, Logistic Curve. Mathematical Theories, Marxists views on Population Issues.

### UNIT-III : Modern Population Theories

Theory of Demographic Transition - critical evaluation and applicability; Leibenstein's Critical minimum effort thesis; Lewis economic development with unlimited supplies of Labour ;Coale and Hoover Models; .Becker's theory, Ronald Freedman conceptual models, Caldwell's model on fertility.

### UNIT -IV: Population Policies and World Population Conferences

Population Policies: Meaning and Definitions; important dimensions; Types of Population Policies: Fertility Influencing Policies, Mortality Influencing policies, and Migration Influencing Policies; Population Policy justification; Overview of Population Policies in Developing and Developed Countries. Role of the United Nations, and other international agencies in population policy promotion; World Population and Health Conferences: Bucharest (1974), Alma Ata, Beijing and Mexico (1984), and Cairo (1994) the World Population Plan of Action in different countries.

### UNIT-V: India's Population Policy

India's Population Policy: History- Pre-Independence and Post-Independence era; National Population Policy 1976; Population policy 1977; National Health Policy 1983; Committee on Population 1991; Draft National Population Policy 1993; National Population Policy - 2000, National Health Policy 2017. Target Free Approach and Reproductive and Child Health Programmes in India.

### TEXT BOOKS:

1. K.C. Mitra, "A Text book of Population Studies: Theory and Principles" (New Delhi: Dominant Publishers and Distributors (P) Ltd., 2012)
2. Sydney H Coontz, "Population Theories and the Economic Interpretation" (New Delhi: Routledge Publications, 2018)

- Peters, David H. et.al. 2002: Better Health Care Systems in India, World Bank, Washington D.C.
- Government of India, 2002: National Health Policy, Ministry of Health and Family Welfare, Government of India, New Delhi.

#### SUPPLEMENTARY READINGS:

- Bhende Asha A. and Tara Kanitkar, Principles of Population Studies (Bombay: Himalaya Publishing House, 2000)
- Government of India, 2000: National Population Policy, Ministry of Health and Family Welfare, Government of India, New Delhi.
- Donald Ludwin, "Stochastic Population Theories" ( New york: Springer-Verlog, 1974.
- Chandrasekhar, S., Infant Mortality, Population Growth and Family Planning in India (London: George Allen and Unwin 1972).

#### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 7	PO 6	PO 8	PO 9	PO 10	PO 11	PO 12	PO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	3	3	3	3	1	1	2	1	2	1	2	3	3	3	2	2
CO2	3	2	1	2	1	3	2	3	3	1	3	2	1	1	1	3	3	2
CO3	3	1	1	2	1	3	3	3	1	3	1	3	3	1	1	2	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPE204	DEPARTMENTAL ELECTIVE 2 : POPULATION AGEING	3	-	-	3

#### Learning Objective (LOs)

The student will be able to

- LO1 : To understand the basic aspects of ageing.
- LO2 : To understand to categorize the social aspects of ageing.
- LO3 : To know to classify the Economic and health aspects of ageing

#### Course Outcomes (COs)

After completion of the course the students will be able to :

- CO1 : Acquire the knowledge on the basic aspects of ageing
- CO2 : Acquire the knowledge to categorize the social aspects of ageing.
- CO3 :Acquire the knowledge to classify the Economic and health aspects of ageing

#### UNIT-I: Basic Aspects of Ageing

Meaning, Concepts and measures of ageing, Components of population ageing and their inter-relation with age structure; Ageing trends and patterns in India.

#### UNIT-II: Social Aspect of Ageing

Social Status and Roles of Elderly, Family Structure, Inter-generational relations, 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, 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, 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.

#### 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

#### TEXT 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 Delhi 2007
3. Bose, A.B. Social Security for the Old. New Delhi: Concept Publishing, 2006

#### SUPPLEMENTARY READINGS:

1. Adil, Mohd Sheeraz: Socio-demographic, economic and behavioral determinants of hypertension and depression in India and state subgroups: Evidence from LASI Wave-1. Mumbai. IIPS
2. Arokiasamy, P; Bloom, David E; Lee, Jinkook; Sekher,T.V& IIPS: Longitudinal Ageing Study in India: (LASI: Pilot survey -010) - India Report. [Investigation of the health, social and economic well-being of India's growing elderly population] Mumbai. IIPS
3. Bhaumik, Debolina: Gender, residence, and social group differential in lifecycle deficit and intergenerational support for elderly in India. Mumbai. IIPS,
4. Bloom, D.E., D. Canning, et.al. The Demographic Dividend: A New Perspective on The Economic Consequences of Population Change. Santa Monica
5. Boro, Sasanka: Prevalence of substance use and its association with non-communicable diseases among older adults aged 45+ in the North-Eastern States of India; evidence from LASI wave-I (017-18). Mumbai. IIPS
6. Chakraborty, Suchandrima: Mental health, material deprivation and III- Treatment status among elderly: A Study in rural West Bengal. Mumbai. IIPS
7. Devikrishna, N B: Burden of measured and undiagnosed depression among older adults in India. Mumbai. IIPS

#### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 7	PO 6	PO 8	PO 9	PO 10	PO 11	PO 12	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6
CO1	2	1	3	1	3	3	3	1	3	2	1	2	1	1	1	3	2	1
CO2	2	1	3	1	3	3	3	1	3	3	2	1	3	1	1	2	3	2
CO3	1	3	1	3	3	3	1	2	2	1	2	2	3	3	3	1	3	1

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPE205	DEPARTMENTAL ELECTIVE 2 : POPULATION AND DEVELOPMENT	3	-	-	3

#### Learning Objectives (LOs)

The students will be able to

- LO1 : Understand the importance of population and development
- LO2 : Learn the importance of development planning
- LO3 : Acquire the knowledge on the component's development planning in India

## Course Outcomes (COs)

After completion of the course the students will be able to:

**CO1** : Impart the knowledge on population planning as an integral part of overall development planning.

**CO2** : Explain the Health services: Primary health care, preventive and curative services, Health delivery system in India.

**CO3** : Illustrate the Planning for education, poverty eradication and malnutrition; employment and manpower planning.

### UNIT-I: Development

Concept and indicators of economic development, Approaches to development; changing concept-emphasis of distributive aspect, social aspects, quality of life, Physical Quality of Life Index (PQLI), Human Development Index (HDI) , Social Development Index (SDI), Gender Development Index (GDI), Millennium Development Goals (MDG), Sustainable Development Goals (SDG), Human Poverty Index (HPI) and Modernization process.

### UNIT-II: 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-III: Concept of Planning

Concept of planning: Definition, Concepts and objectives of planning. Population planning as an integral part of overall development planning. Strategy for planning: Demographic considerations in planning for different sectors.

### UNIT-IV: Food Planning and Health in India

Population and Food security: Food requirements and production, poverty and malnutrition; agricultural development; Health services: Primary health care, preventive, promotive and curative services, Health delivery system in India.

### UNIT-V: Planning Other Aspects

Planning for education; problems, policies and requirements of housing, rural and urban development, poverty eradication and malnutrition; employment and manpower planning.

#### TEXT BOOKS:

1. Ansley J.Coale and E.M Hoover, Population and Economic Development in Low-income Countries (New Jersey: Princet on University Press, 1958)
2. Bhend A Asha .and Tara Kanitkar, Principles o Population Studies, (Bombay: Himalaya Publishing House, 2000)
3. Charles P. Kindilberger and Bruce Herrice, Economic Development( London: McGraw Hill Ltd.,1977)
4. W.T.S. Gould, Population and Development, 2009.

#### SUPPLEMENTARY READINGS:

1. ManZoor Alane S and G.Ram Reddy, Socio-Economic Development Problems in South East Asia(Bombay: Popular Prakashan,1978)
2. Marcus F. Fraud (ed.),Responses to Population Growth in India, Change in Social, Political and Economic Behaviour (New York: Praeger Publishers 1975)
3. Prasad,K.N Problems of Indian Economic Development National and Regional Dimensions (New Delhi: Sterling Publishers Private Limited,1983)
4. Rudder Dutt and K.P.M Sundaram ,Indian Economics (New Delhi: Sultan Chand and Co.,(P)Ltd.,1982)
5. Seth, M.L Principles of Economics (Agra: Lakshmi Narai Agarwal,1982)
6. Yves Bizien, Population and Economic Development (New York: Praeger Publishers,1973)
7. United Nations,(1993):Population Policies and Programmes, Department of Economics & Social Informal & Policy Analysis, New York.
7. Roy K. and G. Rama Rao, (1984): Introduction to Evaluation of Demographic Impact of

- Family Planning Programme, Himalaya Publishing House, Bombay.
8. Birdsall, Nancy et.al. 2001: Population Matters: Demographic Change, Economic Growth and Poverty in the Developing World, Chapters 2, 4 and 5, Oxford University Press, Delhi.
  9. David, E. Bloomet.al., 2003: The Demographic Dividend, Santa Monica, CA.
  10. .Coale, A.J.and Hoover, E.M.1958: Population Growth and Economic Development in Low Income Countries, Prince on University Press, Princeton N.J.

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	2	3	3	3	3	2	1	3	2	1	1	2	1	3	3	3
CO2	2	3	1	3	3	2	3	1	2	3	1	3	1	3	1	3	3	2
CO3	3	1	2	3	2	3	3	1	1	3	1	3	1	2	1	3	3	1

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23APOPX03	INTER - DETARTMENTAL ELECTIVE 2 TAMIL NADU DEMOGRAPHIC SCENARIO	3	-	-	3

### Learning Objectives (LOs)

The students will be able to

- LO1** : Learn fundamentals regarding the key components of demography: fertility, mortality and migration and their societal implications;
- LO2** : Get an opportunity to learn how these demographic trends of growth and transition affect their life in small and large ways.
- LO3** : Identify and manipulate key demographic components that range from the local to the Global spatial scales and for different population segments.

### Course Outcomes (COs)

After completion of this course the students will be able to:

- CO1** : Impart the knowledge of pupation situation and future prospects of future population
- CO2** : Understand the fertility, mortality levels and trends differentials
- CO3** : Engage in close analysis of socio-economic status and policies and programmes.

### UNIT-I: Demography

Demography: Definitions, origin, nature scope and importance; Development of Demography as a discipline; Demography and other sciences – Mathematics and Statistics, Economics, Sociology, Anthropology, Psychology, Public health and Biological Sciences. Sources of Demographic Data.

### UNIT-II: Population Composition

Population Composition: Population Structure-Age and Sex: Definitions, measures and factors; Population Characteristics: Ascribed Characteristics-Age and Sex; Achieved Characteristics: Race, Religion, Caste, Education, Language, Income and Marital Status and the factors affecting the population composition

### UNIT-III : Population Growth

History of Population Growth: Primitive Society and Pre-Industrial Society for World, Developed and Developing Societies; Future prospects of population growth: World, Developed and Developing countries.

