

# **THE GANDHIGRAM RURAL INSTITUTE (DEEMED TO BE UNIVERSITY)**

Ministry of Education (Shiksha Mantralaya), Government of India  
Accredited by NAAC with 'A' Grade (3<sup>rd</sup> Cycle)

**Gandhigram, Dindigul, Tamil Nadu, India**



## ***SYLLABUS***

***for***

**B.A. (Hons.)**

**DEMOGRAPHY AND DEVELOPMENT STUDIES**

**(Academic Year 2024 – 2025)**

**Offered by**

**DEPARTMENT OF APPLIED RESEARCH**

**School of Health Sciences and Rural Development**

**The Gandhigram Rural Institute (DTBU)**

**Gandhigram, Dindigul, Tamil Nadu, India**

## **ABOUT THE DEPARTMENT**

The Department of Applied Research plays a key role in enabling the institute to achieve its overall objective of Rural Development by promoting transdisciplinary, problem solving and development research. It has been offering PhD and PG Diploma in Applied Gerontology programmes besides teaching Research Methodology and Applied Statistics for different UG, PG and PhD Programmes. Responding to National Education Policy (NEP) 2020, the Department revoked M.Phil in Research and Development Programme which had been a successful programme from 1996. In view of optimum utilization of human resources, administrative and infrastructure of the Department of Applied Research, it may be permitted to commence the Four-Year B.A (Honours with Research) in Demography and Development Studies.

## **VISION**

Advancing frontiers of knowledge through scientific research and its application for developing evidence-based policies and programmes for sustainable Rural Development

## **MISSION**

Enriching human resources to empower the rural communities through academia training and research using a system framework for sustainable development.

## **NEED AND RELEVANCE OF THE PROGRAMME**

The Four-Year Undergraduate Programme in B.A (Honours with Research) in Demography and Development Studies with a choice of multiple entry and exit during the course, has been designed to meet the needs of trained to work for the people's progress of the nation in political, cultural, geographical, and socio-economic aspects. It intends to cater to the increasing demand for a development professional to carry out developmental activities with advanced knowledge and skills, responding to the clarion call of the National Educational Policy (2020).

The proposed UG Programme B.A (Honours with Research) in Demography and Development Studies is inevitably intertwined with the ideas of change, to bring prospects in view of historical, comparative, and global perspectives and it's highly transdisciplinary in nature. It is constantly evolving methods, which prepare the individual for a career in many sectors where they can make a positive change and work

for better with skilled manpower. It is now recognized as relevant for everyone to contribute for national development as emphasized in the universal framing of the United Nations Agenda 2030, calling for transformations towards sustainable and prosperous futures for people and a safe environment.

The new Four-Year programme on Demography and Development Studies is a field which is characterized by normative and policy concerns for sustainable development. It is the subject of a transdisciplinary in nature and it includes theories of demography and development. It covers agriculture, rural and urban development, gender development, population sciences, economics, globalization, public health, statistics, policies and other development – related subjects increasingly with the arts, humanities, and social sciences.

The Graduates must be able to select and apply relevant methods for collecting, interpreting and assessing (qualitative and quantitative) information on development processes and their impacts, including knowledge and experience from a range of sources. They must be able to operate intelligently and ethically in situations of incomplete or inaccurate information. To deal with the complexities of development processes, graduates in development studies should be able to carry out policy and practice focused analyses and academic research on a range of topics, using appropriate conceptual frameworks. They must apply concepts and methods from relevant disciplines with scientific rigor. They must be able to communicate the results of their research and their methodology to audiences ranging from academics and policy makers to local communities and civil society organisations. They also need to consider how to engage these stakeholders in following up the research.

For addressing real-world problems and making a tangible impact on society, a degree in Demography and Development Studies provides the knowledge and tools to do so. It's a field dedicated to finding practical solutions to pressing global challenges. The field also hones critical thinking and problem-solving skills. Students learn to analyse complex issues, assess development policies, and develop innovative solutions to global challenges

The scope of the Demography and Development Studies programme promotes and draws part of its strength from genuine partnerships and cross-fertilization

between institutions and individuals anchored in different disciplines and traditions, and working in different parts of the world. It offers a wide range of job opportunities to students in the government sector, non-government sector including development and research consultancy firms and in industrial sector. It connects and provides a platform for development through academic research and with other non-academician such as policymakers, practitioners, social movements, and community organizations. The graduate of this programme will command greater acceptance and recognition by organizations of national and international repute and interested graduates can enroll for PhD programmes, as per UGC guidelines to bring out remarkable research works, which is the need of the hour for developing countries like India, which is working towards attaining the goal of Viksit Bharat 2047. In this context, the Department of Applied Research has proposed to start a four-year B.A (Honours with Research) in Demography and Development Studies programme from the academic year 2024-25.

### **PERSPECTIVES OF THE COURSE**

The Department of Applied Research focus on the interdisciplinary perspective in accordance with the NEP to provide the students with the broad perspective required for becoming an effective Development Professional and transitional nature of working life, replacing linear models that disregard disciplinary boundaries. Hence, students exposed to the different disciplines through multi- disciplinary approach will synthesize knowledge from the different disciplines and interpret the problems and issues through their Demography and Development Studies. The Department makes a conscious effort to integrate the inter-disciplinary perspectives into a coherent Development framework requiring an understanding of methodologies

- **Medium of Instruction: English**
- **Course Duration: Four Year (Full-Time)**

### **ELIGIBILITY CRITERIA**

A minimum eligibility requirement a pass in Higher Secondary Examinations conducted by approved boards or its equivalent.

### **PROGRAMME STRUCTURE**

#### **Total Number of Semesters: 8**

The Details of the core and the elective papers are given in detail in the syllabus. Paralleled with in-depth field work exposure and theory, the student evaluation is based on the prescribed criteria.

**THE GANDHIGRAM RURAL INSTITUTE (DEEMED TO BE UNIVERSITY)**

**DEPARTMENT OF APPLIED RESEARCH**

**B.A (HONOURS WITH RESEARCH) IN DEMOGRAPHY AND DEVELOPMENT STUDIES**

**PROGRAMME STRUCTURE**

<b>SEMESTER – I</b>								
<b>Course Code</b>	<b>Course Title</b>	<b>Course</b>	<b>Credit</b>	<b>Assessment</b>				<b>P. No</b>
				<b>CFA</b>	<b>ESE</b>	<b>V.V</b>	<b>Total</b>	
24ARUC1101	Introduction to Development Studies	Core	4	40	60	-	100	15
24ARUB1101	Elements of Economics	Minor	4	40	60	-	100	18
24CSUI1101	Digital Marketing	MD	3	40	60	-	100	
	English – 1	AEC	3	40	60	-	100	
	Indian Languages (Tamil/Hindi/Malayalam) – 1	SEC	3	40	60	-	100	
	Yoga and Fitness	VAC – 1	2	50			50	
	Let us Know Gandhi	VAC – 2	2	50			50	
<b>Total Credit/ Marks</b>			<b>21</b>				<b>600</b>	

<b>SEMESTER – II</b>								
<b>Course Code</b>	<b>Course Title</b>	<b>Course</b>	<b>Credit</b>	<b>Assessment</b>				<b>P. No</b>
				<b>CFA</b>	<b>ESE</b>	<b>V.V</b>	<b>Total</b>	
24ARUC1202	Elements of Demography	Core	4	40	60	-	100	20
24ARUB1202	Spatial Demography and Application of GIS	Minor	4	40	60	-	100	22
24CSUI1101	<b>Any one Course from other Dept.</b>	MDC	3	40	60	-	100	
	English – 2	AEC	3	40	60	-	100	
	Indian Languages (Tamil/Hindi/Malayalam) – 2	SEC	3	40	60	-	100	
	Environmental Education	VAC – 3	2	50			50	
	Heritage and Culture History of India/ Santhi Sena	VAC – 4	2	50			50	
<b>Total Credit/ Marks</b>			<b>21</b>				<b>600</b>	

\* Exit Option with UG Certificate on Demography and Development Studies (42 Credits)

SEMESTER - III								
Course Code	Course Title	Course	Credit	Assessment				P. No
				CFA	ESE	V.V	Total	
24ARUC2103	Population Dynamics - Policies and Programme	Core	4	40	60	-	100	25
24ARUC2104	Globalization and Labour Issues	Core	4	40	60	-	100	28
24ARUB2103	Youth Development	Minor	4	40	60	-	100	31
	SWAYAM Online Course	MDC	3	-	-	-	100	
	Essential English: Advanced	AEC	3	40	60	-	100	
	Indian Languages (Tamil/Hindi/Malayalam) - 3	SEC	3	40	60	-	100	
	Functional Tamil/Hindi/Malayalam	SEC	2	50			50	
24ARUE2101	Village Placement Programme	COR	2	50			50	
<b>Total Credit/ Marks</b>			<b>25</b>				<b>700</b>	

SEMESTER - IV (Core Course)								
Course Code	Course Title	Course	Credit	Assessment				P. No
				CFA	ESE	V.V	Total	
24ARUC2205	Elements of Research Methods	Core	4	40	60	-	100	34
24ARUC2206	Psychological Perspectives on Development	Core	4	40	60	-	100	36
24ARUC2207	Gender and Development	Core	4	40	60	-	100	39
24ARUB2204	Indian Economy	Minor	4	40	60	-	100	42
24ARUA2204	Academic Writing	AEC	3	40	60	-	100	44
	Community Engagement	COR	2	50			50	
<b>Total Credit/ Marks</b>			<b>21</b>				<b>550</b>	

\* Exit Option with UG Diploma on Demography and Development Studies (88 Credits)

**SEMESTER - V (Core Course)**

Course Code	Course Title	Course	Credit	Assessment				P. No
				CFA	ESE	V.V	Total	
24ARUC3108	Occupational Health and Development	Core	4	40	60	-	100	46
24ARUC3109	Applied Statistics	Core	4	40	60	-	100	49
24ARUC3110	Rural Development	Core	4	40	60	-	100	52
24ARUB3105	Environmental Economics	Minor	4	40	60	-	100	54
24ARUE3102	Internship	Inter.	2	50			50	
	Community Outreach	COR	2	50			50	
<b>Total Credit/ Marks</b>			<b>20</b>				<b>500</b>	

**SEMESTER - VI (Core Course)**

Course Code	Course Title	Course	Credit	Assessment				P. No
				CFA	ESE	V.V	Total	
24ARUC3211	Urban Governance and Development	Core	4	40	60	-	100	56
24ARUC3212	Techniques of Demographic Analysis	Core	4	40	60	-	100	59
24ARUC3213	Social Institutions and Development	Core	4	40	60	-	100	62
24ARUC3214	Population Growth and Sustainable Development	Core	4	40	60	-	100	65
24ARUB3206	Disaster Management	Minor	4	40	60	-	100	68
24ARUC3215	Project Work	Core	4			100	100	
<b>Total Credit/ Marks</b>			<b>24</b>				<b>600</b>	

\* Exit Option with 3-year UG Degree in Demography and Development Studies (132 Credits)

**SEMESTER - VII (Core Course)**

Course Code	Course Title	Course	Credit	Assessment				P. No
				CFA	ESE	V.V	Total	
24ARUC4116	Advanced Quantitative Techniques	Core	4	40	60	-	100	70
24ARUC4117	Qualitative Research Methods	Core	4	40	60	-	100	73
24ARUC4118	Healthcare Institutions and Policies	Core	4	40	60	-	100	76
24ARUB4107	Monitoring and Evaluation of Development Projects	Minor	4	40	60	-	100	79
24ARUB4108	Growth and Development Economics	Minor	4	40	60	-	100	82
<b>Total Credit/ Marks</b>			<b>20</b>				<b>500</b>	

**SEMESTER - VIII (Core Course)**

Course Code	Course Title	Course	Credit	Assessment				P. No
				CFA	ESE	V.V	Total	
24ARUC4219	Dimensions of Tribal Development	Core	4	40	60	-	100	85
24ARUC4220	Contemporary Policy Issues and Development	Core	4	40	60	-	100	88
<b>Only for the 4-year UG Degree (Honours) in Demography and Development Studies*</b>								
24ARUC4221	Inclusive Development	Core	4	40	60	-	100	91
24ARUC4222	Gender and Reproductive Health	Core	4	40	60	-	100	94
24ARUC4223	Energy Economics	Core	4	40	60	-	100	97
<b>Only for the 4-year UG Degree (Honours with Research) in Demography and Development Studies**</b>								
24ARUC4206	Dissertation	Inter.	12			200	200	
<b>Total Credit/ Marks</b>			<b>20</b>					

\* On completion of 4-year UG Degree (Honours) in Demography and Development Studies (172 Credits)

\*\* On completion of 4-year UG Degree (Honours with Research) in Demography and Development Studies (172 Credits). Those students who secure 75% of marks and above in the first 6 semesters are eligible to undertake research at the undergraduate level.

Note: MD – Multidisciplinary  
 SEC – Skill Enhancement Course  
 COR – Community Outreach  
 CFA – Continuous Formative Assessment

AEC – Ability Enhancement Course  
 VAC – Value Added Course  
 V.V – Viva-voce Examination  
 ESE – End Semester Examinations

Course Code & Title	INTRODUCTION TO DEVELOPMENT STUDIES (24ARUC1101)				
	Credit: 4	Semester - I	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K - 1: Understand the key concepts and theories related to development and ethics.				
	K - 2: Learn the historical, economic and ethical dimensions of development.				
	K - 3: Comprehend the application of various development theories and ethical principles in real-world scenario.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>To understand the transition from quantitative to qualitative indices of development.</li> <li>To analyze the characteristics of modern economic growth and its global disparities.</li> <li>To explore the nature and objectives of development ethics and its various approaches.</li> <li>To assess development using various indices like PQLI, HDI, and Seers' criteria.</li> <li>To study and compare different theories and paradigms of development.</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Concept of Development:</b> Transition from quantitative to qualitative indices-Growth and Development - Synonymity to Disjunction. Characteristics of modern economic growth - its unequal spread and global disparities - Commonalities and dissimilarities among developing countries.</p>				12
II	<p><b>Development Ethics:</b> Ethics - Definition, nature and objectives - Approaches: normative and non-normative. Development Ethics -concept and meaning - Principles and importance. Development Ethics classical, neo-classical &amp; Liberals viewpoints. Paradigms of Development Ethics- Ethics and development theory and practice.</p>				12
III	<p><b>Core Values of Development:</b> Assessing development - from per capita income to PQLI, Choice and access, HDI, Seers' criteria- Approaches of Development: Adam Smith- Marx- Schumpeter-Structuralist approach, post-dependency and actor-oriented approaches, Neo-liberalism, IMF and structural adjustment, Capabilities Approach.</p>				14
IV	<p><b>Theories of Development:</b> The Capitalist World System, The evolution of thought on poverty reduction, Colonial Regimes and Their Legacies, The Industrial Revolution and its Spread, Development and Growth, Theorizing Development, Modernization Theory, Dependency Theory.</p>				13

<b>V</b>	<b>Theories Related to Development:</b> Baran's theory, World System theory, Dependency theory & Theory of Unequal Exchange: Theory of Economic Growth, Theory of Positivist Development and Theory of Realistic Development	<b>13</b>
<b>References</b>	<ul style="list-style-type: none"> <li>• Sen, A. (1999). Development as freedom. Oxford University Press, Oxford.</li> <li>• Pattanaik, BK, (2016), Introduction to Development Studies; Sage Publication India Pvt. Ltd, New Delhi</li> <li>• Sachs, J. D. (2005). The end of poverty: Economic possibilities for our time. Penguin Books, New York.</li> <li>• Easterly, W. (2001). The elusive quest for growth: Economists' adventures and misadventures in the tropics. MIT Press, Cambridge, MA.</li> <li>• Nussbaum, M. C. (2011). Creating capabilities: The human development approach. Harvard University Press, Cambridge, MA.</li> </ul>	
<b>Textbooks</b>	<ul style="list-style-type: none"> <li>• Todaro, M. P., &amp; Smith, S. C. (2014). Economic development (12th ed.). Pearson, Boston, MA.</li> <li>• Desai, V., &amp; Potter, R. B. (2014). The companion to development studies (3rd ed.). Routledge, London.</li> <li>• Rapley, J. (2007). Understanding development: Theory and practice in the Third World. Lynne Rienner Publishers, Boulder, CO.</li> <li>• Peet, R., &amp; Hartwick, E. (2009). Theories of development: Contentions, arguments, alternatives (2nd ed.). Guilford Press, New York.</li> <li>• Clark, D. A., &amp; Timms, P. (Eds.). (2016). Theories of development in the 21st century (2nd ed.). Polity, Cambridge.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.undp.org/">https://www.undp.org/</a></li> <li>• <a href="https://www.worldbank.org/">https://www.worldbank.org/</a></li> <li>• <a href="https://www.imf.org/">https://www.imf.org/</a></li> <li>• <a href="https://ophi.org.uk/">https://ophi.org.uk/</a></li> <li>• <a href="https://www.cgdev.org/">https://www.cgdev.org/</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Define and explain the concept of development and its evolution.</p> <p>CO2: Analyze the characteristics and unequal spread of modern economic growth.</p> <p>CO3: Understand and discuss the principles and importance of development ethics.</p> <p>CO4: Assess development using core values and different approaches.</p> <p>CO5: Evaluate various theories and paradigms related to development.</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	2	3	3	2	3	3	3	2	3	2
2	3	2	3	3	2	2	3	2	3	1	2	2
3	3	3	2	3	2	3	3	2	3	2	3	3
4	3	3	3	3	3	2	3	2	3	2	2	3
5	3	3	3	3	3	3	3	2	3	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	ELEMENTS OF ECONOMICS (24ARUB1101)				
	Credit: 4	Semester – I	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: To enable students to understand the basic concepts and theories of economics and analyze a real-life decision based on opportunity cost.				
	K-2: To predict the effect of a shift in demand or supply on market equilibrium and recognize key macroeconomic indicators such as GDP, CPI, and the unemployment rate.				
	K-3: To evaluate the effectiveness of a recent fiscal or monetary policy implemented in your country.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• To grasp fundamental economics concepts.</li> <li>• To acquire knowledge of decision-making processes among economic actors.</li> <li>• To understand production and market structures.</li> <li>• To learn about macroeconomic indicators of a country.</li> <li>• To explore macroeconomic policies for national economic development.</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Introduction of Economics:</b> Definitions of Economics: Wealth, Welfare, Scarcity and Growth – Distinction between Microeconomics and Macroeconomics – Basic Concepts of Economics – Production Possibility curve.				10
II	<b>Consumer Behaviour:</b> Utility Theory: Law of Diminishing Marginal Utility – Law of Equi-Marginal utility – Consumer’s Surplus – Indifference Curve – Demand analysis – Elasticity of Demand – Supply analysis.				14
III	<b>Production Function and Market Structure:</b> Production Function: Meaning – Law of Variable Proportions – Laws of Returns to Scale – Cost Function – Revenue Function – Market Structure: Perfect Market – Monopoly- Monopolistic and Oligopoly.				14
IV	<b>National Income:</b> Circular Flow of Income – Concepts and Measurements of National Income – Aggregate Demand and Aggregate Supply – Effective Demand – Consumption Function – Investment Function – Multiplier – Acceleration.				14
V	<b>Macroeconomic Policy:</b> Business Cycle – Meaning of Inflation – Inflationary Gap – Types of Inflation – Causes of Inflation – Measures to Control Inflation – Deflation – Monetary Policy – Fiscal Policy – Balance of Payments – Exchange Rate.				12

<b>References</b>	<ul style="list-style-type: none"> <li>• Dwivedi D.N., (2010), 'Macro Economics: Theory and Policy', Tata McGraw Hill, Delhi.</li> <li>• Gravelle H and R. Rees (2004, Microeconomics, Pearson Education, 3rd Edition.</li> <li>• Richard T. Froyen (2013) 'Macroeconomics: Theories and Policies, Pearson Education, New Delhi.</li> <li>• Sen A. (1999), Microeconomics: Theory and Application, Oxford University Press, Delhi.</li> <li>• Varian H.R. (2000), Microeconomic Analysis, W.W. Norton, New York.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Gregory Mankiw (2016) 'Principles of Microeconomics, CBS Publishers, Delhi.</li> <li>• Gregory Mankiw (2016) 'Macroeconomics', CBS Publishers, Delhi.</li> <li>• Samuelson, P. A., &amp; Nordhaus, W. D. (2010). Economics. New York, NY: McGraw-Hill Education.</li> <li>• Salvatore Dominic (2012) 'Micro Economic Theory', Tata McGraw Hill, Delhi.</li> <li>• Mankiw, N. G. (2021). Principles of economics (9th ed.). Cengage Learning, Boston, USA.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.khanacademy.org/economics-finance-domain">https://www.khanacademy.org/economics-finance-domain</a></li> <li>• <a href="https://www.investopedia.com/economics-4689746">https://www.investopedia.com/economics-4689746</a></li> <li>• <a href="https://www.economicsnetwork.ac.uk/">https://www.economicsnetwork.ac.uk/</a></li> <li>• <a href="https://mru.org/">https://mru.org/</a></li> <li>• <a href="https://mankiw-economics.com/">https://mankiw-economics.com/</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Explain the basic concepts of economics.</p> <p>CO2: Analyze the consumer behaviour.</p> <p>CO3: Understand the knowledge of production and marketing strategies.</p> <p>CO4: Apply the macroeconomic indicators of the country.</p> <p>CO5: know the macroeconomic policies for an economy.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	2	2	1	2	2	2	3	2	3	3	3	3
<b>2</b>	2	3	2	3	3	3	3	3	3	3	3	3
<b>3</b>	2	3	3	3	3	3	2	3	3	3	3	3
<b>4</b>	2	3	2	3	3	3	3	3	3	3	3	3
<b>5</b>	2	2	2	2	3	2	3	3	3	3	2	2

**0: No Correlation**

**1: Weakly Correlating**

**2: Moderately Correlating**

**3: Strongly Correlating**

Course Code & Title	ELEMENTS OF DEMOGRAPHY (24ARUC1202)			
	Credit: 4	Semester – II	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1 Understanding the basic concepts of demography			
	K-2 Understanding the various sources of demographic data			
	K-3 Understanding the basic components of population change			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Comprehend the basic concepts and definitions in Demography</li> <li>• Identify the various sources of data in Demography</li> <li>• Describe the population growth scenario of the world, India and its states</li> <li>• Explore the components of population change, including fertility, mortality, and migration, along with their causes and consequences.</li> <li>• Study and critique various theories of population growth and migration, understanding their historical context and modern applications.</li> </ul>			
UNIT	Content			No. of Hours
I	<p><b>Demography:</b> Definitions - Concept – Origin and Scope of Demography. Demography and other sciences – Mathematics, Economics, Sociology, Anthropology, Psychology, Public health and Biological Sciences.</p>			12
II	<p><b>Sources of Demographic Data:</b> Census, Vital Registration System, Population Register and Sample Surveys. Population Composition – Age, Sex, Religion, Caste, Education, Language, Income.</p>			13
III	<p><b>History of Population growth:</b> Primary Society, Pre-Industrial Society, Developing and Developed Societies, World Population. Population Scenario of India – History of Population growth – Population size and growth in states.</p>			13
IV	<p><b>Components of population change:</b> Fertility, Mortality and Migration, Causes and Consequences of change. Migration and Urbanisation – Types of migration, factors affecting migration, causes and consequences of urbanization. Marriage and Family – Concepts and Definitions, changes in household size, trends and differentials in age at marriage.</p>			13
V	<p><b>Theories of Population Growth:</b> Pre – Malthusian Theories of Population, Malthusian theory. Post-Malthusian Theories. Criticism of the theory of Malthus. Theories of Migration: Ravenste in Stonffer, Ziffe, Lee’s theory and its modification, Michal Todaro, Theories of Urban Growth.</p>			13

<b>References</b>	<ul style="list-style-type: none"> <li>• Misra.B.D.: An Introduction to the study of population – New Delhi : South Asian, 1981</li> <li>• Bose, Ashish: India’s urbanization 1901 – 2001 – 2nd Ed New Delhi, Tata McGraw Hill, 1978</li> <li>• Bougue, Donald J: Principles of demography – New York: John Wiley and Sons, 1969</li> <li>• Bhende, Asha A and Tara Kanitkar: Principles of population studies – 5th rev. ed. Delhi: Himalaya, 1997</li> <li>• Simon, Julian Lincoln. The economics of population growth. Princeton university press, 2019.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Ramakumar.R and Gopal Y S: Technical demography – New Delhi: Wiley Eastern, 1986</li> <li>• Shrivastava O S: A text book of demography with economics of man power supply and manpower demand, New Delhi: Vikas, 1983</li> <li>• Sinha and Zachariah: Elements of Demography, allied publishers pvt. Ltd. 1986,</li> <li>• Thompson, Warrens and David T Wewis: Population Problem – 5th ed – New Delhi: Tata McGraw Hill, 1965</li> <li>• Williams, Brian K., Stacey C. Sawyer, and Carl Wahlstrom. Marriages, families, and intimate relationships. Pearson Education, 2012.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://population.un.org/wpp/">https://population.un.org/wpp/</a></li> <li>• <a href="https://www.prb.org/">https://www.prb.org/</a></li> <li>• <a href="https://censusindia.gov.in/census.website/node/180">https://censusindia.gov.in/census.website/node/180</a></li> <li>• <a href="https://www.un.org/development/desa/pd/content/urbanization-0">https://www.un.org/development/desa/pd/content/urbanization-0</a></li> <li>• <a href="https://censusindia.gov.in/census.website/demography">https://censusindia.gov.in/census.website/demography</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Comprehend the basic concepts and definitions in Demography</p> <p>C02: Identify the various sources of data in Demography</p> <p>C03: Describe the population growth scenario of the world, India and its states</p> <p>C04: Relate the history of population growth to the present day structure and composition of population</p> <p>C05: Compare different theories of population growth and migration</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	2	2	3	3	3	3	3	2	2	3
2	3	3	2	3	3	3	3	3	3	3	3	3
3	3	3	3	3	2	2	3	3	3	3	2	3
4	3	3	3	3	3	3	3	3	2	3	3	3
5	3	2	3	2	2	3	3	2	2	2	1	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	SPATIAL DEMOGRAPHY AND APPLICATION OF GIS (24ARUB1202)				
	Credit: 4	Semester - II	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1 Importing the knowledge on application of Geospatial software.				
	K-2 Importing the knowledge on application of Statistical software.				
	K-3 Understanding the concept of GIS and Spatial analysis of Demography Data.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the concepts and terminology of demography as a spatial science.</li> <li>• Understand the basic concepts of Geospatial data and software.</li> <li>• Understand the basic concepts of Statistical data and Statistical software.</li> <li>• Understand the concepts of GIS and Spatial Analysis of Demographic Data.</li> <li>• Familiar with the applications of modeling</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Spatial Demography:</b> Basic Concepts and Theories of Demography as a spatial science; Understanding demographic process by geographical scale; nature of disaggregated data; Application of spatial frameworks to demographic process; Spatial pattern of mortality and diseases; Distance as factor in access to health care and health planning; Migration and distance; urban sprawl and sub-urbanization.</p>				12
II	<p><b>Health GIS:</b> Spatial epidemiology: epidemics and their control – disease mapping – bioterrorism – infectious disease modelling – health facility location mapping – health and disease atlas of India</p>				13
III	<p><b>Geospatial Data and Software:</b> Spatial Concepts and Cartography; Spatial parameters; Representation of spatial and non-spatial data. Introduction to geospatial software: GIS – Geo coding and basics of digitization in Arc GIS. Introduction to Geoda: Exploratory Spatial Data Analysis; Local Indicators of Spatial Association.</p>				13
IV	<p><b>GIS and Spatial Analysis of Demographic Data:</b> Representation of statistical data and automated cartography; Population distribution map of India. Density map by Choropleth and population density gradient by Isopleth. Fertility, mortality and natural growth of population by Polygraph. Measurement of population concentration by cumulative curve. Migration flow by Cartogram.</p>				13

v	<b>Concept and Application Models:</b> Spatial Lag and Error Regression Modeling. Multilevel modeling (hierarchical linear modeling). Geographically Weighted Regression. Spatial Pattern Analysis. Urban and city level projection.	13
References	<ul style="list-style-type: none"> <li>• Griffith, D. A. and Amehin (1997): Multivariate Statistical Analysis for Geographers. Englewood Cliffs, New Jersey, Prentice Hall.</li> <li>• Chang, K. (2008). Introduction to Geographic Information Systems. New Delhi, McGraw Hill Education.</li> <li>• Shaw, G. and Wheeler, D. (1994). Statistical Techniques in Geographical Analysis. EnglewoodCliffs, New Jersey, Prentice Hall.</li> <li>• Soja, E. W. (1996). Third space: Journeys to Los Angeles and Other Real-and Imagined Places. Wiley-Blackwell.</li> <li>• Dorling, D. and Fairborn, D. (1997): Mapping. Ways of Representing the World. Longman, Harlow.</li> </ul>	
Text Books	<ul style="list-style-type: none"> <li>• Anselin, L. (2005). Exploring Spatial Data with GeoDa: A Wookbook. UC Santa Barbara, CA: Centerfor Spatially Integrated Social Science. available on <a href="http://geodacenter.asu.edu/">http://geodacenter.asu.edu/</a>.</li> <li>• Bonham, Carter G.F. (1995): Information Systems for Geoscientists–Modelling with GIS. Pergamon, Oxford.</li> <li>• Chen, X., Orum A.M., and Paulsen K.E. (2013). Introduction to Cities: How Place and Space shape Human Experience. West Sussex, Willey-Blackwell.</li> <li>• Kurland K. S., Gorr W. L. (2007). GIS Tutorial for Health. Redlands, CA, ESRI Press.</li> <li>• Lo, C.P. and Yeung, A. K. W. (2002): Concepts and Techniques of Geographic Information Systems. New Delhi, Prentice Hall of India.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://www.cpc.unc.edu/resources/publications/bib/3799/">https://www.cpc.unc.edu/resources/publications/bib/3799/</a></li> <li>• <a href="https://spatial.uchicago.edu/geoda#:~:text=GeoDa%20is%20a%20user%2Dfriendly.methods%20for%20analyzing%20spatial%20data.">https://spatial.uchicago.edu/geoda#:~:text=GeoDa%20is%20a%20user%2Dfriendly.methods%20for%20analyzing%20spatial%20data.</a></li> <li>• <a href="https://learn.arcgis.com/en/paths/gis-for-population-and-development-studies-data-analysis-and-visualization/">https://learn.arcgis.com/en/paths/gis-for-population-and-development-studies-data-analysis-and-visualization/</a></li> <li>• <a href="https://storymaps.arcgis.com/stories/f587e4ee2c684f8cbe4a97f472c6715e">https://storymaps.arcgis.com/stories/f587e4ee2c684f8cbe4a97f472c6715e</a></li> <li>• <a href="https://crd230.github.io/lab8.html">https://crd230.github.io/lab8.html</a></li> </ul>	
Course Outcomes	<p>On completion of the course, students should be able to</p> <p>C01: Learn about the concepts and terminology of demography as a spatial science.</p> <p>C02: Learn about the basic concepts of Geospatial data and software.</p> <p>C03: Learn about the basic concepts of Statistical data and Statistical software.</p> <p>C04: Learn about the concepts of GIS and Spatial Analysis of Demographic Data.</p> <p>C05: Get acquainted with the applications of modeling</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	2	3	3	2	2	2	2	3	1	3
2	1	1	2	2	2	2	2	2	2	2	2	3
3	3	3	2	3	3	3	3	3	3	3	3	3
4	3	3	2	3	3	3	3	3	2	3	3	3
5	2	3	2	3	3	3	3	3	2	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	POPULATION DYNAMICS – POLICIES AND PROGRAMMES (24ARUC2103)			
	Credit: 4	Semester – III	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	<b>K-1</b> Learning the concept of Population Policy and Population Growth.			
	<b>K-2</b> Getting to know about Reproductive Health Programme Management.			
	<b>K-3</b> Understanding the concept of Fertility and Family Planning.			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Gain knowledge on basic concepts of Population Policy and Ethical issues.</li> <li>• Know the concepts of national health and family planning programmes.</li> <li>• Understand the basic concepts of Reproductive Health Programme Management.</li> <li>• Acquire knowledge on evaluation of population, health and family welfare programme.</li> <li>• Comprehend the basic concepts of Fertility and Family Planning.</li> </ul>			
UNIT	Content			No. of Hours
I	<p><b>Population Policy:</b> Definition, principal features, policies in the context of population growth, structure and distribution. Policy formulation: Policy indicators, justification of population policy, socio-cultural, political and ethical issues related to population policy and the mechanism of decisions.</p>			12
II	<p><b>Fertility:</b> Definition and types. Contraceptive Prevalence Rate; Use effectiveness of family planning methods; Unmet need for family planning, Wanted and unwanted fertility, Bongaarts’ model for estimating fertility impact, Demand-supply framework to evaluate family planning programmes.</p>			13
III	<p><b>Role of Health Organizations:</b> The United Nations, and other International agencies; World Population Plan of Action in various countries. Influencing policies for Fertility and Health; Programmes for special groups; National health and family planning programmes. NRHM – Role and Functions.</p>			13
IV	<p><b>Reproductive Health Programme Management:</b> Principles; Reproductive Health Programme Management Strategies; Targeting the people in need; Providing services; Quality of Care in Reproductive Health Programme: A Management Perspective: Definition and importance of quality of care.</p>			13
V	<p><b>Evaluation of Population Programmes:</b> Need and Importance of evaluation of population, health and family welfare programmes. Objectives of the evaluation, types of evaluation, Evaluation Framework, levels of indicators in Family Welfare programme evaluation.</p>			13