### UNIT-IV: India's Population Scenario

Population Scenario of India and its States; History of population growth- Past, Present and Future Prospects; Components of Population change-Fertility, Mortality and Migration-Definitions, Importance, Sources. Concepts and Measures, Causes and consequences of Population change.

### UNIT-V: Migration and Urbanization

Migration and Urbanization – Migration: Definition, Concepts, Sources, Importance and Measures, Types and Factors; Urbanization: Definition, Importance, Sources, Concepts and Measures; Current Urbanization processes in Developed and Developing countries with special focus on India; Causes and Consequences of Urbanization.

#### TEXT BOOKS:

1. Bose, Ashish: India's Urbanization 1901 – 2001 – 2nd Ed New Delhi: Tata McGraw Hill, 1978
2. Thompson, Warrens and David T Lewis: Population Problem – 5th ed – New Delhi: Tata McGraw Hill, 1965.
3. Jacob S. Siegel and David a. Swanson, "The Methods and Materials of Demography", Second Edition, USA.: Elsevier Science, 2004
4. John Weeks, "Population: An Introduction to Concepts and Issues" Singapore: Wordsworth Learning. Singapore 9<sup>th</sup> edition., 2005
5. World Population Prospects, Vol I and II, United Nations, 2006
6. United Nations, (2004): World Urbanization Prospects, The 2003 Revision, New York.

#### SUPPLEMENTARY READINGS:

1. Bhende, A. and T. Kanitkar, "Principles of Population Studies" Mumbai: Himalaya Publishing House, 2019.
2. Bloom, D.E., D. Canning, et.al, "The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change", Santa Monica, RAND, 2002
3. Bogue, Donald J. (1969), "Principles of Demography", John Wiley and Sons Inc., New York
4. United Nations, The Determinants and Consequences of Population Trends, Vol. I (New York: Dept. of Economic and Social Affairs, 1973).

#### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	3	1	3	3	3	1	3	2	1	3	1	3	1	3	3	3
CO2	2	1	3	1	3	3	3	1	3	3	2	1	3	1	2	3	3	2
CO3	1	3	1	3	3	3	1	2	2	1	3	2	3	3	3	3	2	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23APOPX04	INTER - DEPARTMENTAL ELECTIVE 2 HEALTH PLANNING AND POLICIES	3	-	-	3

#### Learning Objectives (LOs)

The students will be able to

**LO1** :: Explore the origin and history of public health and health indicators in particular

**LO2** : Outline the health planning and organization

**LO3** : Recognize the health care services, health legislation, and health programmes in particular

## Course Outcomes (COs)

After completion of the course, the students will be able to

**CO1** : Acquire the knowledge about public health and health planning

**CO2** : Explore the importance of health organization

**CO3** : Understand about health programmes and the role of agencies in the promotion of Health

### **UNIT-I: Health Situation**

Historical review of origin of various branches of public health; Health services in India; Indicators of health: morbidity and mortality, Health and development relationship; Health situation under Five Year Plans

### **UNIT-II: Health Planning and Organization**

Health planning process: Decision making, qualitative and quantitative decisions, Policies Strategies, budget; Health Planning in India; Reports of different Committees: Bhole committee, Mudaliar committee, Chandah committee, Mukerji committee; Health Organization: Design, structure, principles, formal/informal types, coordination within and outside. Span of control, centralization, and decentralization, staffing

### **UNIT-III: Health Care Services and Health Legislations**

Preventive, Promotive and Curative services; Approaches in health care service: risk and epidemiological Health care services for mothers, adults and aged population and children, industrial workers; Health care legislations in India: Legal aspect of healthcare, MTP Act, Biomedical Waste Rules, The Consumer Protection Act, Pre-Conception and Pre-Natal Diagnostic Techniques (PNDT)Act, Transplantation of human organs Act

### **UNIT-IV : National Health Policies**

National Health Policy 1983; National Health Policy 2002; National Rural Health Mission, 2005; National Urban Health Mission 2013; National Health Policy 2017: The Swachh Bharat Abhiyan, Yatri Suraksha, Reduced stress and improved safety in the work place, Reducing indoor and outdoor air pollution; Ayushman Bharat National Health Protection Scheme

### **UNIT-V: Major Health Programmes**

National Health Programmes – National Leprosy Eradication Programme, National Malaria Eradication Programme, Universal Immunization Programme, National Programme for Prevention of AIDS, National Filaria Control Programme, STD Control Programmes, 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

### **TEXT BOOKS:**

1. K. Park, Preventive and Social Medicine, (India: Bannersidas Bhanot and Company Limited, 2015)
2. Rameshwari Pandya, Health, Family Planning and Nutrition in India, (New Century Publication, New Delhi, 2009).
3. Piyush Gupta & Amir Maroot Khan, Text book of Community Medicine, (New Century Publication, New Delhi, 2016)

### **SUPPLEMENTARY READINGS:**

1. Andrew Green, an Introduction to Health Planning for Developing Health System Oxford Press, 2007)
2. Govt. of India National Health Policy-2002, Ministry of Health and Family Welfare, New Delhi. (2002)
3. Government of India Report of the National Commission on Macro Economics and Health, Ministry of Health and Family Welfare, New Delhi 2005)
4. Peters, et.al, Better Health System for India's Poor: Findings, analysis and Options: The World bank, New Delhi (2002)
5. National Institute of Health and Family Welfare Management Training Modules for District level Health officers, New Delhi, 1990

6. Ashokshan et.al., Community Participation In Health and Family Welfare Programme, Innovative Experience in India, Indian Society of Health Administrators, Bangalore, 1990.

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	2	3	1	3	3	3	2	1	3	2	3	3	1	1	1	3
CO2	3	3	3	2	1	1	2	3	3	3	1	3	2	3	1	3	3	1
CO3	2	1	1	1	3	3	3	3	2	1	1	2	3	3	1	1	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23TSSC200	ACADEMIC WRITING SKILLS	2	-	-	2

### Learning Objectives (LOs)

The students will be able to

- LO1 : Acquire the skills of writing in English for literary and other purposes
- LO2 : Enhance the students master the art of writing in English to fulfill their academic and professional goals
- LO3 : Make the students understand the strategies involved in developing effective and coherent paragraphs
- LO4: Make the students get acquainted with the conventions of academic writing in English
- LO5 : Help them analyse different sentence structures

### Course Outcomes (COs)

After completion of the course, the students will be able to

- CO1 : Construct a variety of flawless sentences in English using appropriate grammatical structures
- CO2 : Earn their skills in Technical Writing
- CO3 : Draft effective research proposals/reports
- CO4 : Exploit the resources of English language for professional development
- CO5 : Develop effective introduction and conclusion

### UNIT-I

Organizing the Theme, Introduction and Conclusion

### UNIT-II

The Paragraph, Logic

### UNIT-III

Deadwood, Inflated Diction, Weak Word, Cliché

### UNIT-IV

Sentence Structure: Sentence Fragment, Run-together Sentence, and Comma Splice  
Sentence Structure: Faulty Pronoun Reference, Sentence Structure: Faulty Parallelism  
Correct Usage, Agreement

### UNIT-V

Punctuation and Mechanics

### TEXT BOOKS:

1. Kinsella, Paul. The Techniques of Writing. New York: Harcourt, 1975

### SUPPLEMENTARY READINGS:

1. Krammer. G. Melinda, et al. Prentice Hall Handbook for Writers. New Jersey, 1995.
2. Langan, John. Sentence Skills with Readings. New York: McGraw-Hill, 2001.
3. Mohan, Krishna & Meenakshi Raman. Effective English Communication; New Delhi: McGraw-Hill, 2000



## Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	1	3	1	1	3	3	1	3	2	1	3	3	1	1	3	3
CO2	3	2	1	3	1	1	3	3	1	3	3	2	3	2	2	2	2	2
CO3	3	1	1	3	1	1	3	3	1	3	2	2	2	2	1	1	3	3
CO4	3	2	1	3	1	1	3	3	1	3	2	2	2	2	1	1	2	2
CO5	2	1	1	2	1	1	2	2	1	2	3	2	3	3	1	1	2	3

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC301	CORE 7 : DEMOGRAPHIC MODELS , INDIRECT ESTIMATIONS AND POPULATION PROJECTION	5	-	-	5

### Learning Objectives (LOs)

The students will be able to

**LO1** : Understand the important Model Life Tables, Stable Population Model and Fertility Models used in demographic analysis

**LO2** : Comprehend the various Indirect Estimation Techniques of Fertility, Mortality and Migration used in Demographic Analysis

**LO3** : Understand the important Techniques used for Projecting National and Sub-National Populations.

### Course Outcomes (COs)

After completion of the Course, the Students would be able to

**CO1** : Identify the utilities of Model Life Tables, Stable Population Model and Fertility Models used in Demographic Analysis.

**CO2** : Recognize the usefulness of Indirect Estimations Techniques of Fertility in Demographic Analysis.

**CO3** : Recognize the usefulness of Indirect Estimations Techniques of Mortality in Demographic Analysis.

**CO4** : Recognize the usefulness of Indirect Estimations Techniques of Migration in Demographic Analysis.

**CO5** : Realize the use effectiveness of Techniques used for Projecting National and Sub-National Populations.

## UNIT-1: Model Life Tables and Stable Population

Model Life Tables: United Nations Model Life Tables, Coale and Demeny Regional Model Life Tables, Ledermann's System of Model Life Tables, Brass-Logit Life Table System, United Nations Model Life Tables of Developing Countries. Stable Population; Stationary Population; Quasi-Stable Population; Model Stable Populations; Derivation of Stable Population Theory.

### UNIT-II: Fertility Models and Estimation of Fertility

Fertility Models: Coale and Trussel Model, Brass Relational Gompertz Fertility Model. Indirect Estimation of Fertility: Brass Type P/F Ratio Method, Estimation of Age-Specific Fertility from the Increment of Cohort Parities between Two Surveys, Based on the Information on Children Ever Born Classified by Duration of Marriage, Using Model Stable Age Distributions, Reverse Survival Methods. Sreenivasan's Birth Intervals.

### UNIT-III: Estimation of Mortality

Estimation of Child Mortality: Based on Children Born and Children Surviving, Based on Data classified by Duration of Marriage. Estimation of Mortality Using Model Stable Age Distributions. Estimation of Adult Mortality: Using Census Age Distributions, Based on Distribution of Deaths by Age. Estimation of Adult Survivorship Probabilities from Data on Orphan hood and Widowhood.

#### UNIT-IV: Estimation of Migration

Estimations of Inter-Censal Migration: Using Data on Place of Birth, Duration of Residence, Place of Last Previous Residence and Place of Residence at a Fixed Prior Date; Vital Statistics Method; Life Table Survival Ratios Method; Census Survival Ratios Method; National Growth Rate Method. Direct and Indirect Methods for Estimating of Rural-Urban Migration.