<b>References</b>	<ul style="list-style-type: none"> <li>• Peabody, J.W.; Rahman, H. Omar; Gertlor, Paull, J.; Haan, Joyce, (1999): Policy and Health Implication for Development in Asia, Cambridge University Press. Cambridge.</li> <li>• Peters, David H. YazbeekAbdo S.; Sharma, Rashmi R.; Ramana G.N.V., (2002): Better Health Care Systems in India, World Bank, Washington D.C.</li> <li>• United Nations, (1979): "The Methodology of Measuring the Impact of Family Planning Programme on Fertility", Manual IX, Population Studies, No.66, New York.</li> <li>• United Nations, (1998): National Population Policies, Department of Economics and Social Affairs, New York.</li> <li>• World Bank, (2006): World Development Report, 2006, Oxford University Press, London.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Giridhar, G. Sattar E.M. and Kang J.S., (Eds.), (1989): Reading in Population Programme Management, ICOMP.</li> <li>• Government of India, (1996): Community Need Assessment, Ministry of Health and Family Welfare, New Delhi.</li> <li>• Government of India (2002): National Health Policy, Ministry of Health and Family Welfare, New Delhi.</li> <li>• Government of India, (2000): National Population Policy, Department of Health and Family Welfare, Ministry of Health and Family Welfare, Govt. of India, New Delhi.</li> <li>• Jain, Anirudh, (1988): Do Population Policy Matter? Fertility and Policies in Egypt, India, Kenya, and Mexico, Population Council, New York.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.un.org/development/desa/pd/content/population-policies-0">https://www.un.org/development/desa/pd/content/population-policies-0</a></li> <li>• <a href="https://www.india.gov.in/national-population-policy-2000">https://www.india.gov.in/national-population-policy-2000</a></li> <li>• <a href="https://www.un.org/en/development/devagenda/population.shtml">https://www.un.org/en/development/devagenda/population.shtml</a></li> <li>• <a href="https://www.mospi.gov.in/93-health-and-family-welfare-statistics">https://www.mospi.gov.in/93-health-and-family-welfare-statistics</a></li> <li>• <a href="https://papp.iussp.org/sessions/papp101_s05/PAPP101_s05_040_020.html#:~:text=Bongaarts'%20aggregate%20model%20of%20the%20proximate%20determinants%20of%20fertility%20(cont.fertility%20from%20its%20theoretical%20maximum.">https://papp.iussp.org/sessions/papp101_s05/PAPP101_s05_040_020.html#:~:text=Bongaarts'%20aggregate%20model%20of%20the%20proximate%20determinants%20of%20fertility%20(cont.fertility%20from%20its%20theoretical%20maximum.</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <ul style="list-style-type: none"> <li>• Acquire insight on basic concepts of Population Policy and Ethical issues.</li> <li>• Learn about the concepts of national health and family planning programmes.</li> <li>• Gain knowledge on Reproductive Health Programme Management.</li> <li>• Acquire insight on evaluation of population, health and family welfare programme.</li> <li>• Learn about the basic concepts of Fertility and Family Planning.</li> </ul>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	3	3	2	2	3	3	3	3	2	2
2	3	2	2	2	3	3	2	3	3	3	3	2
3	3	2	3	3	3	3	3	3	3	3	3	3
4	3	3	2	3	3	3	2	3	3	3	3	3
5	3	2	3	2	2	2	2	3	3	3	2	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	GLOBALIZATION AND LABOUR ISSUES (24ARUC2104)			
	Credit: 4	Semester – III	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1 Introducing the globalization and its effects			
	K-2 Gaining Knowledge of globalization on labour Market			
	K-3 Understanding the impact of globalization on various aspects of development			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the meaning of labour, labour market trends, and various wage theories.</li> <li>• Analyze the impact of globalization on women's work and labour market regulations based on gender and caste.</li> <li>• Examine the concept, evolution, and impact of globalization on industrialization and the economy.</li> <li>• Explore new work organizations, diversity, and work culture in the context of globalization.</li> <li>• Study the structure of industrial labour, employment dimensions, and the role of trade unions in labour market reforms.</li> </ul>			
UNIT	Content			No. of Hours
I	<p><b>Labour:</b> Meaning, Labour markets trends. Theories of Wage -Classical, New Keynesian and Keynesian perspectives. Agrarian relations and labour in rural India - Evolution of the class of agricultural labourers - Labour contracts: A theoretical perspective –Farm and Non-farm sector. Urban informal labour – Migration, Growth, Livelihood situation of informal workforce.</p>			12
II	<p><b>Gender, caste and labour:</b> Assessing women’s work -Impact of the policies of globalization on women’s work. Globalisation and labour- Labour market regulations and its impacts on employment and industrial performances based on Gender and Caste.</p>			13
III	<p><b>Globalisation:</b> Concept, Evolution, Objectives, Dimensions and Features – Impact of globalisation. Nature of Industrialization, liberalization, Globalization and restructuring of work and economy - Industrial policies since 1990s - Small and Medium Enterprises. Labour market situations in various countries - India, China, Indonesia, Malaysia, Thailand, Vietnam.</p>			13

IV	<b>New Work Organization:</b> Diversity, Gender. Organizational and Work culture. IT Industry, Recruitment, Selection and Training and Managers - Work commitment, Productivity and change - Employment Relations, and Innovative Strategies - E-commerce and labour - Workers participation in Management. Sub-contracting and Outsourcing (BPO and KPO).	13
V	<b>Industrial Labour:</b> Structure of industrial labour; Employment dimensions of Indian industry; Industrial legislation and relations; Collective Bargaining. Exit policy and social security; Wages and problem of bonus — labour market reforms. Role of Trade Unions.	13
References	<ul style="list-style-type: none"> <li>• Bagchi, A.K. (Ed.). (1995). 'New Technology and the Workers' Response': Microelectronics, Labour and Society. New Delhi: Sage.</li> <li>• Behal R., Mah A. &amp; Fall B. (Eds.). (2011). "Rethinking Work" Global Historical and Sociological Perspectives. New Delhi: Tulika.</li> <li>• Berg, I., &amp; Kallerberg, A. L. (Eds.). (2001). Source Book of Labour Markets: Evolving Structures and Processes. Kluwer Academic / Plenum Publishers, New York.</li> <li>• Ahluwallia, I.J (1985), Industrial Growth in India, Oxford University Press, New Delhi.</li> <li>• Desai, B.(1999), Industrial Economy in India, Himalaya Publishing House, Mumbai</li> </ul>	
Textbooks	<ul style="list-style-type: none"> <li>• Akerlof, G. A and J. L. Yellen. (1986). Efficiency Wage Models of the Labour Market. Cambridge University Press. Cambridge.</li> <li>• Chakravarty, S. (ed.) (1990). The Balance between Industry and Agriculture in Economic Development: Volume 3, Manpower and Transfers. Macmillan Press, London.</li> <li>• Banerjee, D. and Goldfield, M. (eds.) (2007). Labour, Globalisation and the State: Workers, Women and Migrants Confront Neoliberalism. Routledge, London and New York.</li> <li>• Marx, K. (1976). Wage, Labour and Capital &amp; Value, Price and Profit, International Publishers, New York.</li> <li>• Khera, R (2011). The Battle for Employment Guarantee, Oxford University Press, New Delhi.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://www.ilo.org/">https://www.ilo.org/</a></li> <li>• <a href="https://www.studysmarter.co.uk/explanations/social-studies/global-development/globalisation-and-employment/">https://www.studysmarter.co.uk/explanations/social-studies/global-development/globalisation-and-employment/</a></li> <li>• <a href="https://www.plutojournals.com/world-organisation-labour-and-globalisation/">https://www.plutojournals.com/world-organisation-labour-and-globalisation/</a></li> <li>• <a href="https://www.freiheit.org/new-model-globalization-world-employment">https://www.freiheit.org/new-model-globalization-world-employment</a></li> <li>• <a href="https://study.com/academy/lesson/the-effects-of-globalization-on-labor-conditions.html">https://study.com/academy/lesson/the-effects-of-globalization-on-labor-conditions.html</a></li> </ul>	

<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Clarify the meaning of labour, labour market trends, and wage theories.</p> <p>C02: Understand the impact of globalization on women's work and labour market regulations based on gender and caste.</p> <p>C03: Describe the concept, evolution, and impact of globalization on industrialization and the economy.</p> <p>C04: Comprehend the new work organizations, diversity, and work culture in the context of globalization.</p> <p>C05: Explain the structure of industrial labour, employment dimensions, and the role of trade unions in labour market reforms.</p>
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### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	3	2	2	3	2	3	2	2	3	2	3	2
<b>2</b>	3	3	3	3	3	3	3	3	3	3	3	3
<b>3</b>	3	3	3	3	3	2	2	3	3	3	3	2
<b>4</b>	3	3	3	3	2	3	2	2	3	2	3	2
<b>5</b>	3	2	2	3	2	3	2	2	2	2	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	YOUTH DEVELOPMENT (24ARUB2103)			
	Credit: 4	Semester - III	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1: Identify and recall the basic concepts of youth development			
	K-2: Explain the role of youth in social development and participatory governance, as well as their involvement in national programs.			
	K-3: Apply knowledge of youth welfare measures to analyze and suggest improvements in youth self-employment, leadership training, and vocational guidance.			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the concept of youth and their problems in rural and urban settings.</li> <li>• Analyze the role of youth in social development, including their contributions to social harmony and national unity.</li> <li>• Explore participatory governance and the capacity-building initiatives for youth in decentralized planning and community involvement.</li> <li>• Examine various national programs for youth, including Nehru Yuva Kendra Sangathan and National Service Volunteers Scheme.</li> <li>• Study youth welfare measures, including self-employment, leadership training, sports, youth rights, and vocational guidance.</li> </ul>			
UNIT	Content			No. of Hours
I	<p><b>Youth Development:</b> Concept of youth, needs and problems of youth in rural and urban setting, social changes in India and its effects on youth, patterns of youth culture in modern India, cultural gap and generation conflicts amongst youth; Problems faced by youth - unemployment, alienation, drug addiction, crime.</p>			12
II	<p><b>Youth and Social Development:</b> Promotion of Social Harmony and national unity among Youth. Role of Youth in family, community and society. Social changes in India and its effects on youth, Expectation of Youth - Expectation upon youth in the Nation Building</p>			12
III	<p><b>Participatory Governance:</b> Capacity Building Initiatives, Decentralized Planning - Micro Planning Process, Bottom up Planning, Accountability and transparency, Development process of model Gram Panchayats, Citizens Action Research - status of youth - national scenario, international scenario - importance, involvement and progress</p>			14
IV	<p><b>National Programmes For Youth:</b> Nehru Yuva Kendra Sangathan - Youth Clubs/Mahilamandals, National Service Volunteers Scheme - Nehru</p>			12

	yuvasatheese scheme, National Rural Corps Scheme -Origin, Programmes and functions. Self Help Group – Functions, Role of youth, and outcome of SHG in the lives of youth population.	
<b>V</b>	<b>Youth Welfare:</b> Self-employment Measures, Youth Leadership Training, Games and Sports – needs and importance, Youth rights and responsibilities – Youth rights in Public Participation, Youth Counseling, Vocational Guidance, Skill training youth health and politics.	<b>12</b>
<b>References</b>	<ul style="list-style-type: none"> <li>• White, R. (Year). Youth and society: Exploring the social dynamics of youth experience. Melbourne: Oxford University Press.</li> <li>• Kehily, M. J. (Year). Understanding youth: Perspectives, identities and practices. London: Sage Publications.</li> <li>• Brake, M. (Year). The sociology of youth culture and youth subcultures. London: Routledge.</li> <li>• Côté, J., &amp; Andrews, W. B. (Year). Youth studies: An introduction. New York: Wiley-Blackwell.</li> <li>• Buckingham, D. (Ed.). (Year). Youth, identity, and digital media. Cambridge, MA: The MIT Press.</li> </ul>	
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Danzig, D. N. (Year). Youth and community empowerment. New York: McGraw-Hill.</li> <li>• Saggarr, S. (Year). Youth in contemporary India: Images of identity and social change. New Delhi: Sage Publications.</li> <li>• Pittman, K., &amp; Wright, M. (Year). Youth development and youth leadership: A background paper. Washington, D.C.: Impact Strategies, Inc.</li> <li>• Skelton, T., &amp; Valentine, G. (Year). Global perspectives on youth: Place, age and identities. New York: Routledge.</li> <li>• Wood, J., Westwood, S., &amp; Thompson, G. (Year). Youth work: Preparation for practice. London: Routledge.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.un.org/development/desa/youth/">https://www.un.org/development/desa/youth/</a></li> <li>• <a href="https://www.nyda.gov.za/">https://www.nyda.gov.za/</a></li> <li>• <a href="https://youth.gov/">https://youth.gov/</a></li> <li>• <a href="https://www.youthpolicy.org/">https://www.youthpolicy.org/</a></li> <li>• <a href="https://thecommonwealth.org/youth">https://thecommonwealth.org/youth</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Define the concept of youth and describe the needs and problems faced by youth in different settings.</p> <p>C02: Understand the role of youth in promoting social harmony and national unity, as well as their expectations in nation-building.</p> <p>C03: Explain participatory governance and the importance of capacity-building initiatives for youth in community development.</p> <p>C04: Gain knowledge on various national programs aimed at youth development and their functions and outcomes.</p> <p>C05: Understand youth welfare measures, including self-employment, leadership training, youth rights, and vocational guidance.</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	2	3	2	2	3	2	2	3	2	3	3	3
2	3	2	2	2	3	2	3	3	3	2	2	3
3	2	3	3	3	3	3	3	3	3	3	3	3
4	3	3	2	3	3	3	2	2	3	3	3	3
5	3	3	3	3	2	2	2	3	2	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	ELEMENTS OF RESEARCH METHODS (24ARUC2205)			
	Credit: 4	Semester – IV	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1 Understanding the basics of research methodology			
	K-2 Constructing tools for data collection in research			
	K-3 Developing skill in preparing scientific research report			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>Identify and formulate a problem for research.</li> <li>Prepare suitable research design to study the research problem to be formulated</li> <li>Choose appropriate methods of sampling, tools and techniques of data collection</li> <li>Process the data collected in the field and analyze it using appropriate statistical methods and</li> <li>Prepare research report in a professional manner.</li> </ul>			
UNIT	Content			No. of Hours
I	<p><b>Research:</b> Definition, Characteristics and Functions of Research. Scientific method. Types of research: Pure, Applied and Action Research, Qualitative and Quantitative studies. Research Skills and Ethics, Significance of Ethical Committee.</p>			12
II	<p><b>Steps in Research:</b> Research Process, Selection and Formulation of Research Problem, Statement of the Problem and Definition of Terms, Objectives. Review of Literature, Data Base and Reference Management Software. Conceptual Framework, Types of Variables – Hypothesis: types, characteristics and functions.</p>			13
III	<p><b>Preparation of Research Design:</b> Exploratory, Descriptive, Diagnostic and Experimental designs - types. Methods of Research: Multidisciplinary, Interdisciplinary and Transdisciplinary studies, Mixed methods. Participatory research: RRA, PRA and PLA.</p>			13
IV	<p><b>Sources and types of Data Collection:</b> Conduct of Interview, Observation, Schedule and Questionnaire. Sociometry, Psychological test and Projective techniques, Content analysis, Survey, Case study - Scaling Techniques – Online research methods – Pre- test, Test of reliability and validity.</p>			13
V	<p><b>Research Report:</b> Format - types of reports – Citation styles, Reference Materials, Bibliography, Webliography, Footnotes, Glossary, Index and Appendix. Preparation of Research Proposal, Plagiarism – Impact factor - dissemination of research findings.</p>			13

<b>References</b>	<ul style="list-style-type: none"> <li>• Bernard, H. Russell (1995): Research Methods in Anthropology: Qualitative and Quantitative Approaches, Altamira Press, Walnut Creek.</li> <li>• Goode W J and Hatt P K (1952), Methods in Social Research, McGraw Hills, New York.</li> <li>• Kish, Leslie (1995), Survey Sampling, John Wiley and Sons, Inc, New York.</li> <li>• L. Sharaon (1999), Sampling: Design and Analysis, Duxbury Press, London.</li> <li>• Lwanga S K and Lemeshow S (1991), Sample size determination in ealt Studies: A Practical Manual, World Healt Organization, Geneva.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Mukherji P N (1999), Methodologies in Social Science, Sage Publications, New Delhi.</li> <li>• Pullun W (2006), An Assessment of Age and Data Reporting in the DHS Survey, 1985 – 2003. DHS Methodological Report No. 5. Calverton, Maryland, Marco International Inc.</li> <li>• Royce A Singleton and Bruce C Straits (1999) Approaches to Social Research, Oxford University Press.</li> <li>• Young P V (1994), Scientific Social Survey and Research, Prentice Hall, New York (4<sup>th</sup> Edition)</li> <li>• Kothari C R (2020), Research Methodology – Methods and Technique, Generic, ASIN</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://instr.iastate.libguides.com/researchmethods/actionresearch">https://instr.iastate.libguides.com/researchmethods/actionresearch</a></li> <li>• <a href="https://www.ncrm.ac.uk/">https://www.ncrm.ac.uk/</a></li> <li>• <a href="https://www.scribbr.com/category/methodology/">https://www.scribbr.com/category/methodology/</a></li> <li>• <a href="https://www.indiastat.com/">https://www.indiastat.com/</a></li> <li>• <a href="https://libguides.library.cityu.edu.hk/researchmethods/ethics">https://libguides.library.cityu.edu.hk/researchmethods/ethics</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Develop expertise and skills to undertake independent research</p> <p>CO2: Construct research tools</p> <p>CO3: Understand research skills and ethics related issues</p> <p>CO4: Apply of statistical tools from application perspective</p> <p>CO5: Prepare research article and project report</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	3	3	3	3	3	3	2	3	3	3	3	3
<b>2</b>	2	3	3	3	3	3	3	3	3	3	3	3
<b>3</b>	3	3	3	3	3	3	2	3	2	3	3	2
<b>4</b>	3	3	2	3	3	3	2	3	3	3	3	3
<b>5</b>	2	2	3	3	2	3	2	2	3	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	PSYCHOLOGICAL PERSPECTIVES ON DEVELOPMENT (24ARUC2206)				
	Credit: 4	Semester - IV	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Understand fundamental concepts, origins, and methods in psychology.				
	K-2: Learn and comprehend cognitive processes, motivation and emotion, personality and intelligence, social psychology, psychological distress, and industrial/organizational psychology.				
	K-3: Analyze and apply psychological theories and methods to real-world contexts, especially within the Indian framework.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>Understand the basic concepts, origins, and development of psychology.</li> <li>Learn about cognitive processes such as perception, learning, memory, motivation, and emotion.</li> <li>Explore social psychology, including individual and interpersonal processes, attitudes, and group dynamics.</li> <li>Examine the concepts of psychological distress, abnormality, and well-being, along with coping strategies.</li> <li>Study industrial and organizational psychology, including work-related attitudes, motivation, and leadership.</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Psychology:</b> Definition and Concepts. Origin and development of psychology, methods. Cognitive processes: Perception, learning and Memory -Types and Process. Motivation and Emotion. Personality and Intelligence: Nature, and Theories.				14
II	<b>Social psychology:</b> Scope, levels, approaches towards understanding social behavior. Individual level processes: Perception: attribution-theories. Attitude: formation, change and resistance to change. Interpersonal processes: Pro-social behavior, aggression. Group dynamics: Key Concepts.				14
III	<b>Basic Concepts of Psychological distress:</b> Abnormality and psychological well-being. Theoretical perspectives: Biological, familial, cultural, behavioral, cognitive and psychodynamic. Dealing with psychological distress: Coping strategies, personal growth and well-being.				13
IV	<b>Industry and organization:</b> Current status of Industrial/Organizational psychology, Industrial/Organizational psychology in the Indian context. Work Related Attitudes: Job satisfaction; Organizational Commitment; Organizational Citizenship Behavior.				12

<b>V</b>	<b>Work Motivation:</b> Concepts, Types, Theories and application. Work Engagement. Leadership: Styles and Types - Contemporary perspectives on leadership; Cross-cultural leadership issues. Stress Management and Positivity.	<b>11</b>
<b>References</b>	<ul style="list-style-type: none"> <li>• Gleitman, H., Gross, J., &amp; Reisberg, D. (2018). Psychology (9th ed.). W. W. Norton &amp; Company, New York.</li> <li>• Myers, D. G., &amp; Dewall, C. N. (2017). Psychology (12th ed.). Worth Publishers, New York.</li> <li>• Schacter, D. L., Gilbert, D. T., &amp; Wegner, D. M. (2017). Psychology (3rd ed.). Macmillan Learning, New York.</li> <li>• Atkinson, R. L., &amp; Hilgard, E. R. (2000). Introduction to Psychology. Harcourt Brace College Publishers, Fort Worth, TX.</li> <li>• Schultz, D. P., &amp; Schultz, S. E. (2019). A History of Modern Psychology (11th ed.). Cengage Learning, Boston, MA.</li> </ul>	
<b>Textbooks</b>	<ul style="list-style-type: none"> <li>• Morgan, C. T., King, R. A., &amp; Weisz, J. R. (2017). Introduction to Psychology (7th ed.). McGraw-Hill Education, New York.</li> <li>• Plotnik, R., &amp; Kouyoumdjian, H. (2017). Introduction to Psychology (10th ed.). Cengage Learning, Boston, MA.</li> <li>• Hockenbury, D. H., &amp; Nolan, S. A. (2017). Discovering Psychology. Macmillan Higher Education, New York.</li> <li>• Baron, R. A., &amp; Branscombe, N. R. (2017). Social Psychology (14th ed.). Pearson, Boston, MA.</li> <li>• Luthans, F., Luthans, B. C., &amp; Luthans, K. W. (2015). Organizational Behavior: An Evidence-Based Approach. McGraw-Hill Education, New York.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.apa.org/">https://www.apa.org/</a></li> <li>• <a href="https://www.bps.org.uk/">https://www.bps.org.uk/</a></li> <li>• <a href="https://www.psychologytoday.com/">https://www.psychologytoday.com/</a></li> <li>• <a href="https://www.simplypsychology.org/">https://www.simplypsychology.org/</a></li> <li>• <a href="https://www.nimh.nih.gov/">https://www.nimh.nih.gov/</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Understand and articulate the origins and development of psychology</p> <p>C02: Analyze cognitive processes such as perception, learning, memory, and motivation</p> <p>C03: Evaluate major theories of personality and intelligence</p> <p>C04: Analyze social behaviors and dynamics using theories of social psychology</p> <p>C05: Understand concepts of psychological distress and well-being</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	3	3	2	3	2	2	3	2	2	1
2	2	3	2	3	3	3	3	3	3	3	3	2
3	2	3	3	3	3	3	3	3	3	3	3	1
4	3	2	2	3	2	3	2	2	3	2	2	2
5	3	3	3	3	3	3	3	3	3	2	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	GENDER AND DEVELOPMENT (24ARUC2207)			
	Credit: 4	Semester - IV	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1: Understand fundamental concepts and key theoretical formulations in gender studies and development.			
	K-2: Analyze the construction of gender in major social institutions and the emergence of gender concerns in development.			
	K-3: Evaluate obstacles to women's development in India and assess the impact of gender discrimination on familial resources, violence against women, and development programs.			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Introduce the concept of gender and differentiate between sex and gender</li> <li>• Examine the construction of gender in major social institutions</li> <li>• Analyze the emergence of gender concerns in development, reviewing theoretical approaches</li> <li>• Discuss women's work, representation in economic sectors, feminization of poverty, and the impact of globalization on women's economic participation.</li> <li>• Evaluate obstacles to women's development in India, including gender discrimination</li> </ul>			
UNIT	Content			No. of Hours
I	<b>Gender:</b> Concept, difference between Sex and Gender, key concepts in gender studies, gender equality, gender justice, gender bias, gender roles, gender relations, gender blindness, gender division and labour, gender perspective.			10
II	<b>Construction of gender in major social institutions:</b> Family, Religion, Economy, Education, Politics and Media Development –Concept, major theoretical formulations, changing concept of development, the shift from the growth model to the social justice model.			13
III	<b>Emergence of gender concerns in development:</b> Review of theoretical approaches: women in Development (WID), Women and Development (WAD) and Gender and Development (GAD). Gender Empowerment Measure (GEM). Gender Inequality Index (GII). A review of development efforts in India.			13
IV	<b>Women and work:</b> Definitions of women's work -Gender biases the case of census definitions - Distinctions between 'within' and 'outside' the home. women in the organised and unorganized sectors, feminization of poverty, globalisation and its impact on women's economic participation.			14

<b>V</b>	<b>Obstacles to women's development:</b> Gender discrimination in allocation of familial resources - violence against women and Gender based violence. Policies and Programmes of women's development, Central and State Social Welfare Boards, UN Women. Laws related to women development.	<b>14</b>
<b>References</b>	<ul style="list-style-type: none"> <li>• Lorber, J., &amp; Moore, L. J. (2011). Gendered Bodies: Feminist Perspectives. Oxford University Press, New York.</li> <li>• Connell, R. W. (2012). Gender. Polity Press, Cambridge.</li> <li>• Kimmel, M. S., &amp; Aronson, A. (2018). The Gendered Society Reader. Oxford University Press, New York.</li> <li>• West, C., &amp; Zimmerman, D. H. (1987). Doing Gender. Gender &amp; Society, 1(2), 125–151. (Journal article)</li> <li>• Butler, J. (1990). Gender Trouble: Feminism and the Subversion of Identity. Routledge, New York.</li> </ul>	
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Wood, J. T. (2018). Gendered Lives: Communication, Gender, and Culture (13th ed.). Cengage Learning, Boston, MA.</li> <li>• Risman, B. J. (2018). The Gendered Society (6th ed.). Oxford University Press, New York.</li> <li>• Robbins, S. P., &amp; Judge, T. A. (2019). Organizational Behavior (18th ed.). Pearson, Boston, MA.</li> <li>• Kalpana Kannabiran. (2016). Tools of Justice: Non-Discrimination and the Indian Constitution. Routledge India, New Delhi.</li> <li>• Nivedita Menon (Ed.). (2007). Gender and Politics in India. Oxford University Press, New Delhi.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.unwomen.org/en">https://www.unwomen.org/en</a></li> <li>• <a href="https://gadnetwork.org/">https://gadnetwork.org/</a></li> <li>• <a href="https://oig.cepal.org/en">https://oig.cepal.org/en</a></li> <li>• <a href="https://www.worldbank.org/en/topic/gender">https://www.worldbank.org/en/topic/gender</a></li> <li>• <a href="https://www.genderspectrum.org/">https://www.genderspectrum.org/</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Understand the concept of gender and its distinction from sex</p> <p>CO2: Analyze the construction of gender in major social institutions</p> <p>CO3: Evaluate the emergence of gender concerns in development</p> <p>CO4: Discuss women's work, gender biases, and the impact of globalization on women's economic participation</p> <p>CO5: Identify and assess obstacles to women's development in India</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	2	2	3	3	2	2	3	2	2	2
2	3	3	3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	2	3	2	3	3	2	3	1
4	3	2	3	3	2	3	2	2	3	3	2	2
5	3	3	3	3	3	3	3	3	3	3	3	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	INDIAN ECONOMY (24ARUB2204)				
	Credit: 4	Semester - IV	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Enable students to understand the basic concepts, historical context, and key theories of Indian economic development.				
	K-2: Predict the effects of economic policies on India's development and recognize key macroeconomic indicators				
	K-3: Evaluate the effectiveness of recent economic policies and programs in India and their impact on the country's overall development.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the nature and scope of Indian Economic Development.</li> <li>• Know about planning and development in India.</li> <li>• Understand the role of agriculture sector in Economic Development.</li> <li>• Highlight the importance of industrial and service sectors development in India.</li> <li>• Learn the importance of foreign trade and economic policy.</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Nature and Scope of Indian Economy:</b> Underdevelopment – Meaning – Characteristic of Indian Economy – Economic Development and Growth – Determinants and Obstacles of Economic Development – India as a mixed Economy – Sustainable Development.				14
II	<b>Planning and Development:</b> Definition of Planning – Objectives – Planning Commission - Five Year Plans of India – Achievements and Failures of Economic Planning in India - NITI Aayog – Structure - Objectives and Role.				14
III	<b>Agriculture and Economic Development:</b> Role of Agriculture in Indian Economy - Production and Productivity - Green Revolution and Organic Farming and Sustainable Development – Problems of Indian Agriculture – Agriculture marketing and Agriculture Finance.				12
IV	<b>Industrial and Service Sectors:</b> Industrialization- Meaning – Problems – Role of Industrialization – Industrial Finance – Industrial Policy - Industrial Sickness – Trade Union – Service Sector - Broader Classification – Contribution to Economic Development.				12
V	<b>Foreign Trade and Economic Policy:</b> International Trade and Development - Foreign Direct Investment (FDI) – New Economic Policy (LPG) - World Trade Organization (WTO) – Special Economic Zones (SEZs) – Demonetization – Goods and Services Taxes.				12

<b>References</b>	<ul style="list-style-type: none"> <li>• Uma Kapila (Ed.) (2017-18), Indian Economy since Independence, Academic Foundation, New Delhi, 28th Edition.</li> <li>• Jhingan (2014), Economics of Development and Planning – Vikas Publishing House, Bangalore,</li> <li>• Kausik Basu (Ed.) (2012), Oxford Companion to Indian Economy, 3rd Edition, OUP, New Delhi.</li> <li>• Dhingra, I C., (2014), Indian Economy, Sultan Chand &amp; Sons, New Delhi.</li> <li>• Joshi, V. and I.M.D. Little (1996), “India’s Economic Reforms: 1991-2001”, Oxford University Press, New Delhi.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Mishra, P., &amp; Puri, V. K. (2020). Indian Economy (13th ed.). Himalaya Publishing House: Mumbai, India.</li> <li>• Uma Kapila (Ed.). (2020). Indian Economy: Performance and Policies. Academic Foundation: New Delhi, India.</li> <li>• Ruddar Datt &amp; K.P.M. Sundharam (2021). Indian Economy. S. Chand Publishing: New Delhi, India.</li> <li>• Ramesh Singh (2021). Indian Economy. McGraw Hill Education: New Delhi, India.</li> <li>• Dutt, R., &amp; Sundaram, K. P. M. (2018). Indian Economy (72nd Revised &amp; Enlarged ed.). S. Chand Publishing: New Delhi, India.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.rbi.org.in/">https://www.rbi.org.in/</a></li> <li>• <a href="https://www.finmin.nic.in/">https://www.finmin.nic.in/</a></li> <li>• <a href="https://niti.gov.in/">https://niti.gov.in/</a></li> <li>• <a href="https://www.cii.in/">https://www.cii.in/</a></li> <li>• <a href="https://economictimes.indiatimes.com/">https://economictimes.indiatimes.com/</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Understand the nature and scope of Indian Economic Development.</p> <p>CO2: Know about planning and development in India.</p> <p>CO3: Understand the role of agriculture sector in Economic Development.</p> <p>CO4: Highlight the importance of industrial and service sectors development in India.</p> <p>CO5: Learn the importance of foreign trade and economic policy.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	2	3	3	2	3	2	3	3	3	2
2	3	3	2	3	3	3	3	3	3	2	3	3
3	3	3	3	3	3	2	3	2	3	3	2	2
4	3	2	3	3	3	2	3	3	3	3	3	3
5	2	2	3	3	3	3	3	3	3	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	ACADEMIC WRITING (24ARUA2204)				
	Credit: 4	Semester – IV	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	<b>K-1</b> Understand the concepts of proper essay writing, grammar and punctuation.				
	<b>K-2</b> Getting to know about Approaches for writing and types				
	<b>K-3</b> Understand the concepts of Plagiarism and Writing models				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Gain knowledge in academic writing</li> <li>• Understand the basic concepts and process of academic writing</li> <li>• Gain knowledge on Vocabulary for writing</li> <li>• Acquire knowledge on Plagiarism and Paraphrasing</li> <li>• Acquire knowledge on literature review and writing models</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Writing Process:</b> Concept of writing – purpose, types of writing. Reading – Concept, types of text. Reading methods and Critical thinking. Combining sources, Organizing Paragraphs, Rewriting and Proofreading.				13
II	<b>Elements of Writing:</b> Argument and discussion, Cause and Effect, Cohesion, Comparisons, Define Articles, Examples, Generalisations, Passives, Problem and Solutions, Punctuation, Singular or Plural, Style, Visual Information.				13
III	<b>Vocabulary for Writing:</b> Approaches for writing, Abbreviations and its types. Academic Vocabulary: Nouns and Adjectives, Adverbs and Verbs. Conjunctions, Numbers, Prefixes and suffixes, Prepositions, Synonyms and Time Makers.				13
IV	<b>Plagiarism:</b> Concept, Importance, Acknowledging sources, degree of plagiarism, avoiding plagiarism by summarizing and paraphrasing, avoiding plagiarism by developing good study habits. Finding key points and note making. Reference and Quotations.				13
V	<b>Writing Models:</b> Case studies – Using and Model case studies. Literature Reviews and Book Reviews. Reports – Writing reports, Essays and reports and scientific reports.				12
References	<ul style="list-style-type: none"> <li>• Anneliese A. Singh, Lauren Lukkarila (2017), Successful Academic Writing: A Complete Guide for Social and Behavioral Scientists, Guilford Publications, New York.</li> <li>• James Kershner (2015), The Elements of Academic Writing (1<sup>st</sup> Edition), Kendall Hunt Publishing Company, Dubuque, Iowa.</li> </ul>				

	<ul style="list-style-type: none"> <li>Janet Giltrow, Richard Gooding, Daniel Burgoyne, Marlene Sawatsky (2009), Academic Writing: An Introduction (2<sup>nd</sup> Edition), Broadview Press, New York.</li> <li>Noushad Husain (2021), Fundamentals of Academic Writing, Shipra Publications, Delhi.</li> <li>Stephen Balley (2018), Academic Writing: A Handbook for International Students (5<sup>th</sup> Edition), Routledge, New York.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>Alice Oshima, Ann Hogue (2007), Introduction to Academic Writing (3<sup>rd</sup> Edition), Pearson Education, New York.</li> <li>Boba Samuels, Jordana Garbati (2018), Mastering Academic Writing, Sage Publications Ltd, New Delhi.</li> <li>Luke Strongman (2013), Academic Writing, Cambridge Scholars Publishing, UK.</li> <li>Stephen Balley (2015), Academic Writing: A Handbook for International Students (4<sup>th</sup> Edition), Routledge, New York.</li> <li>Steven Charles Roe, Pemela H. Den Ouden (2018), Academic Writing: The Complete Guide, Canadian Scholars, Canada.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li><a href="http://www.routledge.com">www.routledge.com</a></li> <li><a href="https://wilson.fas.harvard.edu/files/jeffreywilson/files/jeffrey_r_wilson_academic_writing.pdf">https://wilson.fas.harvard.edu/files/jeffreywilson/files/jeffrey_r_wilson_academic_writing.pdf</a></li> <li><a href="https://edisciplinas.usp.br/pluginfile.php/3928474/mod_resource/content/1/Introduction%20to%20Academic%20Writing.pdf">https://edisciplinas.usp.br/pluginfile.php/3928474/mod_resource/content/1/Introduction%20to%20Academic%20Writing.pdf</a></li> <li><a href="https://www.enago.com/academy/7-steps-of-writing-academic-book-chapter/">https://www.enago.com/academy/7-steps-of-writing-academic-book-chapter/</a></li> <li><a href="https://www.sydney.edu.au/students/writing/types-of-academic-writing.html">https://www.sydney.edu.au/students/writing/types-of-academic-writing.html</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: have more confidence and enthusiasm to write</p> <p>CO2: understand the tone, and style of writing</p> <p>CO3: employ proper grammar and punctuation</p> <p>CO4: know the key components of academic writing</p> <p>CO5: learn to summarise and read for academic purposes</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	1	1	2	2	2	1	2	2	1	1	2	2
2	2	2	1	2	2	1	1	2	1	1	2	1
3	1	2	2	2	1	2	2	1	1	2	2	1
4	1	1	1	1	1	2	1	1	1	1	1	1
5	2	1	1	2	1	1	1	2	1	1	1	1

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	OCCUPATIONAL HEALTH AND DEVELOPMENT (24ARUC3108)				
	Credit: 4	Semester – V	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	<b>K-1</b> Understanding the concept of Occupational Health and Demography.				
	<b>K-2</b> Understanding the basic concept of Measures of Occupational Health Risks.				
	<b>K-3</b> Getting to know about data Sources of occupational health and its various measures.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Gain knowledge in data collection related to occupational health risk</li> <li>• Understand the concepts of health well-being of Workers and occupation related morbidity</li> <li>• Understand the concepts of measures of occupation health</li> <li>• Be familiar with the basic concepts of occupational health</li> <li>• Understand the concepts of Labour Welfare Schemes and Programmes</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Occupational Health:</b> Definition, basic concepts, Historical development, scope, and importance of occupational health in demography; Difference between occupational health risks and hazards; Intersectionality of occupational health - socioeconomic and demographic characteristics.				12
II	<b>Health Well-being of Workers:</b> Occupation-related Morbidity, Health Disorders, Different types of Disabilities, and Mortality; Mental Health. Pre and Post industrialization theories on occupational health risks and hazards; Decent work; Women's health and safety.				13
III	<b>Types and Measurements of Occupational Health Risks:</b> Occupational disciplines and related risks; Measurements of occupational health safety, risks and hazards; Health impact assessment, Mental health assessment scale, Musculoskeletal disorder scale, American Thoracic Society and the Division of Lung Diseases, Occupational Stress Index, Job Strain Model.				13
IV	<b>Data Sources of Occupational Health:</b> Data sources and limitations in the area of Occupational health. Legislation, Social and Welfare Policies; Sustainable Development Goals; Fundamental Principles and Rights at Work; International Labour Standards on Occupational Safety and Health, Wages and Working time; Occupational Safety and Health Convention, Health and Safety Acts; Child Labour and Health.				13