#### UNIT-V: Population Projections

Mathematical Methods; Economic Methods , Component Method. Projections of Urban and Rural Populations: Using Urban Growth Rates; Using Rural Growth Rates, Using Ratio Methods; United Nation's Method ; Methods of Projecting Households and Families. Methods of Projecting School Going , and Labour Force Populations.

#### TEXT BOOKS:

1. Bhaskar Dutt Misra An Introduction to the Study of Population, South Asian Publishers Pvt. Ltd, New Delhi, (2004)
2. Bhende, A. and T. Kanitkar Principles of Population Studies, Himalaya Publishing House, Mumbai, (2019)
3. Bose, Ashish Population of India: 2001 Census Results and Methodology, B. R. Publishing Corporation, Delhi, (2001)
4. Coale, A.J and Demeny, P Regional Model Life Table and stable Populations, (1983),
5. Henry Shylock, et.al. (1971), The Methods and Materials of Demography, Vols. I and II, Washington: Bureau of Census.
6. Pathak, K. B. and F. Ram, Techniques of Demographic Analysis, 2nd Edition, Himalaya Publishing House, Bombay, (1998),
7. Ramakumar, R. Technical Demography, New Age International (P) Limited Publishers, New Delhi, (2006)
8. Srinivasan, K., Basic Demographic Techniques and Applications, Sage Publications, New Delhi, (1998)

#### SUPPLEMENTARY READINGS:

1. United Nations (Manual I- Methods of Estimating Total Population for Current Dates, (1952),
2. United Nations, Manual II- Methods of Appraisal of Quality of Basic Data for Population Estimates, (1955).
3. United Nations, Manual III- Methods for Population Projection by Sex and Age, (1956)
4. United Nations, Manual IV- Methods of Estimating Basic Demographic Measures from Incomplete Data, (1967)
5. United Nations, Manual V-Methods of Projecting the Economically Active Population (1971).
6. United Nations, Manual VI- Methods of Measuring Internal Migration, (1970).
7. United Nations , Manual VII- Methods of Projecting Households and Families, (1973).

#### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	2	3	2	2	3	2	3	1	3	1	2	3	2	2	1	2	2
CO2	2	3	2	2	3	1	2	2	3	2	1	2	3	3	2	2	1	2
CO3	3	2	1	3	3	2	3	1	2	1	2	2	2	2	2	2	2	3
CO4	3	2	2	1	1	3	1	1	3	2	2	3	1	1	1	3	3	2
CO5	1	3	3	2	3	1	2	2	1	2	2	1	2	2	1	1	2	1

Course Code	Course Title	Hours / Week			Credit
		L	T	P	

23POPC302	CORE 8 : RESEARCH MEHTODOLOGY AND STATISTICAL TECHNIQUES	5	-	-	5
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### Learning Objective (LOs)

The student will be able to

- LO1 : Understand the major stages in social research by scientific method.
- LO 2 : Learn the important factors embodied in a research design and the techniques involved in framing it
- LO3 : Learn about data classification and tabulation, analysis, application of statistical techniques and report writing.
- LO4 : Have a detailed knowledge in descriptive statistics
- LO5 : Acquire knowledge on statistical techniques like regression, probability and distribution, and test of significance.

### Course Outcomes (COs)

At the end of the course the students will be able to

- CO1 : Acquire the knowledge of scientific research
- CO2 : Understand research design and sampling techniques
- CO3 : Explore the knowledge of processing data and analysis
- CO4 : Measures of central tendency and dispersion the relevance of probability and distribution
- CO5 : Understand the statistical techniques like correlation and regression and test of significance in social research.

### UNIT-I: Social Research and Research Design

Scientific Research: meaning, nature, scope, objectives and basic assumptions: Utilities of research; Types of research: Pure, Applied and Action Research; Major steps in Social Research; Formulation of a Research Problem; Framing of objectives; Hypothesis: concepts, definitions, characteristics types, sources, formulation and Testing of Hypothesis: Null hypothesis and alternative hypothesis. Research Design: meaning, need, features of good design, components of research design, and types: Exploratory, Descriptive and Experimental; Method of investigation: Social Survey method, Experimental methods, statistical methods, Case study method.

### UNIT-II: Sampling techniques, Data collection and Scaling techniques

Sampling techniques: Meaning, Definition, need; Types: Probability and Non-Probability Sampling. Data Collection: Methods and Tools; Methods: Observation: Participant and Non-Participant, Interview Technique, Focus Group Discussion, Case Study, In-depth interviews; Tools: Schedule and Questionnaire; Advantages and disadvantages; Scaling Techniques: Problems of Measurement; Types of Scales used in Social Research.

### UNIT-III: Data analysis, Interpretation and Report Writing

Processing of Data: Editing, Coding, Classification and Tabulation; Analysis of data; Use of Computer in the Processing and Analysis of data. Diagrammatic and Graphical Representation of data: Diagrams: Simple, Multiple, Component and percentage bar diagrams; Pie diagrams and Pictograms; Graphs: Line diagram, Histogram, Frequency Polygon, Ogive and Lorenz Curve. Interpretation of results and report writing; Elements and Pre-caution of writing research report; Uses of reference materials; Proposals preparation; Preparation of Manuscripts for a Scientific Journal.

### UNIT-IV: Statistical Techniques

Statistical methods: Importance in Population Studies; Types of variables: Qualitative and Quantitative; Discrete and Continuous; Independent and Dependent; Computer: importance and applications; Measures of Central Tendency: Mean, Median and Mode Geometric mean, Dispersion: Meaning, definition, Uses, Measures: Range, Quartile deviation, Mean deviation and standard deviation; co- efficient of variation, Quartile Co- efficient of variability; Skewness and Kurtosis. Elementary Probability Theory and Theoretical distribution: Meaning and importance in Demographic analysis; Theoretical Distributions; Binomial, Poisson and Normal Distribution: Assumptions, properties, fitting and simple problems.

## UNIT-V: Correlation, Regression and Test of Significance

Correlation: Concepts; scatter diagram and its uses; Pearsons co-efficient of correlation, Rank correlation and Spearman co-efficient; partial and multiple correlation; Regression: Meaning and uses; curve fitting; Multiple Regression: Step-Wise, Logit regression analysis and path Analysis; Test of significance: Meaning and importance; Level of significance; parametric Test P, t and F; Test for mean, proportion and correlation.(Note: Emphasis is to be laid only on application, proof of any theorem or derivation of any formula should be avoided)

### TEXT BOOKS:

1. C. R. Kothari and Gaurav Garg, "Research Methodology: Methods and Techniques" (New Delhi: New Age International (P) Ltd., 2014)
2. Dharmesh P. Patel, "Research Methods in Social Sciences", (Jaipur: Sree Nivas Publications, 2013)
3. Gerard Guthrie, "Basic Research Methods", (New Delhi: Sage Publications India (P) Ltd, 2014).
4. Uwe Flick, "Introducing Research Methodology", (New Delhi: Sage Publications India (P) Ltd, 2012)
5. Misra, R.P. "Research Methodology, (New Delhi: Concept Publishing Company, 2002)
6. Pat Cox, Thomas Geisen and Roger Green "Qualitative Research and Social Change", (U.K: Palgrave Max Millan. 2016)
7. Douglas and Altman "Practical Statistics for Medical Research" (Washington DC: Chapman and Hall Publication, 2006)
8. C.B. Gupta and Vijay Gupta "An Introduction to Statistical Methods" (New Delhi: Vikas Publishing House, 2004)
9. Michael de Smith "Statistical Analysis Handbook", (U.K: The Winchelson Press, 2015)

### SUPPLEMENTARY READINGS:

1. Rajit Kumar. "Research Methodology", (New Delhi: Sage Publication India Pvt., Ltd., 2011)
2. Petti Alasuctions, Leonard Bickman and Julia Prannen "Social Research Methods" (New Delhi: Sage Publishers, 2008)
3. T.S. Wilkinson, and P.L Bhandarkar, "Methodology, Techniques of the Social Research"(Bombay: Himalaya Publishing House, 1979).
4. Gupta SP "Statistical Method" (New Delhi: Sultan Chand Publications, 2021)
5. Charyl Anm Williard "Statistical Methods: An Introduction to Basic Statistical Concepts and Analysis", (U.K: Rouldege Taylor and Francis, 2020)
6. Rudolf J. Frewid, William J Wilson and others "Statistical Methods" (USA: Academic Press, 2010)

### Outcome Mapping

PO/ CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	2	3	1	3	3	3	2	3	2	3	3	3	2	1	1	2
CO2	3	3	3	2	3	3	3	2	1	1	1	1	2	3	3	3	3	2
CO3	2	1	1	2	3	3	3	3	2	1	2	1	3	3	2	1	1	2
CO4	3	3	3	2	1	1	2	3	3	3	3	1	2	3	3	3	3	2
CO5	2	1	1	2	3	3	3	3	2	1	2	2	3	3	1	1	2	3

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC303	CORE 9: POPULATION PROGRAMMES AND EVALUATION	5	-	-	5

### Learning Objectives (LOs)

The students will be able to

**LO1** : Explain the family planning programmes, its importance, and organizational structure

**LO2** : Discuss the various approaches and methods of FPP

**LO3** : Examine the family planning performance and agencies of family planning programmes

### **Course Outcomes (COs)**

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

**CO1** : Acquire the knowledge about Family Planning Programme and organizational structure

**CO2** : Analyze the level and trends of family planning programme

**CO3** : Bring an understanding of Family Planning Programme evaluation and the role of National and International Agencies in the Family Planning Programme

### **UNIT-I: Family Planning**

Family Planning: Meaning, Definition, Objectives, Principles, and Need for Family Planning; History of Family Planning Movement in the World, Developed and Developing Countries

### **UNIT-II: Organizational Structure, Approaches and FP Methods**

Organizational Structure : Central level, State level, District level, and Block level ; Approaches to Family Planning : Clinical Approach , Extension Approach , Integrated Approach, Camp Approach, Cafeteria Approach, Target Free Approach , and Reproductive and Child Health Approach; Methods of Family Planning : Rhythm Method , Coitus interrupts, Condom, Oral pills, Foam Tablets, Diaphragm\Jelly, IUD ; Sterilization : Tubectomy, Vasectomy, and Laparoscopic; Effectiveness and acceptability of each method

### **UNIT-III: Targets and Achievements**

Level and Trends in the Family Planning methods: Acceptance and Non-acceptance of Family Planning methods; Community Resistance; Misconceptions; prejudices, bias, and other impediments to the acceptance of family planning; Funds Allocation, Targets, and Achievements under various plan periods

### **UNIT-IV: Family Planning Programme Evaluation**

Family Planning Programme Evaluation: Definition of Terms and Concepts in Family Planning Evaluation: Acceptance, Use-effectiveness, and Extended-use-effectiveness; Need for evaluation in family planning; Sources of data and limitation; Family Planning Programme measures: Acceptance rate, Contraceptive Prevalence rate, Percent Protected Couple Years, Fertility Indices and Births Averted

### **UNIT-V: Role of Different Agencies in Promotion of Family Planning Programme**

Role of Government Agencies: Mass -Media, Family Planning Association of India (FPAI), Population Foundation of India and IASP; Educational Institutions: ICSSR, ICMR, UGC, and Other Research Institutions; Role of World Agencies: UN, World Bank, WHO, UNFPA, UNICEF, etc.; Non-Governmental Organizations: International Planned Parenthood Federation, Rockefeller Foundation, and the Population Council etc.