V	<b>Occupational Health in India:</b> Prevalence, Incidence of Occupational Health in India; Health behavioral risks and hazards; Evolution of labour unions; and Contemporary occupational health challenges of workers in India. Legal provisions and acts in India –Labour Welfare Schemes and Programmes.	13
References	<ul style="list-style-type: none"> <li>• LaDou, J. (Ed.). (2017). Current Occupational &amp; Environmental Medicine (5th ed.). McGraw-Hill Education: New York, NY.</li> <li>• Greenberg, M. I., &amp; Hamilton, R. J. (Eds.). (2017). Occupational, Industrial, and Environmental Toxicology (3rd ed.). Elsevier: Amsterdam, Netherlands.</li> <li>• Levy, B. S., Wegman, D. H., Baron, S. L., &amp; Sokas, R. K. (Eds.). (2019). Occupational and Environmental Health: Recognizing and Preventing Disease and Injury (7th ed.). Oxford University Press: New York, NY.</li> <li>• Kriebel, D., Jacobs, D. E., Claudio, L., &amp; Miller, M. D. (Eds.). (2017). Environmental and Occupational Medicine (5th ed.). Wolters Kluwer: Philadelphia, PA.</li> <li>• Stellman, J. M. (Ed.). (2014). Encyclopedia of Occupational Health and Safety (4th rev. ed.). International Labour Office: Geneva, Switzerland.</li> </ul>	
Text Books	<ul style="list-style-type: none"> <li>• Jain, N. C. (2019). Textbook of Occupational Health and Development (4th ed.). Jaypee Brothers Medical Publishers: New Delhi, India.</li> <li>• Ahuja, S. (Ed.). (2020). Occupational Health Nursing. Tata McGraw-Hill Education: New Delhi, India.</li> <li>• Ramazzini, B. (2018). De Morbis Artificum Diatriba (Diseases of Workers) (Trans. &amp; Ed. by Wright, J. W., &amp; Zotti, A. M.). CRC Press: Boca Raton, FL.</li> <li>• Quick, T. L., &amp; Henderson, D. F. (2016). Occupational Health: Recognizing and Preventing Work-related Disease and Injury (7th ed.). Lippincott Williams &amp; Wilkins: Philadelphia, PA.</li> <li>• Lee, S. (2021). Occupational Health Psychology: Concepts and Applications. Wiley-Blackwell: Hoboken, NJ.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://www.weps.org/principle/employee-health-well-being-and-safety">https://www.weps.org/principle/employee-health-well-being-and-safety</a></li> <li>• <a href="https://psycnet.apa.org/doiLanding?doi=10.1037%2Ft53532-000">https://psycnet.apa.org/doiLanding?doi=10.1037%2Ft53532-000</a></li> <li>• <a href="https://www.who.int/health-topics/occupational-health">https://www.who.int/health-topics/occupational-health</a></li> <li>• <a href="https://labour.gov.in/policies/safety-health-and-environment-work-place">https://labour.gov.in/policies/safety-health-and-environment-work-place</a></li> <li>• <a href="https://labour.gov.in/general-overview">https://labour.gov.in/general-overview</a></li> </ul>	
Course Outcomes	<p>On completion of the course, students should be able to</p> <p>CO1: Know about the basic concepts of occupational health</p> <p>CO2: Understand the health well-being of Workers and occupation related morbidity.</p> <p>CO3: Comprehend the concepts of measures of occupation health.</p> <p>CO4: Study the data collection related to occupational health risk.</p> <p>CO5: Learn about the concepts of Labour Welfare Schemes and Programmes</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	2	2	3	3	3	3	3	2	3	3
2	3	2	3	3	2	2	3	2	3	3	2	3
3	3	3	2	2	3	3	2	3	3	2	3	2
4	3	2	2	2	2	2	2	2	3	2	2	3
5	3	2	3	3	2	3	3	2	3	3	2	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	APPLIED STATISTICS (24ARUC3109)			
	Credit: 4	Semester - V	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	<b>K-1</b> Imparting the knowledge on applications of Statistics on various disciplines.			
	<b>K-2</b> Acquiring knowledge on various measures of central tendency and dispersion.			
	<b>K-3</b> Understanding various methods of performing sampling, correlation and regression.			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Be familiar with the basic concepts and terminology of statistics.</li> <li>• Understand the importance and application of statistics in different disciplines</li> <li>• Choose appropriate sampling procedure and decide sample size.</li> <li>• Develop skill in reading and understanding the results from data analysis</li> <li>• Able to demonstrate competence in analyzing statistical data using software.</li> </ul>			
UNIT	Content			No. of Hours
I	<b>Applied Statistics:</b> Origin, scope, limitations and misuses of Statistics – Stages of Statistics. Statistical Organizational set up in Central and State Governments. Recent trends in the application of Statistics			12
II	<b>Sampling Design:</b> Basic Concepts of Census and Sampling Method, Characteristics of a good Sample, Sampling Unit, Sampling Frame. Determination of Sample Size. Random sampling –Non-random sampling. Sampling and Non-sampling errors.			13
III	<b>Sources and types of statistical data:</b> Classification of data, Scoring and Coding, Tabulation and presentation of data – Frequency distribution. Diagrammatic presentation of data: one, two and three-dimensional diagrams – Graphical representation of data.			13
IV	<b>Measures of Central Tendency:</b> Mean, Median, Mode – Merits and Demerits. Measures of Variation: Range, Mean deviation, Quartile deviation, Standard deviation, Co-efficient of variation – Merits and Demerits.			13
V	<b>Measures of Skewness and Kurtosis:</b> Definition, Types; Karl Pearson's coefficient of Skewness – Bowley's Co-efficient of Skewness. Measures of Kurtosis: Definition and Types. Correlation: Concept, Types, and its applications. Regression: Concept and Types of Regression.			13

<b>References</b>	<ul style="list-style-type: none"> <li>• Agarwal, Y.P, Statistical Methods, New Delhi: Sultan Chand and Sons, 1996.</li> <li>• Gupta, S.P and Gupta.M.P, Business Statistics, New Delhi: Sultan Chand and Sons, (19<sup>th</sup> Ed), 2019.</li> <li>• Gupta, S.P., Statistical Methods, Sultan Chand Publishers, New Delhi, (13<sup>th</sup>Ed), 2019.</li> <li>• Kothari.C.R, Quantitative Techniques, New Delhi: Vikas Publishing House, 1998.</li> <li>• W.G.Cochran, Sampling Techniques, Wiley Eastern Ltd, New Delhi, 1985.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Gupta, S.C. Fundamentals of Statistics, Mumbai: Himalaya Publishing House, 2018.</li> <li>• Goon, A. M., M.K. Gupta, and B. Dasgupta, Fundamentals of Statistics, Vol. II, World Press, Kolkata, 2016.</li> <li>• Gupta. S.C. and Kapoor. V.k, Fundamentals of Mathematical Statistics, Sultan Chand &amp; Sons, (12<sup>th</sup> Ed), 2020.</li> <li>• Parimal Mukopadhyay, Mathematical Statistics (Third Edition), Books and Allied Private Limited, Kolkata, 2006.</li> <li>• Siegel, Sidney, Non-Parametric Statistics for Behavioural Sciences, New Delhi: McGraw Hill, 2006.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://mospi.gov.in/142-present-indian-statistical-system-organisation#:~:text=The%20Central%20Statistical%20Organisation%20(CSO,the%20Government%20of%20India%20and">https://mospi.gov.in/142-present-indian-statistical-system-organisation#:~:text=The%20Central%20Statistical%20Organisation%20(CSO,the%20Government%20of%20India%20and</a></li> <li>• <a href="https://www.learner.org/wp-content/uploads/2019/03/AgainstAllOdds_StudentGuide_Unit16-Census-and-Sampling.pdf">https://www.learner.org/wp-content/uploads/2019/03/AgainstAllOdds_StudentGuide_Unit16-Census-and-Sampling.pdf</a></li> <li>• <a href="https://www.theknowledgeacademy.com/blog/types-of-data-in-statistics/">https://www.theknowledgeacademy.com/blog/types-of-data-in-statistics/</a></li> <li>• <a href="https://statistics.laerd.com/statistical-guides/measures-central-tendency-mean-mode-median.php">https://statistics.laerd.com/statistical-guides/measures-central-tendency-mean-mode-median.php</a></li> <li>• <a href="https://www.researchgate.net/publication/338919704_Descriptive_statistics_Measures_of_central_tendency_dispersion_correlation_and_regression">https://www.researchgate.net/publication/338919704_Descriptive_statistics_Measures_of_central_tendency_dispersion_correlation_and_regression</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to do</p> <p>CO1: Get exposed to the recent trends in the application of Statistics.</p> <p>CO2: Obtain insight in sampling techniques.</p> <p>CO3: Learn data collection and its visualization techniques.</p> <p>CO4: Study the concepts in Descriptive Statistics.</p> <p>CO5: Acquire knowledge on Correlation and Regression.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	2	3	3	2	2	3	3	2
2	3	2	2	3	2	3	3	3	2	3	3	3
3	3	3	3	3	3	3	3	3	2	3	3	3
4	3	3	2	3	2	3	3	3	2	3	3	3
5	3	3	2	3	3	3	3	3	2	3	3	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	RURAL DEVELOPMENT (24ARUC3110)			
	Credit: 4	Semester - V	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1: Understand fundamental concepts and components of Rural Development			
	K-2: Analyze the principles and practices of Rural Cooperatives			
	K-3: Evaluate the role of different institutions and agencies in Rural Development			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Introduce the basic concepts and components of Rural Development</li> <li>• Explore the principles and practices of Rural Management.</li> <li>• Discuss the concept and scope of Rural Market in India, and the challenges faced.</li> <li>• Analyze the principles, and the evolution of Rural Cooperative in India</li> <li>• Examine Role, Functions and Programmes of the Institutions and Agencies for Rural Development</li> </ul>			
UNIT	Content			No. of Hours
I	<p><b>Rural Development:</b> Concept, Scope, Principle, Objectives, Indicators, Policies, Strategies; Rural Development Experiments and Efforts in India (Nilokheri, Gurgaon, Marthandam, Sriniketan, Sevagram), Problems of Rural Development in the context of India.</p>			13
II	<p><b>Rural Management:</b> Concept, Definition, Functions of Rural Management - Process - Contemporary Issues. Managing Rural Industries –Cottage Industries and Handicrafts. Management of Rural labour: concepts, types and problems. Participation of Rural Labour Force.</p>			13
III	<p><b>Rural Markets:</b> Concept and Types. Farm sector and Non-Farm sector, Difference between Traditional Marketing and Urban Marketing, Benefits and Demerits of Rural Market, traditional and future expansion of rural markets, Challenges and Perspectives of rural marketing.</p>			13
IV	<p><b>Rural Cooperatives:</b> Concept and Principles of Cooperatives. Growth and Development, Evolution of Cooperatives in India. Rural Cooperatives – Features and Functions. Rural Cooperative Societies and Rural Banks. Farmer producer organization and other cooperative organization.</p>			13
V	<p><b>Rural Development Agencies:</b> Different Ministries of Central and State Governments; Schemes and Programmes. Institutions–NIRDPR, SIRDPR–Role and Functions. District Rural Development Agency (DRDA)and Panchayat Raj – Schemes and Programmes. Other Agencies involved in Rural Development.</p>			12

<b>References</b>	<ul style="list-style-type: none"> <li>• Rao, C. H. H., &amp; Singh, J. P. (Eds.). (2018). Rural Development: Principles, Policies and Management. Rawat Publications: Jaipur, India.</li> <li>• Dhawan, B. D. (2019). Rural Development in India: A Multi-Dimensional Analysis. PHI Learning Pvt. Ltd.: New Delhi, India.</li> <li>• Patel, J. C. (Ed.). (2017). Rural Development: Challenges and Opportunities. Atlantic Publishers &amp; Distributors: New Delhi, India.</li> <li>• Mishra, S. N. (2018). Rural Marketing: Indian Perspective. Pearson Education India: New Delhi, India.</li> <li>• Singh, S. P. (Ed.). (2016). Rural Development: Principles, Policies and Management. Sage Publications: New Delhi, India.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Singh, R. K. P. (2018). Rural Development: Principles, Policies and Management (2nd ed.). Sage Publications: New Delhi, India.</li> <li>• Maheshwari, S. R. (2020). Rural Development: Concepts, Policies and Programmes. Rawat Publications: Jaipur, India.</li> <li>• Reddy, K. S., &amp; Rao, V. M. (2019). Rural Management in India: The Changing Perspectives. Pearson Education India: New Delhi, India.</li> <li>• Desai, V. (2017). Rural Marketing: Text and Cases (3rd ed.). Pearson India Education Services: Noida, India.</li> <li>• Misra, S. N., &amp; Puri, V. K. (2016). Rural Banking and Agricultural Finance in India: Promise and Reality. Oxford University Press: New Delhi, India.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.nirdpr.org.in/">http://www.nirdpr.org.in/</a></li> <li>• <a href="https://rural.gov.in/en">https://rural.gov.in/en</a></li> <li>• <a href="https://www.sidbi.in/en/">https://www.sidbi.in/en/</a></li> <li>• <a href="https://www.nabard.org/">https://www.nabard.org/</a></li> <li>• <a href="https://rural.gov.in/sites/default/files/DRDA RTI 0.pdf">https://rural.gov.in/sites/default/files/DRDA RTI 0.pdf</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to do</p> <p>CO1: Understand the fundamental concepts and components of Rural Development</p> <p>CO2: Discuss the concept and scope of Rural Industries and Management in India</p> <p>CO3: Analyze the principles and practices of Rural Marketing</p> <p>CO4: Apply Cooperative principles and techniques for Rural Development.</p> <p>CO5: Evaluate the Role and Functions of Rural Development Agencies.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	3	2	2	3	2	1	3	2	2	3
2	3	3	3	2	3	3	3	1	3	3	3	3
3	3	2	3	3	3	3	3	2	3	3	2	2
4	3	3	3	3	3	3	3	2	3	3	3	3
5	3	3	3	3	3	3	3	2	3	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	ENVIRONMENTAL ECONOMICS (24ARUB3105)			
	Credit: 4	Semester – V	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1: Enable students to understand the basic concepts, terminology, and key theories of environmental economics.			
	K-2: Predict the impacts of environmental policies on economic and ecological systems and interpret key environmental indicators.			
	K-3: Evaluate the effectiveness of environmental policies and economic strategies in mitigating environmental problems and promoting sustainability.			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Gain clarity in the concepts in environmental economics.</li> <li>• Understand anatomy of environmental resources and economic development.</li> <li>• Identify global environmental problems and their impact on society.</li> <li>• Evaluate policy instruments and legal frameworks for pollution control Examine the roles of environmental policies and regulatory bodies</li> </ul>			
UNIT	Content			No. of Hours
I	<b>Basics of Environment:</b> Concept– Components and Functions – Environment and Development - Ecology and its types. Economics: Definition, Nature and Scope - Basic Theories – Market failure and Externality.			12
II	<b>Environmental and Economics:</b> Linkage of Environment and Economics, Consumption, Production and Wastes linkage – Population and Environment linkages – Environment and Public welfare – Slums and Urbanizations.			12
III	<b>Environmental Problems:</b> Environmental Degradation– Air pollution – water pollution – noise pollution – Land pollution Causes and effects- Global Warming and Climate Change, Ozone Layer Depletion – Global Environmental issues and problems - Strategies.			14
IV	<b>Pollution Control:</b> Policy instruments for Environment - Laws, Acts, Rules and Regulations – Waste Management –Reduce, Recycle, and Reuse. Sustainable development, Objectives, Approaches.			12
V	<b>Policy Measures for Protecting Environment:</b> Environmental Policy – Functions - Ministry of Environment Forests and Climate Change – Functions of State and Central Pollution Control Boards.			12
References	<ul style="list-style-type: none"> <li>• Bhattacharya N. Rabindra (Ed.) (2001) ‘Environmental Economics: An Indian Perspective’, Oxford University Press, Delhi.</li> <li>• Rajalakshmi. N and Dhulasi Birundha (1994) ‘Economic Analysis of Environment’ Allied Publishers, Ahmedabad.</li> </ul>			

	<ul style="list-style-type: none"> <li>• Singh G.N (Ed.) (1991) 'Environmental Economics', Mittal Publications, Delhi.</li> <li>• Tom Tietenberg (2003) 'Environmental and Natural Resource Economics', Pearson, Education', Delhi.</li> <li>• Dr.A.Thangavelu &amp; Dr.K.Sapna (2021), Basics of Environmental Economics, Sankalap Publication, Chhattisgarh</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Dutt, A., Dutta, S and Pandey (2005) 'Environmental Economics' APH Publishing, Delhi.</li> <li>• Karpagam. M (1993) 'Environmental Economics', Sterling Publishers, Delhi.</li> <li>• Sankar. U (2000) 'Environment Economics', Oxford University Press, Delhi.</li> <li>• Sankaran. S (1994), 'Environmental Economics', Margham, Chennai.</li> <li>• Varadarajan S. and Elangovan S. (1992) 'Environmental Economics', SPEED, Madurai.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.epa.gov/">https://www.epa.gov/</a></li> <li>• <a href="https://www.worldbank.org/en/topic/environment">https://www.worldbank.org/en/topic/environment</a></li> <li>• <a href="https://www.unep.org/">https://www.unep.org/</a></li> <li>• <a href="https://www.nationalgeographic.com/environment/">https://www.nationalgeographic.com/environment/</a></li> <li>• <a href="https://www.ciel.org/">https://www.ciel.org/</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to do</p> <p>CO1: Gain the knowledge of environmental economics.</p> <p>CO2: Understand the nexus between environmental resources and population growth.</p> <p>CO3: Study the global environmental issues and their impact on society.</p> <p>CO4: Assess the environmental pollution using valuation technique of environmental resources.</p> <p>CO5: Narrate the environmental regulation for creating environmental ethics.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	1	2	2	3	3	3	3	3	3	3	2	3
<b>2</b>	3	3	2	3	3	2	3	3	3	3	2	3
<b>3</b>	3	2	3	2	3	3	2	3	3	3	2	3
<b>4</b>	2	2	2	2	3	3	3	3	3	3	2	3
<b>5</b>	2	3	2	2	3	3	2	3	3	3	2	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	URBAN GOVERNANCE AND DEVELOPMENT (24ARUC3211)				
	Credit: 4	Semester - VI	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Understand the basics of urban management, including urbanization trends, local government structures, and the role of key institutions in urban development.				
	K-2: Analyze urban developmental planning and major welfare programs, including urban planning systems, personnel management, and urban issues like poverty, slums, and pollution.				
	K-3: Evaluate urban development policies and programs, including national and state- sponsored initiatives, urban governance issues, and the performance measurement of urban public services.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the conceptual framework of urban development and governance.</li> <li>• Analyze the role of various governmental and non-governmental institutions in urban management.</li> <li>• Evaluate urban planning processes and developmental strategies.</li> <li>• Assess the challenges and issues related to urban governance and public services.</li> <li>• Explore the impact of urban development policies and programs on sustainable urban growth.</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Urban Development:</b> Meaning and Types of Urban: Metropolitan, Municipal Corporation, Municipal Council, and Town Panchayat. Urbanisation and its Trends. Ministries and Departments – Central, State, and Local Governments – Organisational Structure and Functions. Role of Institutions for Urban Management: National Institute of Urban Affairs, All India Institute of Local Self Government and State Institute of Urban Development.</p>				12
II	<p><b>Urban Planning and Management:</b> Urban Developmental Planning - Emerging issues - Planning system: Perspective Plan, Development Plan, Annual Plan, and Projects/Schemes - Five Year Plans and NITI AYOOG - Process of Planning in Urban Areas. Other Major Welfare Programmes.</p>				11
III	<p><b>Urban Personnel System and Management:</b> Importance of Municipal Personnel Management, Personnel Development, Recruitment Process, and Training &amp; Development. Performance Appraisal –Need and Importance. Job Description, Career Management Plan, Staffing Structure.</p>				13

IV	<b>Urban Issues and Public Services:</b> Urban Poverty, Urban Slums, Urban Safety, Pollution, Traffic Congestion, Urban Health, Law and Order, Land grabbing, Civic amenities, Waste Management - Urban Public Services. Emerging Urban Governance Issues - India's Response to Global Campaign for Good Urban Governance.	14
V	<b>Urban Development Policies and Programmes:</b> National Urban Sanitation Policy, National Urban Transport Policy - Central and State Sponsored programmes – Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT) North Eastern Region Urban Development Programme (NERUDP), National Urban Information System (NUIS), Swarna Jayanthi Shahari Rozgar Yojaya (SJSRY) and Rajiv Awaas Yojana (RAY).	13
<b>References</b>	<ul style="list-style-type: none"> <li>• Chand, M. (2019). Urban Economics and Urban Development: Theory and Policy Applications. Routledge, London.</li> <li>• Hammer, L. (2016). The Challenge of Urban Governance in India: The Urbanization Dimension. World Bank Publications, Washington, D.C.</li> <li>• United Nations Human Settlements Programme (UN-Habitat). (2016). The State of the World's Cities Report 2016: Urbanization and Development - Emerging Futures. UN-Habitat, Nairobi.</li> <li>• Bahl, R., &amp; Linn, J. F. (1992). Urban Public Finance in Developing Countries. Oxford University Press, New York.</li> <li>• Agrawal, A., &amp; Varshney, A. (Eds.). (2016). Urbanization in India: Challenges, Opportunities, and the Way Forward. Sage Publications, New Delhi.</li> </ul>	
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Cervero, R., &amp; Kockelman, K. (1997). Travel Demand and the 3Ds: Density, Diversity, and Design. Transportation Research Part D: Transport and Environment, Amsterdam.</li> <li>• Friedmann, J. (2005). The Prospect of Cities. University of Minnesota Press, Minneapolis.</li> <li>• Satterthwaite, D. (2007). The Transition to a Predominantly Urban World and Its Underpinnings. Human Settlements Discussion Paper Series, London.</li> <li>• Grant, U. S. (2019). The Social Meaning of Modern Religious Movements in Urban Society. Routledge, London.</li> <li>• Davis, M. (2006). Planet of Slums. Verso Books, London.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://mohua.gov.in/">https://mohua.gov.in/</a></li> <li>• <a href="https://www.niua.org/">https://www.niua.org/</a></li> <li>• <a href="https://www.aiilsg.org/">https://www.aiilsg.org/</a></li> <li>• <a href="http://www.siudmysore.gov.in/en/home">http://www.siudmysore.gov.in/en/home</a></li> <li>• <a href="https://sdgs.un.org/">https://sdgs.un.org/</a></li> </ul>	

<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Describe the types and trends of urban development and governance structures.</p> <p>C02: Analyze urban planning systems and major welfare programs in urban areas.</p> <p>C03: Demonstrate knowledge of urban personnel management and its importance in municipal governance.</p> <p>C04: Evaluate urban issues and public service delivery mechanisms.</p> <p>C05: Assess the effectiveness of urban development policies and programs in enhancing urban infrastructure and services.</p>
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### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	3	2	3	3	2	3	2	2	3	2	2	3
<b>2</b>	3	3	2	3	3	3	3	3	3	3	3	3
<b>3</b>	3	3	3	3	3	3	3	3	3	2	3	3
<b>4</b>	3	3	2	3	3	3	3	3	3	3	3	3
<b>5</b>	3	2	3	3	3	3	3	2	2	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	TECHNIQUES OF DEMOGRAPHIC ANALYSIS (24ARUC3212)				
	Credit: 4	Semester - VI	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	<b>K-1</b> Understand the fundamental concepts and definitions of demographic measures				
	<b>K-2</b> Apply demographic techniques such and population estimation methods to interpret and analyze demographic data sets effectively.				
	<b>K-3</b> Analyze and evaluate demographic data quality, interpret demographic trends, and formulate projections				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Comprehend fundamental demographic concepts such as fertility, mortality, nuptiality, and migration.</li> <li>• Calculate and interpret demographic measures like rates, ratios, and indices crucial for demographic analysis.</li> <li>• Analyze population structure using age-sex composition measures and demographic indices.</li> <li>• Assess mortality patterns and their implications through various mortality measures.</li> <li>• Apply demographic techniques such as life tables and population projections for policy and planning purposes.</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Introduction:</b> Concepts and Definitions of fertility, mortality, Nuptiality, and Migration - Basic Measures, their merits and demerits. Structure of Population: Measures of Age and Sex Composition of the Population. Age pyramid, Quality of Age data, Errors in demographic data – Whipple’s Index, Myer’s Index, UN Joint Score Index. Infant mortality -Need and Importance in demographic analysis.</p>				12
II	<p><b>Rates and Ratios:</b> Person years lived, Crude and Specific Rates, Standardization – Direct and Indirect Methods: Components of Rates. Fertility Measures: Introduction, Concepts, Types of Analysis: Period and Cohort Measures – Crude and Specific Rates, Standardized Rates, Coale’s Fertility Indices – Total Fertility Rate, Gross Reproduction Rates, Net Reproduction Rate, Replacement Index. Measures of Nuptiality – Introduction, Crude Marriage Rate, General Marriage Rate, Mean Age at Marriage, Singulate Mean Age at Marriage.</p>				13
III	<p><b>Mortality Measures:</b> Introduction, Crude and Scientific Rates, Standardized rates Infant Mortality – Infant Mortality Rate, Neo – natal mortality rate, Post neonatal mortality, Peri natal mortality, Foetal Death. Morbidity: Prevalence and Incidence Rates, Maternal Mortality. Age and sex specific mortality with a focus on excess female mortality.</p>				13

IV	<p><b>Infant Mortality:</b> Importance of infant mortality in population and health; causes of infant mortality (endogenous and exogenous factors); Importance of causes of death statistics; definition and sources of causes of death statistics. Population Estimation and Projections – Methods of Population, estimation, and Projection – Mathematical and Cohort Component methods, Assumptions on fertility, Mortality and Migration.</p>	13
V	<p><b>Life Table:</b> Concepts, Assumptions, Construction of Life tables – Complete and Abridge – Various types – Force of Mortality, Uses of Life Tables, Single Decrement Associated Life Tables. Multiple Decrement Life Table – Multi-State Life Table, Applications, Nuptiality Tables, Contraceptive Effectiveness. Working Life Tables.</p>	13
References	<ul style="list-style-type: none"> <li>• Yaukey, David. 1985. Demography: The study of Human population. St. Martins, New York.</li> <li>• Weeks, John R. 2005. Population: An Investigation to Concepts and Issues. 9th Edition, Wadsworth Publishing Co. CA.</li> <li>• Ram, F. and K.B. Pathak (1998): Techniques of Demographic Analysis, 2nd Ed, Himalaya Publishing house, Bombay</li> <li>• Coale, Ansley J. and Paul, Demney (1983): Regional Model Life Tables and Stable Populations, Academic Press, New York.</li> <li>• Preston, S. H., Patrick Heuveline and Michel Guillot (2001): Demography: Measuring and Modeling Population Process, Blackwell Publishers, Oxford, UK</li> </ul>	
Text Books	<ul style="list-style-type: none"> <li>• Keyfitz, N., &amp; Caswell, H. (2005). Applied Mathematical Demography (3rd ed.). Springer. New York, NY.</li> <li>• Preston, S. H., Heuveline, P., &amp; Guillot, M. (2001). Demography: Measuring and Modeling Population Processes. Blackwell Publishers. Oxford, UK.</li> <li>• Smith, S. K., &amp; Tayman, J. (2001). State and Local Population Projections: Methodology and Analysis. Kluwer Academic Publishers. Dordrecht, Netherlands.</li> <li>• Siegel, J. S., &amp; Swanson, D. A. (2004). The Methods and Materials of Demography (2nd ed.). Elsevier Academic Press. San Diego, CA.</li> <li>• Hinde, A. (1998). Demographic Methods. Arnold Publishers. London, UK.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4622">https://www.who.int/data/gho/indicator-metadata-registry/imr-details/4622</a></li> <li>• <a href="https://www.un.org/development/desa/pd/data/model-life-tables">https://www.un.org/development/desa/pd/data/model-life-tables</a></li> <li>• <a href="http://The Population of Europe: The Demographic Transition and After   Encyclopedia.com">The Population of Europe: The Demographic Transition and After   Encyclopedia.com</a></li> <li>• <a href="https://censusindia.gov.in/census.website/data/SRSCOD">https://censusindia.gov.in/census.website/data/SRSCOD</a></li> <li>• <a href="https://www.unicef.org/health/community-health">https://www.unicef.org/health/community-health</a></li> </ul>	

<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Demonstrate proficiency in calculating and interpreting demographic measures.</p> <p>C02: Apply various demographic techniques.</p> <p>C03: Evaluate the quality and reliability of demographic data.</p> <p>C04: Utilize demographic analysis tools to assess health and social implications of population</p> <p>C05: Formulate demographic projections based on mathematical models and assumptions for policy and planning purposes.</p>
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### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	3	3	2	3	3	1	3	3	2	1	1	3
<b>2</b>	3	3	1	3	3	1	3	3	2	1	1	3
<b>3</b>	3	3	1	3	2	2	3	3	2	1	1	3
<b>4</b>	3	3	1	3	2	2	3	3	2	1	1	3
<b>5</b>	3	3	1	3	2	2	3	3	2	1	1	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	SOCIAL INSTITUTIONS AND DEVELOPMENT (24ARUC3213)			
	Credit: 4	Semester – VI	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	K-1: Understand and define key sociological concepts and social structures in India.			
	K-2: Learn the basic tenets and historical changes in Indian social structures, including caste, family, and marriage.			
	K-3: Comprehend the role of the caste system in maintaining hierarchical status and the impact of independent India on society.			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Define the family, religion, caste, society, community, associations, social groups and social processes, and control</li> <li>• Explain basic tenants of Indian social structure and its (caste, family and marriage) impact and historical changes on sociological studies.</li> <li>• Examine the caste system role into maintain hierarchical status in Indian society and how independent India affect Indian society.</li> <li>• Explain the Indian society, social stratification changing aspects for development</li> <li>• Elucidate the social mobility and social change and its obstacles</li> </ul>			
UNIT	CONTENT			No. of Hours
I	<p><b>Society:</b> Meaning and characteristics. The Indian Society – A Brief Social History, Typical Features of Indian Society; Multi-Religions, Multi-Caste, Multi-Lingual, Rural, Urban, Tradition Vs Modernity. Social Stratification – Meaning and Features, Forms of Stratification, Distinction between Caste and Class, Caste in Indian traditional and changing aspects.</p>			13
II	<p><b>Social Institutions:</b> Meaning, Characteristics, Functions, and Process of Institutionalization. Caste as a Social Institution: Meaning, Characteristics, Function and Dysfunction of caste. Change in Caste System: Factors affected for change to Caste System in Independent India.</p>			12
III	<p><b>Family as a Social Institution:</b> Meaning and Common characteristics of Family. Types of Family: Joint Family - Meaning and characteristics of Traditional Joint family, Function and Dysfunction of Traditional Joint family. Nuclear Family - Meaning and characteristics of nuclear family -Factors affecting change in Indian family system.</p>			13
IV	<p><b>Culture:</b> Meaning, features and types of Culture. Socialization – Meaning, Agencies. Social Institutions – Meaning, features, major social institutions, Family, Religion, Economy, Education, Politics. Recent changes in social institutions related to development.</p>			13

V	<b>Social Mobility:</b> Meaning, types, factors affecting social mobility with special reference to India. Social change – Meaning, nature of change, theories of social change, obstacles to social change. Non-economic factors affecting development – Family, Values, Religion, Caste, Education, and Politics.	13
References	<ul style="list-style-type: none"> <li>• Macionis, J. J., &amp; Plummer, K. (2017). Sociology: A global introduction (6th ed.). Pearson, Boston, MA.</li> <li>• Haralambos, M., Holborn, M., &amp; Heald, R. (2008). Sociology: Themes and perspectives. Collins Educational, London.</li> <li>• Beteille, A. (1995). Society and politics in India: Essays in a comparative perspective. Oxford University Press, Delhi.</li> <li>• Srinivas, M. N. (2017). The dominant caste and other essays. Oxford University Press, Delhi.</li> <li>• Sharma, U. (2017). Caste. Rupa Publications, New Delhi.</li> </ul>	
Textbooks	<ul style="list-style-type: none"> <li>• Giddens, A., Duneier, M., Appelbaum, R., &amp; Carr, D. (2018). Introduction to sociology (10th ed.). W. W. Norton &amp; Company, New York.</li> <li>• Ferrante, J. (2016). Sociology: A global perspective (9th ed.). Cengage Learning, Boston, MA.</li> <li>• Gupta, D. N. (2016). Indian Society and Culture. Vikas Publishing House, New Delhi.</li> <li>• Anderson, J., &amp; Taylor, H. F. (2017). Sociology: The essentials (9th ed.). Cengage Learning, Boston, MA.</li> <li>• Macionis, J. J. (2018). Sociology (17th ed.). Pearson, Boston, MA.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://ncert.nic.in/">https://ncert.nic.in/</a></li> <li>• <a href="https://www.icsr.org/">https://www.icsr.org/</a></li> <li>• <a href="https://www.csds.in/">https://www.csds.in/</a></li> <li>• <a href="https://www.sociologyguide.com/">https://www.sociologyguide.com/</a></li> <li>• <a href="https://www.indiansociology.org/">https://www.indiansociology.org/</a></li> </ul>	
Course Outcomes	<p>On completion of the course, students should be able to</p> <p>CO1: Define and explain key sociological concepts</p> <p>CO2: Understand and articulate the basic tenets of Indian social structure</p> <p>CO3: Analyze the role of the caste system in maintaining hierarchical status in Indian society</p> <p>CO4: Explain the changing aspects of social stratification in Indian society</p> <p>CO5: Understand and evaluate the processes of social mobility and social change</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	3	3	2	2	2	3	2	2	2	3
2	3	3	3	3	2	2	3	3	2	3	2	2
3	2	3	3	3	3	3	3	3	3	3	3	3
4	3	2	3	2	3	3	2	2	2	3	2	2
5	3	3	3	3	3	3	3	3	3	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	POPULATION GROWTH AND SUSTAINABLE DEVELOPMENT (24ARUC2314)				
	Credit: 4	Semester – VI	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	<b>K-1</b> Understand the concepts of Population and Sustainable development.				
	<b>K-2</b> Analyze the relationship between the concepts of measurements of vulnerability.				
	<b>K-3</b> Understanding the concepts of Pollution and various sources of health data				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Be familiar with sustainable development concepts.</li> <li>• Understand the concepts of measurement of vulnerability and resilience.</li> <li>• Understand the concepts of pollution and health data sources.</li> <li>• Understand the concepts of disaster and its types.</li> <li>• Familiarize with population potential mapping and satellite image interpretation.</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Sustainable Development:</b> Concept, Principles, and History – MDGs and SDGs -Trends, Impact, and Drivers - Global Warming and Climate Changes– Biodiversity. SDGs – National Indicator Framework of India. Indian Model of SDG localization.				12
II	<b>Vulnerability and Resilience:</b> Meaning, Types and Measurements of Vulnerability and Resilience – Theories and Dimensions. Risk Identification and Assessment Methods. Adaptive Capacity and Adaptation Strategies. - Calamities and Measurements.				13
III	<b>Population Issues:</b> Population Growth–NSO and NFHS - International Migration –Hunger, Food Security and Nutrition. Sustainable Agriculture and Food Systems. Disparity in Education, Employment and Empowerment. Sustained Economic Growth and descent work.				13
IV	<b>Disaster:</b> Meaning, Factors and Significance, Types of Disasters, Natural and Man-Made, Causes and Effects of Disasters. Profiling of Disaster in India, Community Health during Disaster (drinking water, food and nutrition, hygiene and sanitation) and Urban Population (with case studies).				13
V	<b>Population Potential Mapping:</b> Satellite Image Interpretation, Geospatial modeling to measure environmental impact on Health, Analyzing Environment using Large Scale Data, Local Area Pollution Analysis, Energy literacy training.				13