### **TEXT BOOKS:**

1. Bhende Asha A. and Tara Kanitkar, Principles of Population studies (Bombay: Himalaya Publishing House, 2014)
2. Demeny, Paul, Population Policy: A Concise Summary, Policy Research Division Working Paper No. 173, Population Council, New York, (2003)
3. S.L. Goel, Population Policy and family Planning (Deep Publications Pvt. Ltd New Delhi,2005)

### **SUPPLEMENTARY READINGS:**

1. Ministry of Health and Family Welfare 2005: National Rural Health Mission (2005-2012), Mission Document.
2. Roy, T.K and G. Rama Rao, Introduction of Evaluation of Demographic Impact of Family Planning, (Bombay: Himalaya Publishing House, 1985)
3. United Nations, The Methodology of measuring the Impact of Family Planning Programme on Fertility, Manual IX, Population Studies, No. 66, (New York: United Nations, 1979).

4. Jain, Anrudh K. (ed.) Managing quality care in Population Programmes, (West Hartford Com; Kumarian, 1992)
5. C.Chandrasekaran and A.L. Hermalin (Eds.) Measuring the Effect of Family Planning Programme on Fertility Dolhain (Belgium) Editor, 1970)

### Outcome Mapping

PO/ CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	1	3	1	1	3	3	1	3	3	3	3	3	2	1	1	3
CO2	3	3	3	2	1	1	2	3	3	3	1	3	2	3	3	3	3	2
CO3	2	1	1	1	3	3	3	3	2	3	3	1	3	3	3	2	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC304	CORE 10 : BIO-STATISTICS	4	-	-	4

### Learning Objectives (LOs)

By Studying this Course, the Students are required to

- LO1 : Learn Various Aspects of Biostatistics and Epidemiological Study Designs.
- LO2 : Understand the Important Measures of Morbidity and Testing Procedures used in Biostatistics.
- LO3 : Comprehend the Important Survival Function Analysis and Models in Biostatistics.

### Course Outcomes (COs)

After completion of the Course, the Students would be able to

- CO1 : Recognize the Use Effectiveness of Biostatistics in Population Studies.
- CO2 : Realize the Applications of Epidemiological Study Designs.
- CO3 : Understand the important Measures of Morbidity
- CO4 : Recognize the Various Testing Procedures used in Biostatistics
- CO5 : Realize Important Survival Function Analysis and Models in Biostatistics.

### UNIT-I: Introduction

Biostatistics: Definition, Scope, Objectives and Utilities; Divisions of Biostatistics. Statistical Hypothesis: Basic Concepts, Objectives, Testing of Hypothesis, Optimum Tests under Different Situations. Types of Data: Primary, Secondary. Concept of Population and Sample. Measures of Central Tendency, Dispersion, Skewness and Kurtosis, Identification of Outliers

### UNIT-II: Principles of Epidemiology and Epidemiologic Methods

Epidemiology: Definition, Scope, Objectives, Utilities, Principles; Epidemiology of Communicable and Non-communicable Diseases; Epidemiological Methods: Analytical methods, Descriptive Methods., Epidemiology of Communicable and Non- Communicable diseases. Types of Study Designs: Ecological Studies, Cross Sectional Studies, Case Control Studies, Cohort Studies, Randomised Intervention Studies.

### UNIT-III: Measurement of Morbidity

Sources of Data on Morbidity; Measurement of Health and Diseases; Incidence and Prevalence Rates of Morbidity; Morbidity and Mortality link: Life Expectancy, Linking Exposure and Disease, Relative Risk, Odds Ratio, Attributable Risk.

### UNIT-IV: Testing Procedures

(a) Testing Procedures: Objectives, Hypothesis Test for Mean, Barlett's Test for Homogeneity, Chi-Square Test and its Applications, Test of Proportions. b) Non-parametric Tests: Objectives, Sign Test, Median Test, Wilcoxon Signed Test, Rank Test, Mann-Whitney Test. Regression Coefficient as Measure of Effect- Statistical Inference; Goodness of Fit.

### UNIT-V: Survival Function Analysis and Models

Survival Function Analysis: Gehan's Generalized Wilcoxon Test, Cox-Mental Test and Peto and Peto's Generalization of the Wilcoxon Test, Diagnostic Test Evaluation, Sensitivity, Specificity, Predictability, ROC Curve. Survival Models: Kaplan-Meir Method, Life Table Method, Mantel-Haensal Method, Cox-Proportional Hazard Method. Dose Response Analysis.

**TEXT BOOKS;**

1. Alfred, M. Braxton. (2012). Elements of Statistics for the Life and Social Sciences. Springer-Verlag. New York.
2. Annadurai, B. (2007). A Text Book of Biostatistics. New Age International (P) Ltd. New Delhi.
3. Banerjee, Pranab Kumar. (2007). Introduction to Biostatistics. S. Chand and Company Ltd. New Delhi.
4. Chap, T. Lee and Lynn, E. Eberly. (2016). Introductory Biostatistics: Second Edition. John Wiley and Sons Ltd. New Jersey.
5. Hebel, J. Richard and McCarter, J. Robert. (2011). A Study Guide to Epidemiology and Biostatistics: Seventh Edition. Jones and Bartlett. Burlington.
6. Rosner, Bernard. (2015). Fundamentals of Biostatistics: Eight Edition. Cengage. Bostan.
7. Sharma, A. K. (2005). Text Book of Biostatistics – I. Discovery Publishing House. New Delhi.
8. Siegel, S. Jacob. (2011).The Demography and Epidemiology of Human Health and Aging. Springer Dordrecht Heidelberg. London.
9. Woodward, Mark. (2013). Epidemiology: Study Designs and Data Analysis: Third Edition. Chapman & Hall/CRC. New York.

**SUPPLEMENTARY READINGS:**

1. Chang, Mark. (2011). Modern Issues and Methods in Biostatistics. Springer. New York.
2. Hauser, Philip M. and O. D. Duncan (eds.) (1959), The Study of Population, University of Chicago Press, Chicago.
3. Keyfitz, Nathan. (2013). Applied Mathematical Demography: Second Edition. Springer Science+ Business Media. New York.
4. Park, J.E. and Park, K. (2000). Park's Text Book of Preventive and Social Medicine. Banarsidas Bhanot Publishers. Jabalpur.
5. Ramakumar, R. (2006), Technical Demography, New Age International (P) Limited Publishers, New Delhi.

**Outcome Mapping**

PO/ CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	1	2	2	2	2	3	2	3	1	1	1	2	3	2	3	1	3	2
CO2	2	2	3	1	2	1	2	2	3	2	1	2	2	2	3	2	2	1
CO3	2	3	1	3	3	2	3	1	2	2	2	2	2	3	2	2	3	2
CO4	2	2	2	1	1	3	1	1	3	1	3	3	1	1	3	3	3	3
CO5	1	3	1	2	2	3	2	2	1	2	2	1	2	2	1	1	2	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPE305	DEPARTMENTAL ELECTIVE 3: PRACTICAL	3	-	-	3

**Learning Objectives (LO's)**

By Studying this Course, the Students are required to



- LO1 : Understand the Mathematical Application of Evaluation Techniques.
- LO2 : Construct Complete and Abridged Life Tables.
- LO3 : Estimate Fertility, Mortality and Migration Mathematically
- LO4 : Apply the Various Projection Techniques with Empirical Data

### **Course Outcomes (CO's)**

After completion of the Course, the Students would be able to

- CO1 : Comprehend the Mathematical Application of Evaluation Techniques.
- CO2 : Construct Complete and Abridged Life Tables
- CO3 : Estimate Fertility and Mortality Mathematically
- CO4 : Estimate Migration Mathematically
- CO5 : Understand the Application of Various Projection Techniques with Empirical Data

### **Evaluation Techniques**

Whipple's Index,  
Myer's Index,  
United Nation's (UN) Age-Sex Accuracy Index.  
Balancing Equation Method  
Chandrasekharan- Deming Method.

### **Construction of Life Tables:**

Complete Life Table  
Abridged Life Table

### **Indirect Estimations of Fertility**

Brass Type P/F Ratio Method.  
Using Model Stable Age Distributions.  
Reverse Survival Method.

### **Indirect Estimations of Mortality:**

Estimation of Child Mortality Based on Children Born and Children Surviving.  
Estimation of Mortality Using Model Stable Age Distributions.  
Estimation of Adult Mortality Using Census Age Distributions.

### **Indirect Estimations of Migration**

Vital Statistics Method.  
Life Table Survival Ratios Method.  
Census Survival Ratios Method.  
National Growth Rate Method.

### **Population Projection**

Mathematical Methods  
Economic Methods  
Component Method.

### **TEXT BOOKS:**

1. Bhaskar Dutt Misra (2004), An Introduction to the Study of Population. South Asian Publishers Pvt Ltd, New Delhi.
2. Bhende, A. and T. Kanitkar (2019). Principles of Population Studies. Himalaya Publishing House, Mumbai.
3. Bose, Ashish (2001). Population of India: 2001 Census Results and Methodology. B. R. Publishing Corporation, Delhi.
4. Coale, A.J and Demeny, P (1983). Regional Model Life Table and stable Populations. Second Edition. Academic Press. New York.
5. Hauser, Philip M. and O. D. Duncan (eds.) (1959). The Study of Population. University of Chicago Press, Chicago.
6. Henry Shylock, et.al, (1971). The Methods and Materials of Demography, Vols., I and II., Bureau of Census, Washington.



7. Pathak, K. B. and F. Ram (1998). Techniques of Demographic Analysis, 2nd Edition. Himalaya Publishing House, Bombay.
8. Ramakumar, R. (2006). Technical Demography. New Age International (P) Limited Publishers, New Delhi.
9. Srinivasan, K. (1998). Basic Demographic Techniques and Applications. Sage Publications, New Delhi.
10. United Nations (1983). Manual X- Indirect Techniques for Demographic Estimation. UN. New York.

#### SUPPLEMENTARY READINGS:

1. United Nations (1952). Manual I- Methods of Estimating Total Population for Current Dates. UN. New York.
2. United Nations (1955). Manual II- Methods of Appraisal of Quality of Basic Data for Population Estimates. UN. New York.
3. United Nations (1956). Manual III- Methods for Population Projection by Sex and Age. UN. New York.
4. United Nations (1967). Manual IV- Methods of Estimating Basic Demographic Measures from Incomplete Data. UN. New York.
5. United Nations (1971). Manual V- Methods of Projecting the Economically Active Population. UN. New York.
6. United Nations (1970). Manual VI- Methods of Measuring Internal Migration. UN. New York.
7. United Nations (1973). Manual VII- Methods of Projecting Households and Families. UN. New York.
8. United Nations (1974). Manual VIII- Methods for Projection of Urban and Rural Population. UN. New York.
9. United Nations (1968). The Concept of a Stable Population- Application to the Study of Populations of Countries with Incomplete Demographic Statistics. UN. New York.

#### Outcome Mapping

PO /CO5	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	1	2	2	2	2	3	2	3	1	1	2	2	3	2	3	1	2	2
CO2	2	2	2	2	2	1	2	2	3	2	1	2	1	3	2	2	3	3
CO3	3	3	1	3	2	2	2	1	2	2	2	2	2	2	2	2	2	2
CO4	2	2	2	1	3	3	1	1	3	1	3	3	3	1	1	3	3	3
CO5	1	3	2	2	3	1	2	2	1	2	2	1	2	2	2	1	3	1

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPE306	DEPARTMENTAL ELECTIVE 3 HEALTH AND POPULATION EDUCATION	3	-	-	3

#### Learning Objectives (LOs)

The students will be able to

LO 1: Understand the importance of health and public health

LO2: Learn the importance of balanced diet and the impact of under or over nutrition on health scenario

LO3: Acquire knowledge on the Population education in India.

#### Course Outcomes (COs)

After completion of the course the students will be able to

CO1: Acquire basic knowledge of health and Nutrition, public health and its importance

CO2: Impart knowledge on health and agencies involved in the health education programme

**CO3** : Illustrate scope, need for population education

### **UNIT-I : Health and Public Health**

Health: Definitions, Concepts, objectives, importance, Personal hygiene, Indicators of Health; Health delivery system in India. Public Health: Definition, importance, Public Hygiene: Individual, Community; Components of Public Health Environment: Water, Portable water, Wholesome water; Drainage and Sewage system, Sanitation; Occupational Health Hazards; physical, Chemical, Biological, Mechanical and Psycho-social; Environmental Pollution: Water, Air, Noise, Soil.

### **UNIT-II: Nutrition**

Food: classification, Nutrition, Definition, Concepts, Process, Types: Over Nutrition Under-nutrition, Good nutrition, Malnutrition; Functions and Sources; Nutritional deficiency diseases: Factors;

### **UNIT-III: Nutritional Programme and Health System**

Nutritional programme: Integrated Child development programme, School Noon programme, Chief Minister's Noon meals programme, Applied Nutrition Programme, Nutritional feeding Programme. Health system in India: Centre, State and District, Functions: Primary Health Centre, Community Health Centre, Sup- Centre, Hospitals.

### **UNIT-IV: Population Education**

Population Education: Definition, Nature and Scope, objectives, need for population education; Components of Population Education: Population Dynamics, Family life Education and reproductive biology. Population education programme at school and college level. Development of population activities; Implementation Strategies; agencies involved in the population education programmes.

### **UNIT -V: Extension Programme**

Extension Programme: Definition, objectives, scope and its organization: Selection of content and strategies and Training. Role of different Agencies involved in Population Education.

#### **TEXT BOOKS:**

1. Jyotsna Agnihotri Gupta, new Reproductive Technologies, Women's Health and Autonomy Freedom, Sage Publications New Delhi, 2000
2. Kumar, Health and Nutritional Status of Indian women ( Anmol Publications PVT.LTD. New Delhi, 2006) 21<sup>st</sup> Century series.
3. Rameshwari Pandya, Health, Family Planning and Nutrition in India, New Century Publications, New Delhi, 2009
4. Piyush Gupta and Amir Maroo f Khan, Community Medicine (3 rd Edition, CBS Publishers & Distributers Pvt. Ltd New Delhi,2016).
5. Natalie Stein, Public Health Nutrition, (Jones & Bartlett Learning, 2016)
6. P.S Venkatachalam and L.M Revello, Nutrition for Mother and Child, Special Report Series No.40 Nutrition Research Laboratories, 1962)to Human Nutrition, 3rd Edition October 2019 Wiley-Blackwell

#### **SUPPLEMENTARY READINGS:**

1. Dr. Susan A Lanham, Thomas R Hill, Alison M Galaghar, Hester H Vester Introduction \*J.E Park and K.Park, Preventive and Social Medicine (India: Bannersidas Bhanot and Company Limited, 1976)
2. Sunder Lal, Adarsh, Punkaj Community Medicine Preventive and Social Medicine, CBS Publishers Distributions PVT. LTD. 2016.

#### **Outcome Mapping**

	PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1		3	3	2	1	3	3	2	1	2	1	2	1	3	2	3	1	3	2
CO2		3	3	2	1	2	1	3	1	2	2	1	3	1	3	3	3	1	1

CO3	1	3	3	2	2	3	2	3	1	2	1	3	2	1	3	3	1	2
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1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours / Week			Credit
		L	T	P	
23TSSC300	EMPLOYABILITY SKILLS	2	-	-	2

### Learning Objectives (LOs)

The students will be able to

- LO1: Acquire employability skills
- LO2: Understand dimensions of task oriented skills
- LO3: Study on critical problem-solving techniques enhancing the effectiveness of non-profit organizations.
- LO4: Develop employability skills
- LO 5: Understand the logical and reasoning skills

### Course Outcomes (COs)

After completion of the course the students will be able to

- CO1: learn about the employability skills
- CO2: understand dimensions of task oriented skills
- CO3: study on critical problem-solving techniques
- CO4 : develop employability skills
- CO5 : understand the logical and reasoning skills

### UNIT-I : Introduction to Employment Skills

Meaning– Definition- Hard skills and soft skills– Employability skills and vocational skills– Employability and employment – Employability attributes

### UNIT-II:Unpacking Employability Skills

Embedded employability skills– Dimensions of competency– Task skills– Task Management skills– Contingency Management skills–Job/Role Environment skill

### UNIT-III :Inter – Relationships of Employability Skills

Communication – Team work –Problem solving – Initiative and Enterprise – Planning and Organizing – Self management –Learning – Technology.

### UNIT-IV: Resume Writing

Meaning – Features of good resume – Model (Exercise). Etiquettes – Dress, Cleanliness, Etiquettes to be followed inside the employment seeking process.

### UNIT-V: Arithmetic and Logical Reasoning Skills – Exercise.

#### READING LIST

1. <https://www.jobjumpstart.gov.au/article/what-are-employability-skills>
2. <https://www.simplilearn.com/why-are-employability-skills-important-article>
3. <https://blog.hubspot.com/marketing/employability-skills>
4. <https://www.indeed.com/career-advice/finding-a-job/employability-skills>

#### REFERENCES READINGS:

1. K. Alex Soft Skills,
2. Winning Interview Skills, Compiled & Edited by J.K. Chopra
3. A Modern Approach to Verbal and Non- Verbal Reasoning, R. S. Aggarwal.
4. Fafinski, S., Finch, E. (2014). Employability Skills for Law Students. United Kingdom: OUP Oxford
5. Trought, F. (2017). Brilliant Employability Skills: How to Stand Out from the Crowd in the Graduate Job Market. United Kingdom: Pearson Education Limited
6. Chaita, M. V. (2016). Developing Graduate Employability Skills: Your Pathway to Employment. United States: Universal Publishers.

## Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	1	1	1	3	1	3	3	1	1	1	2	2	2	1	1	1	1	1
CO2	1	1	1	3	1	3	3	1	1	1	1	1	1	1	1	1	1	1
CO3	1	1	1	3	1	3	3	1	1	1	1	1	1	1	1	1	2	1
CO4	1	1	1	3	1	3	3	1	1	1	1	1	1	2	1	2	1	1
CO5	1	1	1	3	1	3	3	1	1	1	1	1	1	1	1	1	1	1

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPI307	INTERNSHIP	-	-	-	2

### Description

Under the Internship course, the student shall join as an 'Intern' under an Experiential Learning Supervisor in a Research Institute, a University Department, a Non-Governmental Organization (NGO), or any Other Institute for a short period of time. Internship helps students to explore opportunities and options in their field of study. Even though an internship looks like a smaller investment in time and energy than a full-time job, without a doubt, it is a great investment of their time. More often than not, the internship is going to shape the course of a student's career. It will definitely assist the students in acquiring the skills they need to perform when they get full-time jobs. Moreover, the students can use internship courses as a training opportunity for their career development. Thus, the broad objective of this internship course is to help the students to identify their interests and abilities in their field of study and explore career opportunities, prior to graduation.

### Specific Objectives

- 1) to assess interests and abilities in their field of study.
- 2) to explore career alternatives, prior to graduation, by integrating theory with practice
- 3) to develop work habits and attitudes necessary for job success.
- 4) to develop communication and other critical skills in the job interview process.
- 5) to build a record of work experience.
- 6) to acquire employment contacts necessary for a job, prior to graduation.
- 7) to identify and carry out performance objectives (mutually agreed upon by the Employer, the Experiential Learning Supervisor, and the Student) related to their job assignment.

### Specific Tasks

- 1) to assist and contribute to the team and the institute/organization concerned.
- 2) to learn and gain experience from the assignment/work.
- 3) 'Job Shadowing'.
- 4) to take on an increasing amount of responsibility.
- 5) to build up good relationships and network with colleagues, customers, clients, and the institution.
- 6) to make a career-defining decision.

### Distribution of Marks

Out of the total one hundred (100) marks, twenty-five (25) marks were allotted to Internal Assessment, and seventy-five (75) marks were allotted to External Assessment. Internal Assessment consists of student's attendance in the institute/organization concerned and the External Assessment consists of both the evaluation/progress report by the Experiential Learning Supervisor in the institute/organization and the report submitted by the student in the department.

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC401	CORE 11 : DEMOGRAPHIC AND STATISTICAL SOFTWARE	5	-	-	5

### Learning Objectives (LOs)

The students will be able to

- LO1** : Learn the Basics of SPSS and Data Manipulation Using SPSS.
- LO2** : Learn the Basics of STATA and Data Manipulation Using STATA.
- LO3** : Understand the Basics of R.

### **Course Outcomes (COs)**

After completion of the Course, the Students would be able to

- CO1** : Understand the Basic Functions in SPSS.
- CO2** : Understand the Basic Functions in STATA.
- CO3** : Realize the Data Manipulation Using SPSS.
- CO4** : Realize the Data Manipulation Using STATA.
- CO5** : Comprehend the Basics of R

### **UNIT- I: Introduction to SPSS**

SPSS: Facilities and Applications; Creating Data Base Structure; Data Entry; Specifying Scales; Validation of Data Entry; Importing and Exporting Data.

### **UNIT -II: Data Manipulation Using SPSS**

Creating and Recoding New Variable; Sorting, Filtering and Selection of Specific Data; Generating Simple Frequencies; Use of Syntax Editor; Create Correlation and Partial Correlation; Create Simple and Multiple Linear Regression.