<b>References (to be updated)</b>	<ul style="list-style-type: none"> <li>• IPCC. (2014). Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. IPCC. Geneva, Switzerland.</li> <li>• United Nations. (2015). Transforming Our World: The 2030 Agenda for Sustainable Development. United Nations. New York, NY.</li> <li>• World Bank. (2019). World Development Report 2019: The Changing Nature of Work. World Bank. Washington, DC.</li> <li>• World Health Organization. (2020). State of Health Equity Report: Harnessing the Power of Digital Health to Advance Health for All. WHO. Geneva, Switzerland.</li> <li>• Food and Agriculture Organization of the United Nations. (2020). The State of Food Security and Nutrition in the World 2020. FAO. Rome, Italy.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Dasgupta, P. (2007). Population and Development: The Demographic Transition. Oxford University Press. Oxford, UK.</li> <li>• Bongaarts, J., &amp; Bulatao, R. A. (2000). Beyond Six Billion: Forecasting the World's Population. National Academy Press. Washington, DC.</li> <li>• Haub, C., &amp; Gribble, J. N. (2011). Population and Sustainability: Can We Avoid Limiting the Number of People?. Population Reference Bureau. Washington, DC.</li> <li>• Lutz, W., Butz, W. P., &amp; KC, S. (Eds.). (2014). World Population and Human Capital in the Twenty-First Century. Oxford University Press. Oxford, UK.</li> <li>• United Nations. (2017). World Population Prospects: The 2017 Revision. United Nations Department of Economic and Social Affairs, Population Division. New York, NY.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.un.org/sustainabledevelopment/sustainable-development-goals/">https://www.un.org/sustainabledevelopment/sustainable-development-goals/</a></li> <li>• <a href="https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health?gad_source=1&amp;gclid=Cj0KCQjw6auyBhDzARIsALIo6v-YbZr47LB37-zb_Qi8vMF4Yv kf25Vt5LarmoPizEoxq4j m z Z_o-gsaAurEEALw_wcB">https://www.who.int/news-room/fact-sheets/detail/ambient-(outdoor)-air-quality-and-health?gad_source=1&amp;gclid=Cj0KCQjw6auyBhDzARIsALIo6v-YbZr47LB37-zb_Qi8vMF4Yv kf25Vt5LarmoPizEoxq4j m z Z_o-gsaAurEEALw_wcB</a></li> <li>• <a href="https://www.undp.org/india/publications/disaster-management-india-status-report">https://www.undp.org/india/publications/disaster-management-india-status-report</a></li> <li>• <a href="https://www.drishtias.com/daily-updates/daily-news-editorials/india-s-demographic-potential-1">https://www.drishtias.com/daily-updates/daily-news-editorials/india-s-demographic-potential-1</a></li> <li>• <a href="https://www.researchgate.net/publication/327472344_Mapping_Population_Distribution_from_High_Resolution_Remotely_Sensed_Imagery_in_a_Data_Poor_Setting">https://www.researchgate.net/publication/327472344_Mapping_Population_Distribution_from_High_Resolution_Remotely_Sensed_Imagery_in_a_Data_Poor_Setting</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Get acquainted with basic concepts of sustainable development.</p> <p>C02: Learn the concepts of measurement of vulnerability and resilience.</p> <p>C03: Learn the concepts of pollution and health data sources.</p> <p>C04: Learn the concepts of disaster and its types.</p> <p>C05: Acquire insight on the concepts of population potential mapping and satellite image interpretation.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	3	3	2	3	3	3	3	3	2	3
2	3	3	2	3	3	3	3	2	2	2	3	3
3	3	2	3	3	3	2	3	3	2	3	3	2
4	3	2	3	3	2	3	3	2	2	2	2	2
5	3	3	3	3	3	3	3	3	3	3	2	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	DISASTER MANAGEMENT (24ARUB3206)				
	Credit: 4	Semester – VI	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1 Identify types of natural and man-made disasters				
	K-2 Explain disaster management concepts and processes				
	K-3 Develop disaster response plans and strategies				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Introduce types of disasters</li> <li>• Explain disaster management concepts</li> <li>• Focus on disaster management strategies</li> <li>• Prepare for disaster response</li> <li>• Cover emergency support functions and coordination</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Types of disaster:</b> Natural: Earthquakes – Landslides - Volcanism - Tsunami-Cyclones – Floods - Drought - Forest Fire Man-Made Disasters: Nuclear Disasters - Chemical Disasters - Biological - Deforestation - Accidents</p>				9
II	<p><b>Disaster Management Concepts:</b> Vulnerability – Hazard – Risk Assessment - Natural Disaster Mapping, Management and mitigation</p>				10
III	<p><b>Disaster Management:</b> Prevention - Preparedness and Mitigation - Damage assessment - Land use planning and regulation for sustainable development. Pre-disaster and post disaster planning for relief operations</p>				10
IV	<p><b>Disaster Response:</b> Disaster Response Plan – Communication - Participation and Activation of Emergency Preparedness Plan - Logistics Management - Trauma and Stress Management - Rumour and Panic Management.</p>				10
V	<p><b>Support Systems:</b> Emergency Support Functions and their coordination mechanism. Resource &amp; Material Management. Management of Relief Camp. Rehabilitation, Reconstruction and Recovery - Information systems &amp; decision making tools.</p>				9
References	<ul style="list-style-type: none"> <li>• Gerard Blokdijk, Disaster recovery planning and services, Gennaio publishers, 2008.</li> <li>• Mohamed Gad Large scale disasters : prediction, control and mitigation, Cambridge university press, 2008.</li> <li>• Sisizlatanova&amp; Andrea Fabbrijonathanli, Geometrics solutions for Disaster management, Springer Verlag, 2007.</li> <li>• C.Emdad Haque, Mitigation of natural Hazards &amp; disasters, Kluwer Academic publishers group, 2005.</li> <li>• Linda C. Battersll&amp;PonaldA.Wilhite, From Disaster response to Risk management. Kluwer Academic publishers group, 2005.</li> </ul>				

<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Brian Romaszewski, Geographical Information Systems (GIS) for Disaster Management, CRC Press, New York, 2019.</li> <li>• Parag Diwan, A Manual on Disaster Management, Pentagon Earth, New Delhi, 2010.</li> <li>• Donald Hyndman and David Hyndman. 2009. Natural hazards and disasters. Brooks/Cole. 555p.</li> <li>• Peter Van Oosterom et al., Geo-Information for Disaster Management, Springer (India) Pvt. Ltd., New Delhi, 2008.</li> <li>• Edward A Keller and Robert H Blodgett. 2008. Natural hazards. Pearson Prentice Hall, 488p</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://ndma.gov.in/">https://ndma.gov.in/</a></li> <li>• <a href="https://incois.gov.in/">https://incois.gov.in/</a></li> <li>• <a href="https://www.nioh.org/">https://www.nioh.org/</a></li> <li>• <a href="https://www.nextias.com/blog/disaster-management/">https://www.nextias.com/blog/disaster-management/</a></li> <li>• <a href="https://www.ucf.edu/online/leadership-management/news/the-disaster-management-cycle/">https://www.ucf.edu/online/leadership-management/news/the-disaster-management-cycle/</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Explain the concept of disaster and distinguish various natural and manmade disaster</p> <p>CO2: Apply the concept of Natural Disaster mapping, mitigations and management</p> <p>CO3: Develop Disaster management plan</p> <p>CO4: Plan the Emergency support system</p> <p>CO5: Develop disaster management information system</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	1	1	2	1	1	1	1	1	1	1	1	1
2	2	2	3	2	2	2	2	2	2	2	2	3
3	2	3	3	3	3	3	2	3	3	3	3	2
4	1	2	3	2	2	2	1	2	2	2	2	1
5	1	2	3	2	2	2	1	2	2	2	2	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	ADVANCED QUANTITATIVE TECHNIQUES (24ARUC4116)				
	Credit: 4	Semester - VII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	<b>K-1</b> Understanding the basic concepts of Probability				
	<b>K-2</b> Getting to know about data, data types and calculation of various measures				
	<b>K-3</b> Ability to interpret the statistical inference				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the concept of probability and its distributions.</li> <li>• Develop skill in reading and understanding the results from data analysis.</li> <li>• Understand the concept of parametric tests and its various statistical tools.</li> <li>• Understand the concept of Non-parametric tests and its various tools.</li> <li>• Do analysis using appropriate statistical methods.</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Probability:</b> Basic concepts and importance of Probability – Axioms of Probability – Addition and Multiplication Theorems and simple problems; Probability Distributions, Properties and Applications – Binomial, Poisson and Normal Distributions.</p>				12
II	<p><b>Hypothesis Testing:</b> Basic concepts and steps– Standard Error – Type I and Type II errors – Significant level. Sampling distribution: Students t – distribution, F – distribution, <math>\chi^2</math> – distribution: definition, properties and their applications.</p>				13
III	<p><b>Parametric tests:</b> Large sample tests: tests for single mean and difference between two means, confidence intervals for mean(s). Test for single proportion and difference between two proportions. Small sample tests: test for single mean and difference between two means, paired t – test. <math>\chi^2</math> test for goodness of fit and independence of attributes. F – test for equality of variances. Procedures and simple problems.</p>				13
IV	<p><b>Nonparametric tests:</b> Advantages and disadvantages – comparison with parametric tests. One sample tests: Run Test, Sign Test and Wilcoxon-Signed rank tests (single and paired samples). Two independent sample tests: Median Test, Wilcoxon, Mann-Whitney U Test. Procedures and simple problems.</p>				13

<b>v</b>	<b>Analysis of variance (ANOVA):</b> Basic concepts and examples – Explanation. ANOVA for One-way and Two-way classifications –Kruskal-Wallis test, Friedman’s Test - Procedures and simple problems.	<b>13</b>
<b>References</b>	<ul style="list-style-type: none"> <li>• Agarwal, Y.P, Statistical Methods, New Delhi: Sultan Chand and Sons, 1996.</li> <li>• Gupta, S.P and Gupta.M.P, Business Statistics, New Delhi: Sultan Chand and Sons, (19<sup>th</sup> Ed), 2019.</li> <li>• Gupta, S.P., Statistical Methods, Sultan Chand Publishers, New Delhi, (13<sup>th</sup>Ed), 2019.</li> <li>• Kothari.C.R, Quantitative Techniques, New Delhi: Vikas Publishing House, 1998.</li> <li>• Casella, G., &amp; Berger, R. L. (2002). Statistical Inference (2nd ed.). Duxbury Press. Belmont, CA, USA.</li> </ul>	
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Gupta, S.C. Fundamentals of Statistics, Mumbai: Himalaya Publishing House, 2018.</li> <li>• Goon, A. M., M.K. Gupta, and B. Dasgupta, Fundamentals of Statistics, Vol. II, World Press, Kolkata, 2016.</li> <li>• Gupta. S.C. and Kapoor. V.K, Fundamentals of Mathematical Statistics, Sultan Chand &amp; Sons, (12<sup>th</sup> Ed), 2020.</li> <li>• ParimalMukopadhyay, Mathematical Statistics (Third Edition), Books and Allied Private Limited, Kolkata, 2006.</li> <li>• Siegel, Sidney, Non-Parametric Statistics for Behavioural Sciences, New Delhi: McGraw Hill, 2006.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.geeksforgeeks.org/basic-concepts-of-probability/">https://www.geeksforgeeks.org/basic-concepts-of-probability/</a></li> <li>• <a href="https://www.investopedia.com/terms/h/hypothesistesting.asp">https://www.investopedia.com/terms/h/hypothesistesting.asp</a></li> <li>• <a href="https://www.analyticsvidhya.com/blog/2021/06/hypothesis-testing-parametric-and-non-parametric-tests-in-statistics/">https://www.analyticsvidhya.com/blog/2021/06/hypothesis-testing-parametric-and-non-parametric-tests-in-statistics/</a></li> <li>• <a href="https://www.healthknowledge.org.uk/public-health-textbook/research-methods/1b-statistical-methods/parametric-nonparametric-tests">https://www.healthknowledge.org.uk/public-health-textbook/research-methods/1b-statistical-methods/parametric-nonparametric-tests</a></li> <li>• <a href="https://www.analyticsvidhya.com/blog/2018/01/anova-analysis-of-variance/">https://www.analyticsvidhya.com/blog/2018/01/anova-analysis-of-variance/</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should able to</p> <p>C01: Learn the concept of probability and its distributions.</p> <p>C02: Develop expertise and skill in reading and understanding the results from data analysis.</p> <p>C03: Understand the concept of parametric tests and its various statistical tools.</p> <p>C04: Understand the concept of Non-parametric tests and its various tools.</p> <p>C05: Do analysis using appropriate statistical methods.</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	1	3	1	2	2	2	2	3	2	1	2	2
2	1	3	3	2	3	2	3	3	2	2	3	3
3	1	2	2	2	3	3	2	3	2	2	2	3
4	1	2	2	2	3	3	2	3	2	2	2	3
5	1	3	2	2	3	2	2	3	2	2	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	QUALITATIVE RESEARCH METHODS (24ARUC4117)			
	Credit: 4	Semester – VII	CFA: 40	ESE: 60
Class	B.A. (Hons.) Demography and Development Studies			
Cognitive Level	<b>K-1</b> Recognize and recall key concepts, methodologies, and principles of qualitative research			
	<b>K-2</b> Apply various qualitative research methodologies and data collection techniques to real-world situations			
	<b>K-3</b> Analyze qualitative data using different analytical techniques and interpret the findings.			
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Comprehend the philosophical and ethical foundations of qualitative research.</li> <li>• Explore various qualitative research methodologies and their appropriate applications.</li> <li>• Develop skills in qualitative data collection methods such as Interviews, Focus Groups, Observations and Case study.</li> <li>• Learn and apply different qualitative data analysis techniques including thematic, narrative, and discourse analysis.</li> <li>• Develop the ability to write and present qualitative research findings effectively and to evaluate the quality of qualitative research.</li> </ul>			
UNIT	Content			No. of Hours
I	<b>Foundations of Qualitative Research:</b> Introduction to Qualitative Research - Definition and Characteristics - Differences between Qualitative and Quantitative Research. Philosophical Foundations - Epistemological and Ontological. Research Ethics in Qualitative Studies.			12
II	<b>Qualitative Research Methodologies:</b> Ethnography - Fieldwork and Participant Observation - Writing Ethnographic Accounts. Phenomenology - Data Collection and Analysis Techniques. Grounded Theory - Principles and Procedures. Case Study Research - Design and Implementation.			13
III	<b>Data Collection Techniques:</b> Interviews - Structured, Semi-Structured, and Unstructured Interviews - Conducting and Transcribing Interviews. Focus Groups - Planning and Facilitating Focus Groups - Analyzing Focus Group Data. Observational Methods - Participant and Non-Participant Observation - Recording Observational Data.			13
IV	<b>Data Analysis and Interpretation:</b> Thematic Analysis - Identifying and Developing Themes - Coding Techniques. Narrative Analysis - Approaches to Analyzing Narratives - Representation of Narrative Data. Discourse Analysis - Analyzing Language and Communication - Critical Discourse Analysis. Various software for QDA.			13

V	<b>Presenting and Writing Qualitative Research:</b> Structure and Components of a Qualitative Report - Writing for Different Audiences. Visual Presentation of Qualitative Data - Using Tables, Charts, and Diagrams - Effective Use of Quotes and Excerpts. Criteria for Evaluating Qualitative Studies.	13
References	<ul style="list-style-type: none"> <li>• Silverman, D. (2016). Qualitative Research (4th ed.). SAGE Publications, Thousand Oaks, CA.</li> <li>• Miles, M. B., Huberman, A. M., &amp; Saldaña, J. (2020). Qualitative Data Analysis: A Methods Sourcebook (4th ed.). SAGE Publications, Thousand Oaks, CA.</li> <li>• Flick, U. (2018). The SAGE Handbook of Qualitative Data Collection. SAGE Publications, Thousand Oaks, CA.</li> <li>• Willig, C. (Ed.). (2013). The SAGE Handbook of Qualitative Research in Psychology. SAGE Publications, Thousand Oaks, CA.</li> <li>• Ryan, G. W., &amp; Bernard, H. R. (2003). Techniques to Identify Themes. Field Methods, 15(1), 85-109. (Journal article)</li> </ul>	
Text Books	<ul style="list-style-type: none"> <li>• Creswell, J. W., &amp; Poth, C. N. (2018). Qualitative Inquiry and Research Design: Choosing Among Five Approaches (4th ed.). SAGE Publications, Thousand Oaks, CA.</li> <li>• Merriam, S. B., &amp; Tisdell, E. J. (2015). Qualitative Research: A Guide to Design and Implementation (4th ed.). Jossey-Bass, San Francisco, CA.</li> <li>• Gibbs, G. R. (2018). Analyzing Qualitative Data (2nd ed.). SAGE Publications, Thousand Oaks, CA.</li> <li>• Marshall, C., &amp; Rossman, G. B. (2016). Designing Qualitative Research (6th ed.). SAGE Publications, Thousand Oaks, CA.</li> <li>• Guest, G., Namey, E. E., &amp; Mitchell, M. L. (2013). Collecting Qualitative Data: A Field Manual for Applied Research. SAGE Publications, Thousand Oaks, CA.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://us.sagepub.com/en-us/nam/qualitative-research">https://us.sagepub.com/en-us/nam/qualitative-research</a></li> <li>• <a href="https://www.researchgate.net/">https://www.researchgate.net/</a></li> <li>• <a href="https://www.academia.edu/">https://www.academia.edu/</a></li> <li>• <a href="https://www.emeraldgrouppublishing.com/journal/qri">https://www.emeraldgrouppublishing.com/journal/qri</a></li> <li>• <a href="https://journals.sagepub.com/home/ijq">https://journals.sagepub.com/home/ijq</a></li> </ul>	
Course Outcomes	<p>On completion of the course, students should be able to</p> <p>CO1: Demonstrate an understanding of the philosophical and ethical foundations of qualitative research.</p> <p>CO2: Apply various qualitative research methodologies appropriately to different research scenarios.</p> <p>CO3: Develop proficiency in qualitative data collection methods such as interviews, focus groups, and observations.</p> <p>CO4: Demonstrate the ability to analyze qualitative data using various analytical techniques and interpret the findings.</p> <p>CO5: Able to write and present qualitative research reports effectively and critically evaluate the quality of qualitative research studies.</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	1	2	3	3	3	3	2	3	3	3	3	3
2	2	3	2	3	3	3	2	3	3	3	3	3
3	1	3	3	3	3	3	1	2	3	3	3	3
4	1	2	2	3	3	3	2	3	3	3	3	3
5	1	2	3	3	3	3	3	3	3	3	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	HEALTHCARE INSTITUTIONS AND POLICIES (24ARUC4118)				
	Credit: 4	Semester - VII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1 Understanding the basic concepts of healthcare institutions.				
	K-2 Understanding the basic concepts of healthcare systems.				
	K-3 Understanding the basic concepts of healthcare services.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Be familiar with the basic concepts of Health.</li> <li>• Know the basic concepts of Healthcare institutions.</li> <li>• Learning the basic concepts of Healthcare systems.</li> <li>• Introducing the basic concepts of Healthcare services.</li> <li>• Understanding the basic concepts of Healthcare Policies.</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Basic Concepts:</b> Concepts of Health; Public health; Community health; Preventive and curate health; Health promotion; Health services; and Primary, secondary and tertiary care. Regional Health care Institutions, WHO.</p>				12
II	<p><b>Health System:</b> Goals, boundaries, functions, and WHO's health system building blocks: service delivery, health workforce, health Information systems, access to essential medicines, financing and leadership/ governance.</p>				13
III	<p><b>Health Services:</b> Basic models and functions of health services, international experiences and goals and elements in Universal Health Care (UHC) approach. Health care system in India: public sector, private sector, voluntary sector, human resources for health, access to health care, utilization and expenditure on health services, and UHC initiatives and challenges ahead.</p>				13
IV	<p><b>Health Policy:</b> Concepts and tools of health policy, health policy stakeholders, health policy triangle framework, rational decision making to approach to health policymaking, introduction to health policy and systems research. Health policymaking in India: Health planning in post-Independent India, Bhore Committee Report 1946, National health policies, National Health Policy 2017, and Current National Health Programmes.</p>				13