### **UNIT- III: Introduction to STATA**

STATA: Facilities and Applications; Creating Data Base Structure; Data Entry, Specifying Scales; Validation of Data Entry; Importing and Exporting Data.

### **UNIT- IV: Data Manipulation Using STATA**

Creating and Recoding ; New Variable; Sorting, Filtering and Selection of Specific Data; Generating Simple Frequencies; Use of Do-file Editor. Create Correlation and Partial Correlation; Create Simple and Multiple Linear Regression.

### **UNIT -V : Introduction to R**

R: Facilities and Applications; R-Calculator; Vector and Matrices; Data Entry; Importing and Exporting Data; Identify the Components of R Interface for Windows; Standard Arithmetic Calculation: Numerical and Matrix; Summary Statistics; Graphics in R.

### **TEXT BOOKS**

1. Alan, C. Acock. (2008). A Gentle Introduction to STATA, Second Edition. Stata Press. Texas.
2. Allan, C. Elliott. and Wayne, A. Woodward (2007). Statistical Analysis Quick Reference Guide Book: With SPSS, SAGE Publications. New Delhi.
3. Davies, M. Tilman (2016). The Book of R: First Course in Programming and R. William Pollock. San Francisco.
4. Daniels, Lisa and Minot, Nicholas. (2019). An Introduction to Statistics and Data Analysis Using STATA. SAGE Publications. New Delhi.
5. Everitt, S. Brian S and Hothorn, Torsten. (2006). A Hand book of Analyses Using R. Chapman & Hall/CRC. New York.
6. George, Darren and Mallery, Paul. (2021). IBM SPSS Statistics 27: Step by Step. Allyn and Bacon. Boston.
7. Hesketh, Sophia Rabe and Everit, S. Brian (2006). A Hand Book of Statistical Analyses Using STATA. Fourth Edition. Chapman and Hall/ CRC. New York
8. Kohler, Ulrich and Kreuter, Frauke (2005). Data Analysis Using STATA. Stata Press. Texas.
9. Johns, Elinor, Harden, Simon and Crawley, J. Michael (2022). The Rook. John Wiley and Sons Ltd. Hoboken.
10. Long, J. Scott (2009). The Workflow of Data Analysis Using STATA. Stata Press. Texas.

### **SUPPLEMENTARY READINGS**

1. George, Darren. and Mallery, Paul. (2011). SPSS for Windows: Step by Step. Allyn and Bacon, Boston.
2. Crawley, J. Michael (2007). The R Book. John Wiley and Sons Ltd. Chichester.

- George, Darren. and Mallery, Paul. (2016). IBM SPSS Statistics 23: Step by Step. Allyn and Bacon, Boston.
- Jose, Jeeva (2019). Beginner's Guide for Data Analysis using R Programming.
- Rachad Antonius (2003). Interpreting Quantitative Data with SPSS. SAGE Publications. New Delhi.
- STATA Programming Reference Manual: Release 10 (2007). Stata Press. Texas.
- STATA Survey Data Reference Manual: Release 11 (2009). Texas.

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	1	2	2	2	2	3	2	3	2	1	1	2	3	2	3	1	3	3
CO2	3	1	2	3	2	1	2	2	3	2	1	3	2	3	1	2	2	2
CO3	2	2	1	3	3	2	3	1	2	3	2	2	2	2	2	2	3	1
CO4	2	2	2	1	1	3	1	2	3	1	3	3	1	1	3	3	2	2
CO5	1	3	3	2	3	1	2	2	1	2	2	1	2	2	1	1	1	3

1-Low 2- Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPC402	CORE 12 : REPRODUCTIVE AND CHILD HEALTH	5	-	-	5

### Learning Objectives (LOs)

The students will be able to

- LO1 : Recognize about human reproduction and reproductive health
- LO2 : Explain the gynecological problems
- LO3 : Outline the sexual transmitted diseases and health programmes

### Course Outcomes (COs)

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

- CO1 : Acquire the knowledge about human reproduction and reproductive health
- CO2 : Understand the reproductive health programmes and management
- CO3 : Demonstrate RCH Programs and research studies

### UNIT-I: Reproductive Health

Reproductive Health: Definition, Concepts, importance and elements of reproductive health; Components; Anatomy and Physiology of Human Reproduction, Mechanism of conception and pregnancy; Social and cultural determinants of Reproductive Health; Reproductive Health Rights; Reproductive Morbidity.

### UNIT-II: Gynecological and contraceptive morbidity

Gynecological and contraceptive morbidity: Anemia, Breast, Cervical, Ovarian, Prostate Cancer; Behavioural risk factors, Contraceptive morbidity related to different methods.

### UNIT-III: Reproductive Tract Infection/Sexually Transmitted Infections and HIV/ AIDS

Reproductive Tract Infection/Sexually Transmitted Infections and HIV/ AIDS: Issues related to HIV infection; socio-cultural, medical, public health and psychological perspectives, Social Epidemiological questions concerning HIV infection in Asian countries with emphasis on India.

### UNIT-IV: Reproductive health programme Management

Reproductive health programme Management: Assessment of community needs, Health seeking behaviour. 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-V: RCH Programmes and role of agencies

RCH Programmes in India: Research studies on Reproductive Health, The role of Governments, Non-Governmental organizations (NGOs) including WHO and UNFPA in addressing the reproductive health problems and challenges for adolescents girls in the world and in India.

### TEXT BOOKS:

1. Berer, M., (2000): Making Abortions Safe: A Matter of Good Public Health Policy and Practice, Bulletin, WHO, Vol. 78(5), pp. 590-592.
2. Jyotsna Agnihotri Gupta, new Reproductive Technologies, Women's Health and Autonomy Freedom, Sage Publications, NewDelhi, 2000
3. Mahadevan, K. et.al. 1998. Reproductive Health, AIDS Prevention and Development of Women, (Delhi: B.P 2001)
4. Bott, S. et al (Eds. 2003): Towards Adulthood: Exploring the Sexual and Reproductive Health of Adolescent in South Asia, World Health Organization, Department of
5. Reproductive Health and Research, Geneva. 28 4. Dyson, Tim and Mick Moore, Michael A. Koenig, et.al, (2011) Reproductive Health in India, Rawat Publications
6. Sunder Lal, Adarsh, Punkaj Community Medicine Preventive and Social Medicine, CBS Publishers Distributions PVT. LTD. 2016.

### SUPPLEMENTARY READINGS:

1. E Park and K.Park, Preventive and Social Medicine (India: Bannersidas Bhanot and Company Limited, 1976)
2. P.S Venkatachalam and L.M Revello, Nutrition for Mother and Child, Special Report SeriesNo.40 Nutrition Research Laboratories, 1962)
3. Padbidri V.G and S.N. Daftary, Shaw Text Book of Gynecology. New Delhi: Churchill Livingstone 1999 pp.33-45, 214-239, 351-360
4. Jyotsna Agnihotri Gupta, 2000, Reproductive Technologies, Women's Health and Autonomy, Sage Publications

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	2	3	1	3	3	3	2	1	1	3	3	3	2	1	1	1
CO2	3	3	3	2	1	1	2	3	3	3	2	2	2	3	3	3	3	2
CO3	2	1	1	2	3	3	3	3	2	1	2	2	3	3	2	1	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPP403	PROJECT	5	-	-	7

### Learning Objectives (COs)

The students will be able to

- LO1 : Gain knowledge about how to conduct a social survey
- LO2 : Apply the research methodology to studying a research issue.
- LO3 : Gain experience in sample selection, data collection and analysis and report writing

### Course Outcomes (COs)

At the end of the course, the students will be able

- CO1 : Develop in depth knowledge of field study
- CO2 : Understand the plan and use adequate method to evaluate a task
- CO3 : Attain capability to contribute to research



## Project Work

The project work has been introduced for the students of final year in order to motivate and encourage them in research related activities. They can get practical experience in research. A guide will be allotted to each student and with the guidance of the teacher, the student will complete the project work.

## Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	2	3	1	3	3	3	2	1	1	2	3	3	3	1	1	3
CO2	3	3	3	2	1	1	2	3	3	3	3	2	3	3	3	2	3	2
CO3	2	1	1	2	3	3	3	3	2	1	1	3	3	3	3	1	1	2

1-Low 2- Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23PQPE404	DEPARTMENTAL ELECTIVE 4 : NGO MANAGEMENT	3	-	-	3

### Learning Objectives (LOs)

The students will be able to

**LO1** : Understand the history, origin and purpose of NGOs

**LO2** : Realize NGO's role on education development and family planning, etc

**LO3** : Enhance the knowledge on registration process, its governance and coordinating agencies

### Course Outcomes (COs)

After completion of the course, the students will be able to

**CO1** : Understand the history, origin and purpose of NGOs

**CO2** : Realize the procedures for registration of NGOs

**CO3** : Enhance the knowledge on the its governance and coordinating agencies

### UNIT-I: Introduction

NGOs: meanings, definition, characteristics, Objectives and Types. Genesis, present status of NGOs, and their role in social upliftment. History, origin, and development of NGOs. Purpose of NGOs., Aspects, issues of NGOs. Challenges of NGOs: poverty reduction, child welfare and women empowerment.

### UNIT-II: NGO's Role

National, International Government and Non-Governmental Agencies, Role of NGOs: Education, Women Empowerment, Development, Family Planning, Population Activities, Health, Reproductive and Child Health Programme and AIDS.

### UNIT-III: Registration process of NGO

Registration of NGO: kind of NGOs, nature of registration, modalities of registration, purpose of registration, the Non-Governmental Organizations, Trust, and Community Based Organization: the relevance, the differences, and relationships.

### UNIT -IV: NGO Governance

NGO Governance: Governance Concepts, Challenges, Perspectives and Ethical Concern; Impact of Different Governance Structures; Good Governance: Code and Accountability

### UNIT-V: Coordinating Agencies

Coordinating agencies, Funding Agencies and Schemes: NABARD and Human Rights Commission; Schemes for NGOs under the Government of India

**TEXTBOOKS:**

1. Allen Fowler and Chikku Malunga, 2010. NGO Management, The Earth scan Companion, New Delhi
2. David Lewis, 2014. NGO Management and Development, Routledge, New Delhi
3. Michael J. Worth, 2008 Nonprofit Management. Principles and Practice, Sage Publications, Inc.
4. Banerjee, G.D. (2012). NGOs: Issues in Governance-Accountability -Policies and Principles. Neha Publishers and Distributors.
5. David Lewis (2014). Non Governmental Organizations, Management and Development. Routledge Publications.

**SUPPLEMENTARY READINGS:**

1. Pandey and Devendra Prasad. 2009. Development and Management of NGO Adayayan Publishers Private Limited, New Delhi.
2. R. Kumar, S.L. Goel, Administration and Management of NGOs: Text And Case Studies, 2005
3. David Lewis, Nongovernmental Organizations: Management and Development, 3<sup>rd</sup> Edition. Routledge. 2015.
4. Snehlata Chandra, Guidelines for NGOs Management in India, Routledge, 2013

**Outcome Mapping**

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	2	3	1	3	3	3	2	1	1	3	3	3	2	1	1	2
CO2	2	3	3	2	1	3	3	2	3	2	1	3	3	3	2	1	1	2
CO3	2	1	1	2	3	3	3	3	2	1	2	2	3	3	2	1	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPE405	DEPARTMENTAL ELECTIVE 4 WOMEN ENTREPRENEURSHIP AND DEVELOPMENT	3	-	-	3

**Learning Objectives (LOs)**

The students will be able to

- LO1 : Describe the basics of women entrepreneurship and to understand entrepreneurial skills and competencies.
- LO2 : Acquire knowledge on starting a new business and to understand the role of an entrepreneur.
- LO3 : Comprehend women entrepreneurship and development with special emphasis on India.

**Course Outcomes (COs)**

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

- CO1 : Understand the basics of women entrepreneurship
- CO2 : Comprehend the entrepreneurial skills and competencies of women entrepreneurs.
- CO3 : Understand the knowledge on starting a new business
- CO4 : Understand the qualities and role of an entrepreneur
- CO5 : Comprehend women entrepreneurship and development with special emphasis on India.

**UNI-I: Women Entrepreneurship**

Women Entrepreneurship: Concepts, Scope, Objectives and Importance. Various Types of Women Entrepreneurship on the basis of Business, Technology and Motivation; Clarence Danh of Classification of Entrepreneurs; Functions of Entrepreneurs; Women Achievers as

Entrepreneurs at State and National Level in India.

**UNI-II: Entrepreneurial Skills and Competencies**

Entrepreneurial Development Programme (EDP): Needs and Objectives; Types of Entrepreneurial Competencies; Personal Entrepreneurial Competencies; Venture Initiation and Success; Entrepreneurial Attributes and Characteristics.

**UNIT-III: Starting a New Business**

Identification of Business Opportunities: Business Plan, Sources of Finances, starting a New Venture, Steps for Starting New Business; Legal Requirements for Starting a New Enterprise; Registration Process ; Licensing; SWOT Analysis ; Appraisal.

**UNI-IV: Qualities and Role of Entrepreneur**

Qualities of Entrepreneur: Leadership, Risk Taking, Decision Making, Innovation, Generation of Ideas and Creativity, Competencies, Strategic Management; Role of Entrepreneurship Skills and Development in Economic Empowerment of Women:

**UNIT-V: Entrepreneurship and Development**

Women Entrepreneurs: Traditional and Modern Business, Small, Medium and Large-Scale Enterprises; Self Help Groups; Risks, Problems and Challenges faced by women entrepreneurs; Factors Influencing Women Entrepreneurship; Push and Pull Factors; Recent trends in Development of Women Entrepreneurs in India

**TEXTBOOKS:**

1. Ramanjaneyulu, M. Economic Empowerment of Women in India, Anmol, Delhi, 2006
2. Y.P. Singh, Women Entrepreneurship, 2014
3. Anil Kumar Thakur, R.Rahman, Women Entrepreneurship, 2019.
4. Maura Mcadam, Women’s Entrepreneurship, 2023.

**SUPPLEMENTARY READINGS:**

1. Harpreer Kaur, Women and Entrepreneurship in India: Governance, Sustainability and Policy, 2022
2. Orser, Barbara, and Joanne Leck. "Physician as a feminist entrepreneur: The gendered nature of venture creation and the Shirley E. Greenberg Women’s Health Centre." Women Entrepreneurs and the global environment for Growth 2010.
3. Tinkler, J. E.; Bunker Whittington, K.; Ku, M. C.; Davies, A. R. "Gender and venture capital decision-making: The effects of technical background and social capital on entrepreneurial evaluations", 2015.
4. Hisrich and Robert, Michael Peters and Dean Shepherded Entrepreneurship, 9th Tata McGraw Hill, 2012.
5. Prasad, Kiran : Women, Globalization and Mass Media: International Facets of Emancipation, The Women Press, Delhi, 2006.

**Outcome Mapping**

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
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CO2	2	2	3	2	2	1	2	2	3	2	1	2	2	3	2	2	2	2
CO3	3	3	1	3	3	2	3	2	2	3	2	2	2	2	2	2	2	3
CO4	1	3	2	3	1	3	1	3	3	2	3	3	1	1	3	3	3	2
CO5	2	2	3	2	3	2	2	2	2	3	2	2	2	2	2	2	2	2

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPPCS3	PROJECT PLANNING AND PROPOSAL DEVELOPMENT	2	-	-	2

### **Learning Objectives (LOs)**

The students will be able to

**LO1** : Learn the methods of different types of research proposal

**LO2** : Acquire knowledge on preparation of research proposal

**LO3** : Identify relevant sources of funding agencies

### **Course Outcomes (COs)**

After completion of the course the students will be able to

**CO1** : Analyze and evaluate application guidelines to compose a funding proposal

**CO2** : Define and describe a problem statement or research question appropriate for funding

**CO3** : Acquire skills in report writing, and (iv) the methods of disseminating the research findings

### **UNIT-I : Introduction**

Importance of Social Science Research in India, Characteristics and Limitations of Social Science Research; Definition, Scope and Need for Research Development (Academic and Funding) and Merits and Limitations. Generic structure of Proposals

### **UNIT-II : Development of Academic Research Proposal**

Importance and Basic Steps in Preparation of Research Proposal; Differences between academic grants, and non-profit grant proposals; Selection and Defining the Research Problem / Topic, Review of Literature, Objectives / Hypotheses, Research Design, Sample Frame and Size, Data Collection Instruments and Proposed Data Analysis.

### **UNIT-III : Development of Research Proposal for Fund**

Guidelines for Writing a Successful Proposal: Write an executive summary; Background and Significance of Project; Define project deliverables and goals; Project Plan; Manpower and Developing budgets; Timeline; Preparing Supporting Documents; Writing with style; Building support, cultivating relationships, networking, communicating with the funder; Evaluating reviewer comments

### **UNIT-IV : Proposal Presentation Techniques**

Importance of Research Proposal Presentation, Methods of presentation, Printed Materials and Oral presentation using Audio Visual Aids; Power Point presentation, Ethical Issues Defending, Implications of Research findings.

### **UNIT-V : Funding Agencies**

Procedures for Identifying funding Agencies, Funding Agencies at National Level: UGC, ICSSR, ICPR, ICHR, Ministries, TNSCST, Funding Agencies from Abroad: UN, Population Council, Wellcome Trust, Rockefeller Foundation, McArthur Foundation, Ford Foundation, Bill & Melinda Gates Foundation.

### **TEXT BOOKS:**

1. Desai, Vandana, and Robert B. Potter, (Eds.), Doing Development Research, New Delhi: Vistaar Publications, 2006.
2. Joseph Gibaldi, MLA Handbook for writers of Research Papers, 6th Edition, New Delhi: East West Press, Ltd., 2004.
3. Kitchin, Rob, and Duncan Fuller, The Academic's Guide to Publishing, New Delhi: Vistaar Publications, 2005.
4. Robin D. Tribhuwan, and S.R. Shevkari, How to Write Funding Project Proposals. New Delhi: Discovery Publishing House, 2002.
5. Paul Oliver, Writing Your Thesis. New Delhi: Vistaar Publications, 2004.

### **SUPPLEMENTARY READING:**

1. Zina O'Leary, The Essential Guide to Doing Research, New Delhi: Vistaar Publications, 2005.
2. Harris, R.A. (2001). The plagiarism handbook: Strategies for preventing, detecting, and dealing with plagiarism. Los Angeles, CA: Pyczak Publishing.

3. Heppner, P. P., & Heppner, M. J. (2004). Writing and publishing your thesis, dissertation, and research: A guide for students in the helping professions. Belmont, CA: Brooks/Cole-Thomson Learning.
4. Single, P.B. (2010). Demystifying dissertation writing: A streamlined process from choice of topic to final text. Stylus Publishing: Sterling, VA.
5. Coley, Soraya M. and Scheinberg, Cynthia A. (2008) Proposal Writing. Effective Grantsmanship. Thousand Oaks, CA: Sage.
6. [www.faqtoids.com/knowledge/write-proposal-step-step-guide](http://www.faqtoids.com/knowledge/write-proposal-step-step-guide)  
[www.reference.com/business-finance/one-write-informal-proposal-918942c1b1baf0bb](http://www.reference.com/business-finance/one-write-informal-proposal-918942c1b1baf0bb)
7. [www.questionsanswered.net/article/write-project-proposal](http://www.questionsanswered.net/article/write-project-proposal)

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	2	1	3	1	3	3	3	1	3	2	2	1	1	3	1	3	2	1
CO2	2	1	3	1	3	3	3	1	3	3	2	2	3	1	2	2	3	3
CO3	1	3	1	3	3	3	1	2	2	1	1	3	3	3	3	1	3	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
23POPX406	EXTENSION ACTIVITY		-	-	1

### Learning Objectives (LOs)

The students will be able to

**LO1** : Enable the students to understand the basic problems faced by the villagers.

**LO2** : Expose the students in analyzing the needs of the village people.

**LO3** : Equip the student to prepare themselves to be able to deal with life even in scarcity.

### Course Outcomes (Cos)

At the end of the course, the students would be able to

**CO1** : Assess the Social environment

**CO2** : Empowered socially, economically and culturally

**CO3** : Analyze the behavioral changes after their village exposure.

### Course Description

The Community Outreach Programme is an extension activity envisaged by the University Grants Commission (UGC) and the Tamil Nadu State Council for Higher Education (TANSCHE). Under this extension activity, the students shall select one of the villages of nearby campus/their native place as their study area. The students need to collect data on the demographic, socio-economic, health, nutrition, and felt needs of the people belonging to the village using appropriate sampling methods. The collected will be analysed and prepare a report. The analysis will help prepare the recommendations for program implementers at various levels. Thus, the broad objective of this extension activity is to help the local authority launch useful projects for the benefit of the people.

### Specific Objectives

- 1) to understand the demographic, health, nutritional, and habitat status of the community.
- 2) to provide practical training in designing, conducting, and analyzing the survey data.
- 3) to formulate and provide community education on various issues.
- 4) to disseminate the findings to the authorities concerned with a view to finding solutions to the felt needs of the community

### Specific Tasks

- to plan, design and conduct a sample survey in the selected village on the

- Households' demographic, socio-economic, health, nutritional, and habitat characteristics and to know the community's felt needs.
- to analyze and interpret the data.
- to formulate an awareness programme for the community.
- to derive policy implications and suggest recommendations to provide a link between the community and service providers.

### Distribution of Marks

Out of the total one hundred (100) marks, twenty-five (25) marks were allotted to Internal Assessment, and seventy-five (75) Marks were allotted to External Assessment. Internal Assessment consists of planning, designing, and conducting a sample survey in the selected village. External Assessment consists of analyzing and interpreting the data collected through sample surveys and preparing and presenting the report.

### Outcome Mapping

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	3	1	2	3	1	3	3	3	2	1	2	3	3	3	2	1	1	2
CO2	3	3	3	2	1	1	2	3	3	3	1	1	2	3	3	3	3	1
CO3	2	1	1	2	3	3	3	3	2	1	2	2	3	3	2	1	1	3

1-Low 2-Medium 3- Strong

## VALUE ADDED COURSE

Course Code	Course Title	Hours /Week				Marks		
		L	T	P	C	CIA	ESE	Total
APOPVAC01	NGO's Management and Development	2	-	-	2	25	75	100
APOPVAC02	Population and Climate Change	2	-	-	2	25	75	100
APOPVAC04	Project Planning and Proposal Development	2	-	-	2	25	75	100

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
APOPVAC01	VALUE ADDED COURSE (VAC) 01: NGO'S MANAGEMENT AND DEVELOPMENT	2	-	-	2

### Learning Objectives (LOs)

The students will be able to

- LO 1: Understand the evolution of the non-profit sector into the fastest growing sector of our economy
- LO2: Provide managerial training and most relevant skills.
- LO3: Develop an understanding of management techniques and leadership skills for enhancing the effectiveness of non-profit organizations..

### Course Outcomes (COs)

After completion of the course the students will be able to

- CO 1: Understand the procedures for registration of NGOs
- CO2: Enhance the knowledge on the fundamental of accounting
- CO3: Gain perspectives on the management, financial, leadership

### UNIT-I

Concept and Structure of NGOs, Importance of NGOs, Registration of NGOs, Bye – Laws Memorandum of Associations and Registrations, Sources of funding for Management of

### UNIT-II

National, International Government and Non-Governmental Agencies, Role of NGOs: Education, Women Empowerment, Development, Family Planning, Population Activities, Health, Reproductive and Child Health Programme and AIDS.

### UNIT-III

Project Preparation: Guidelines for drafting a Project. Planning: nature, purpose, steps, types, merits and demerits .Organizations and Staffing.

### UNIT-IV

Book Keeping: Definition, objectives and systems; Types of Account; Accounting for Non-Profit Organizations: Receipts and Payments, Income and Expenditure Account; Balance Sheet; Maintenance of Project Accounts

### UNIT-V

Monitoring: Formulation of objectives; Designing a monitoring systems; Participatory monitoring process; Reporting: ongoing and the completed project. Evaluation of Projects: types, procedures and processes; Participatory evaluations. Evaluation and reporting of an ongoing/ completed project; Participatory Rapid Appraisal (PRA); Management Information System (MIS).

**TEXT BOOKS:**

1. Allen Fowler and Chikku Malunga, 2010. *NGO Management*, The Earthscan Companion, New Delhi
2. David Lewis, 2014. *NGO Management and Development*, Roulledge, New Delhi
3. Michael J. Worth, 2008. *Non profit Management. Principles and Practice*, Sage Publications, Inc.

**SUPPLEMENTARY READINGS:**

1. Pandey and Devandra Prasad. 2009. *Development and Management of NGOs*. Adayayan Publishers Private Limited, New Delhi.

**Outcome Mapping**

PO /CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
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CO2	2	3	3	2	1	3	3	2	3	2	1	3	3	3	2	1	1	2
CO3	2	1	1	2	3	3	3	3	2	1	2	2	3	3	2	1	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
APOPVAC02	VALUE ADDED COURSE (VAC) 02 POPULATION AND CLIMATE CHANGE	2	-	-	2

**Learning Objectives (LOs)**

The students will be able to

- LO1 : Understand the basic components of population change
- LO2 : Explain the Strategies the climate system and natural variability
- LO3 : Analyze the Responses to Climate Change Adaptation and Mitigation

**Course Outcomes (COs)**

After completion of the course the students will be able to

- CO1 : Acquire the average about population Change and Balancing equation
- CO2 : Understand the Climate Change and Natural Variability the Human Effects on Climate
- CO3 : Demonstrate the Adaptation concepts and strategies Renewable Energy Sources and Climate Change Mitigation
- CO4 : Analyze the impacts on Natural Resources Vulnerability of Coastal Belt in India towards climate Change
- CO5 : Comprehend the linkages of the Role of the IPCC in Climate Change

**UNIT-I : Population Changes**

Historical background; Demographic determinants of Population Change-Fertility, Mortality and Migration; Balancing equation; Development of Population Studies in India., India's Population Growth, Situation , and Distribution.

**UNIT- II: Understanding Climate Change**

Introduction to the Climate System; Drivers of Climate system ; Climate Change and Natural Variability; The Human Effects on Climate; Changes in Atmospheric Constituents and Radiative Forcing; Learning from the Past.

**UNIT -III: Responses To Climate Change: Adaptation and mitigation**

Limiting climate change: Adaptation and Mitigation; Adaptation concepts and strategies; Renewable Energy Sources and Climate Change; Mitigation, Costs and benefits of adaptation, Projections of future climate change.



#### **UNIT- IV: Climate Change and India's Concerns**

Climate Change Impacts on Natural Resources; Vulnerability of Coastal Belt in India towards climate Change; Climate Change, Rural Livelihoods and Food Security in India; India's Position on International Climate Negotiations; India's National Action Plan on Climate Change.

#### **UNIT -V: Policy Framework on Aspects Of Climate Change**

Governmental and Intergovernmental Actions to Combat Climate Change; The Role of the IPCC on Climate Change United Nations Framework Convention on Climate Change; The Kyoto Protocol to the Framework Convention; The global carbon market (CDM, JI, IET); Ecological Footprints and Carbon Footprints.

#### **TEXT BOOKS:**

1. Leelakrishnan, P., Environmental law in India. LexisNexis, 2011.
2. Singh, J.S., & Gupta, S.R. Ecology, Environment and Resource conservation. Anamaya Publ., New Delhi, 2006.
3. Smith, TM and Smith RL. Elements of Ecology, Pearson Education, India 2015.
4. McGuire, C. J, and Environmental Law from the Policy Perspective: understanding how legal frameworks influence environmental problem solving. Routledge. 2014.
5. Sudarshan, KN & Trivedi KR, Population and Community Ecology. Neha Publishers & Distributors, 2011.

#### **SUPPLEMENTARY READINGS:**

1. Dwivedi, O. P., India's Environmental Policies, Programmes and Stewardship, Springer, 2016.
2. Ahmed M. Hussen., Principles of Environmental Economics and Sustainability: An Integrated Economic and Ecological Approach, Routledge publisher,2012).
3. Ayres, R.U. & L.W. Ayres. A Handbook of Industrial Ecology. INSEAD, France,2012.
4. Scott J. Callan, Janet M. Thomas, 2015 Environmental Economics and Management Theory, Policy and Applications, South Western publishers,2011.
5. Keller, E.A., Introduction to Environmental Geology, Pearson Prentice Hall,2011.
6. Putnam R, Community Ecology. Springer Publications, 2010.
7. John T. Hardy Climate Change: Causes, Effects, and Solutions,2003.
8. UNFPA IIED, Population Dynamics and Climate Change, UNFPA IIED Publisher,2009
9. Oli Brown , Migration and Climate Change, 2008

#### **Outcome Mapping**

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CO3	2	1	1	2	3	3	3	3	2	1	2	1	3	3	2	1	1	2
CO4	3	1	2	3	1	3	3	3	2	1	3	2	3	3	2	1	1	3
CO5	2	1	1	2	3	2	3	3	2	2	2	1	3	2	1	2	1	2

1-Low 2-Medium 3- Strong

Course Code	Course Title	Hours/ Week			Credit
		L	T	P	
APOPVAC04	VALUE ADDED COURSE (VAC) 04 PROJECT PLANNING AND PROPOSAL DEVELOPMENT	2	-	-	2

### Learning Objectives (LOs)

The students will be able to

**LO1** : Learn the methods of different types of research proposal

**LO2** : Acquire knowledge on preparation of research proposal

**LO3** : Identify relevant sources of funding agencies

### Course Outcomes (COs)

After completion of the course the students will be able to

**CO1** : Analyse and evaluate application guidelines to compose a funding proposal

**CO2** : Define and describe a problem statement or research question appropriate for funding

**CO3** : Acquire skills in report writing, and (iv) the methods of disseminating the research findings

### UNIT-I : Introduction

Importance of Social Science Research in India; Characteristics and Limitations of Social Science Research: Definition, Scope and Need for Research Development (Academic and Funding) and Merits and Limitations. Generic structure of Proposals

### UNIT-II: Development of Academic Research Proposal

Importance and Basic Steps in Preparation of Research Proposal; Differences between academic grants, and non-profit grant proposals; Selection and Defining the Research Problem / Topic, Review of Literature, Objectives / Hypotheses, Research Design, Sample Frame and Size, Data Collection Instruments and Proposed Data Analysis.

### UNIT-III: Development of Research Proposal for Fund

Guidelines for Writing a Successful Proposal: Write an executive summary; Background and Significance of Project; Define project deliverables and goals; Project Plan; Manpower and Developing budgets; Timeline; Preparing Supporting Documents; Writing with style; Building support, cultivating relationships, networking, communicating with the funder; Evaluating reviewer comments

### UNIT-IV: Proposal Presentation Techniques

Importance of Research Proposal Presentation, Methods of presentation, Printed Materials and Oral presentation using Audio Visual Aids; Power Point presentation, Ethical Issues Defending, Implications of Research findings.

### UNIT-V: Funding Agencies

Procedures for Identifying funding Agencies, Funding Agencies at National Level: UGC, ICSSR, ICPR. ICHR, Ministries, TNSCST, Funding Agencies from Abroad: UN, Population Council, Welcome Trust, Rockefeller Foundation, McArthur Foundation, Ford Foundation, Bill & Melinda Gates Foundation.

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1. Desai, Vandana, and Robert B. Potter, (Eds.), Doing Development Research, New Delhi: Vistaar Publications, 2006.
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4. Robin D. Tribhuwan, and S.R. Shevkari, How to Write Funding Project Proposals. New Delhi: Discovery Publishing House, 2002.
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4. Single, P.B. (2010). *Demystifying dissertation writing: A streamlined process from choice of topic to final text*. Stylus Publishing: Sterling, VA.
5. Coley, Soraya M. and Schein berg, Cynthia A. (2008) *Proposal Writing. Effective Grantsmanship*. Thousand Oaks, CA: Sage.
6. [www.factoids.com/knowledge/write-proposal-step-step-guide](http://www.factoids.com/knowledge/write-proposal-step-step-guide)
7. [www.reference.com/business-finance/one-write-informal-proposal-918942c1b1baf0bb](http://www.reference.com/business-finance/one-write-informal-proposal-918942c1b1baf0bb)
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CO3	1	3	1	3	3	3	1	2	2	1	1	3	3	3	3	1	3	2

1-Low 2-Medium 3- Strong