v	<p><b>Regulation in the Health Sector:</b> Need for regulations, mechanisms for regulation, key legislations and standards in the health sector in India, and challenges in the implementation of regulations. Health care legislations in India: Legal aspect of health care, MTP Act, Biomedical Waste Rules, COPRA Act, PNDT Act, Transplantation of human organs Act, etc.</p>	13
References	<ul style="list-style-type: none"> <li>• Report of the health survey and development committee by Bhore, J. (1946). (Vol. 1-4). Manager of Publications.</li> <li>• Reddy, K.S. et.al (2011)” Towards achievement of universal health care in India by 2020: A Call of Action”, www.thelancet.com</li> <li>• Banerjee, D. (1982), Poverty, class and Health Culture in India, Vol. 1 Parahi Prakashan, New Delhi.</li> <li>• Indian Council of Social Science Research and Indian Council of Medical Research (1981), Health for All by 2000 A. D., ICSSR, Delhi.</li> <li>• K. SujathaRao, (2017), Do We Care: India’s Health System, Oxford University Press, ISBN10 : 9780199469543, 478 pages</li> </ul>	
Text Books	<ul style="list-style-type: none"> <li>• Lassey M, Lassey W, and Jinks, M. (1997). Health Care Systems around the World: Characteristics, Issues and Reforms. Prentice-Hall, Inc.</li> <li>• Bodenheimer, Thomas S., Kevin Grumbach. Understanding Health Policy</li> <li>• Fort, Meredith, Mary Anne Mercer and Oscar Gish (Editors). Sickness and Wealth: The Corporate Assault on Global Health</li> <li>• Govt. of India (2017) - National Health Policy-2017, Ministry of Health and Family Welfare, New Delhi.</li> <li>• Peters, et.al (2002), Better Health System for India’s poor: Findings, Analysis and Options: The World bank, New Delhi 6. Abel-Smith, Brian. An introduction to health: policy, planning and financing. Routledge, 2018.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://www.healthknowledge.org.uk/public-health-textbook/medical-sociology-policy-economics/4a-concepts-health-illness/section2/activity3">https://www.healthknowledge.org.uk/public-health-textbook/medical-sociology-policy-economics/4a-concepts-health-illness/section2/activity3</a></li> <li>• <a href="https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1513000">https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1513000</a></li> <li>• <a href="https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)">https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc)</a></li> <li>• <a href="https://www.publichealth.columbia.edu/research/others/comparative-health-policy-library/india-summary">https://www.publichealth.columbia.edu/research/others/comparative-health-policy-library/india-summary</a></li> <li>• <a href="https://cpcb.nic.in/bio-medical-waste-rules/">https://cpcb.nic.in/bio-medical-waste-rules/</a></li> </ul>	
Course Outcomes	<p>On completion of the course, students should be able to</p> <p>CO1: Acquire knowledge of basic concepts in Health.</p> <p>CO2: Understand basic concepts related to healthcare institutions.</p> <p>CO3: Comprehend basic concepts related to healthcare systems.</p> <p>CO4: Gain insight into basic concepts related to healthcare services.</p> <p>CO5: Familiarize themselves with basic concepts related to Healthcare Policies.</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	2	2	2	3	2	1	2	3	3	2	2	3
2	3	2	2	2	1	2	2	3	2	2	2	1
3	3	2	2	2	1	2	2	3	2	2	2	1
4	3	2	2	2	1	2	2	3	2	2	3	2
5	2	2	3	2	3	3	2	3	2	3	3	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	MONITORING AND EVALUATION OF DEVELOPMENT PROJECTS (24ARUB4107)				
	Credit: 4	Semester - VII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Understand the basics of project management, including project features, life cycles, and identification and screening processes.				
	K-2: Analyze project appraisal techniques, project selection methods, project presentation tools, and project scheduling techniques.				
	K-3: Evaluate advanced project management topics like resource management, cost management, risk management, outsourcing, negotiation, and organizational and behavioral issues.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the fundamentals of project management and development projects.</li> <li>• Learn various techniques for project identification, screening, and appraisal.</li> <li>• Master project presentation skills including Work Breakdown Structure (WBS) and scheduling.</li> <li>• Acquire knowledge of resource management, cost management, and risk management in projects.</li> <li>• Gain proficiency in project execution, monitoring, control, and termination processes.</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Project Management:</b> Introduction to Development Projects. Verities of project, Project Features, Project Life Cycle - S-Curve, J-C. Project Identification and Screening - New ideas, Vision, Long-term objectives, SWOT Analysis (Strength, Weakness, Opportunities, Threats). Project Appraisal - Market Appraisal, Technical Appraisal, Economic Appraisal, Ecological Appraisal, and Financial Appraisal - Payback, Net Present Value (NPV), Internal Rate of Returns (IRR). Project Selection - Decision Matrix, Technique for Order Preference using Similarity to Ideal Solution (TOPSIS), Simple Additive Weighting (SAW).</p>				13
II	<p><b>Project Presentation:</b> WBS, Project Network - Activity on Arrow (A-O-A), Activity on Node (A-O-N). Project Scheduling: Gant Chart, Critical Path Method (CPM), Project Evaluation &amp; Review Technique (PERT). Linear time cost trade-offs in project - Direct cost, indirect cost, Project crashing Resource Consideration - Profiling, Allocation, Levelling. Introduction to project management software: Primavera/ Microsoft project.</p>				13

<b>III</b>	<b>Resource Management and Cost Management:</b> Resource levelling, Scheduling and allocating project resources and costs. Reducing Project duration - Crashing project activities to speed up a project. Project Risk Management - Identification, quantification, and mitigation of risks	<b>13</b>
<b>IV</b>	<b>Project Outsourcing:</b> Negotiation, and Managing inter-organizational Relations. Project Procurement and Contract Management.	<b>13</b>
<b>V</b>	<b>Project Execution:</b> Monitoring control cycle, Earned Value Analysis (EVA), Project Control – Physical control, Human control, financial control. Organizational and Behavioral Issues: Organizational Structure, Selection-Project Manager, Leadership Motivation, Communication, Risk Management. Project Termination: Extinction, Addition, Integration, Starvation.	<b>13</b>
<b>References</b>	<ul style="list-style-type: none"> <li>• Project Management Institute. (2017). A Guide to the Project Management Body of Knowledge (PMBOK Guide) (6th ed.). Newtown Square, PA: Project Management Institute.</li> <li>• Turner, J. R. (Ed.). (2016). Gower Handbook of Project Management (5th ed.). Abingdon, UK: Routledge.</li> <li>• Kerzner, H., &amp; Saladis, F. P. (2017). Project Management Workbook and PMP/CAPM Exam Study Guide (12th ed.). Hoboken, NJ: Wiley.</li> <li>• Lock, D. (2019). Project Management (11th ed.). Farnham, UK: Gower Publishing.</li> <li>• Gray, C. F., &amp; Larson, E. W. (2018). Project Management: The Managerial Process (7th ed.). New York, NY: McGraw-Hill Education.</li> </ul>	
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Meredith, J. R., &amp; Mantel Jr, S. J. (2011). Project Management: A Managerial Approach. John Wiley &amp; Sons.</li> <li>• Kloppenborg, T. J. (2019). Contemporary Project Management. Cengage Learning.</li> <li>• Pinto, J. K., &amp; Kharbanda, O. P. (2019). Project Management: Achieving Competitive Advantage. Pearson.</li> <li>• Lock, D. (2019). Project Management. Gower Publishing, Ltd.</li> <li>• Marchewka, J. T. (2019). Information Technology Project Management. Wiley.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.pmi.org/">https://www.pmi.org/</a></li> <li>• <a href="https://www.apm.org.uk/">https://www.apm.org.uk/</a></li> <li>• <a href="https://www.projectmanagementknowledge.com/">https://www.projectmanagementknowledge.com/</a></li> <li>• <a href="https://pmief.org/">https://pmief.org/</a></li> <li>• <a href="https://www.ipma.world/">https://www.ipma.world/</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Analyze and evaluate development project proposals effectively.</p> <p>C02: Apply project management techniques to plan, schedule, and execute projects.</p> <p>C03: Assess and mitigate risks associated with project implementation.</p> <p>C04: Implement project monitoring and control mechanisms using Earned Value Analysis (EVA) and other tools.</p> <p>C05: Demonstrate proficiency in project termination and post-project evaluation.</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	2	3	2	3	3	3	2	2	3	2
2	3	3	3	3	3	3	3	3	3	3	3	3
3	3	3	3	3	3	3	2	3	2	2	3	3
4	3	3	2	3	3	3	3	3	3	3	3	3
5	3	3	2	3	3	3	3	3	3	2	3	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	GROWTH AND DEVELOPMENT ECONOMICS (24ARUB4108)				
	Credit: 4	Semester – VII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	<b>K-1</b> Enable students to grasp fundamental concepts, terms, and theories in growth and development economics.				
	<b>K-2</b> Analyze factors impacting economic growth and development and comprehend policy implications on development outcomes.				
	<b>K-3</b> Evaluate development policies and strategies and suggest solutions for development challenges.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Provide students with a comprehensive understanding of the differences between economic growth and development.</li> <li>• Examine and critique classical development theories in their historical context.</li> <li>• Investigate modern theories and models of economic development and apply them to real-world situations.</li> <li>• Equip students with the skills to measure poverty and inequality and assess the effectiveness of policy interventions.</li> <li>• Analyze the global aspects of economic development, including trade, investment, and international financial institutions.</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Meaning of Development and Relevant Concepts:</b> Distinction between growth and development, human development, Human Development Index, Gender Development Index, Sen’s capabilities approach, environmental sustainability and development, Market and State as agencies of development.				12
II	<b>Classical Theories of Development:</b> Adam Smith, Ricardo, Marx, Schumpeter, Rostow’s stages of growth, Harrod-Domar growth model, Structural change and Lewis’ model of unlimited supplies of labour, Solow’s growth theory.				13
III	<b>Contemporary Models of Development and Underdevelopment:</b> Theories of endogenous growth with special reference to Romer’s model, underdevelopment as coordination failure, multiple equilibria, the big push theory and Lebenscence Theory of Critical Minimum Efforts.				13
IV	<b>Poverty, Inequality and Development:</b> Measurement of poverty – absolute and relative, Head-Count Index and Poverty Gap Indices, policy options for alleviation of poverty, measurement of income inequality, economic growth and income inequality – Kuznet’s inverted Hypothesis, impact of inequality on development.				13

<b>V</b>	<b>International Aspects of Development:</b> Trade strategies for development: inward looking and outward looking, financing of balance of payments deficits, foreign direct investment and multinational corporations, foreign portfolio investments and developing countries, role of IMF and the World Bank – stabilization and structural adjustment programmes.	<b>13</b>
<b>References</b>	<ul style="list-style-type: none"> <li>● Banerjee, A. V., &amp; Duflo, E. (2011). Poor economics: A radical rethinking of the way to fight global poverty. Public Affairs.</li> <li>● Easterly, W. (2002). The elusive quest for growth: Economists' adventures and misadventures in the tropics. MIT Press.</li> <li>● Sachs, J. (2005). The end of poverty: Economic possibilities for our time. Penguin Press.</li> <li>● X`Jhingan, M.L., The Economics of Development and planning, Vrinda Publication.</li> <li>● Taylor, Edward J and Travis J Lybbert. 2015. Essentials of Development Economics. California: University of California Press.</li> </ul>	
<b>Text Books</b>	<ul style="list-style-type: none"> <li>● Ray, D. (2008). Development economics. Princeton University Press.</li> <li>● Todaro, M. P., &amp; Smith, S. C. (2014). Economic development (12th ed.). Pearson.</li> <li>● Jhingan, M. L. (2016). The economics of development and planning. Vrinda Publications.</li> <li>● A.P. Thirlwall, The Economics of Growth and Development, Vol-I. Caterloury, UK, 1995.</li> <li>● Michael P. Todaro, Economic Development, Pearson Education India, 2002</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>● <a href="https://data.worldbank.org/indicator">https://data.worldbank.org/indicator</a></li> <li>● <a href="https://hdr.undp.org/">https://hdr.undp.org/</a></li> <li>● <a href="https://www.imf.org/en/Home">https://www.imf.org/en/Home</a></li> <li>● <a href="https://unctad.org/">https://unctad.org/</a></li> <li>● <a href="https://www.oecd.org/dev/">https://www.oecd.org/dev/</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Distinguish between economic growth and development, including key indices and frameworks such as the Human Development Index, Gender Development Index, and Sen's capabilities approach.</p> <p>CO2: Critically analyze classical theories of economic development, including contributions from Adam Smith, Ricardo, Marx, Schumpeter, Rostow, and the Harrod-Domar model.</p> <p>CO3: Evaluate contemporary models of development and underdevelopment, focusing on theories such as endogenous growth, coordination failure, multiple equilibria, the big push theory, and the critical minimum effort theory.</p> <p>CO4: Measure and analyze poverty and inequality, understanding their impacts on economic development, and evaluate policy options for poverty alleviation and income redistribution.</p> <p>CO5: Examine international aspects of development, including trade strategies, financing balance of payments deficits, the role of foreign investments, and the impact of international financial institutions like the IMF and World Bank.</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	2	3	2	2	2	3	3	3	3	3	3	2
2	2	3	1	3	3	3	3	3	2	3	3	3
3	3	3	1	2	3	3	3	2	3	3	2	3
4	2	3	3	2	3	3	3	3	3	2	3	3
5	2	3	3	3	3	3	3	3	3	3	3	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	DIMENSIONS OF TRIBAL DEVELOPMENT (24ARUC4219)				
	Credit: 4	Semester – VIII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Understand fundamental concepts related to tribes and tribal development.				
	K-2: Analyze the rules and practices of tribal development issues.				
	K-3: Evaluate the impact of legislation, government agencies, policies, and programmes on tribal development.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the various Tribes, and explain the origin, culture and family system</li> <li>• Know the concepts related to the tribal economy and poverty</li> <li>• Elucidate the Social Change and Practices of Tribal Communities</li> <li>• Describe the Tribal communities Development and the social status of tribal communities</li> <li>• Study the Constitutional and Legislative Provisions for Tribal Development</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Life of Tribal:</b> Concepts and Approaches - Marriage: Rules of Marriage, Divorce, Family: Organizations and Functions, Patriarchy, Matriarchy, and Kinship System: Clan, Lineage, Consanguinity and affinity. Religion: Rites de Passage, Festivals, Fares, and Magic.				12
II	<b>Tribal Economy:</b> Agriculture, Labour, Forest, Market, Poverty, Indebtedness. Social Change: Education, Reservations, Movements, Migration and Mobility. Displacement and Resettlement.				13
III	<b>Tribal Development:</b> Historical perspective tribal development, demography and tribal organization; Social Status of Tribal and related problems.				13
IV	<b>Legislation:</b> Constitutional provisions and legislation, constitutional amendments; Role of Government Agencies: Government & Non-governmental Organizations. Recommendations of various committees on Tribal Development.				13
V	<b>Policies and Programmes:</b> Ministry of Tribal Affairs–Tribal Welfare Department (TN) -Tribal Development Policies and Programmes for the Welfare of Tribal People in India, Tribal justice and Modern Laws– PESA Act. Role of Tribals in National Freedom Movement.				13

<p><b>References</b></p>	<ul style="list-style-type: none"> <li>• Guha, R. (2017). India after Gandhi: The History of the World's Largest Democracy. Pan Macmillan: London.</li> <li>• Das, V. (2019). Structure and Change in Indian Society. Oxford University Press: New Delhi.</li> <li>• Sharma, K. L. (2016). Tribal Development and Its Administration. Mittal Publications: New Delhi.</li> <li>• Dube, S. C. (2018). Indian Village: A Historical and Sociological Study. Routledge: Abingdon, UK.</li> <li>• Chakravarti, U. (2017). Gendering Caste: Through a Feminist Lens. Navayana: New Delhi.</li> </ul>
<p><b>Text Books</b></p>	<ul style="list-style-type: none"> <li>• Srinivas, M. N. (2017). Social Change in Modern India. Orient Blackswan: Hyderabad.</li> <li>• Singh, K. S. (2019). Tribal Development in India: The Contemporary Debate. Sage Publications: New Delhi.</li> <li>• Sharma, K. L. (2018). Tribal Development in India: Problems and Prospects. Vikas Publishing House Pvt Ltd: New Delhi.</li> <li>• Berreman, G. D. (2019). Behind Many Masks: Ethnography and Impression Management in a Himalayan Village. Aldine Transaction: New Brunswick, NJ.</li> <li>• Haimendorf, C. V. (2017). The Vanishing Tribes of Burma. Routledge: Abingdon, UK.</li> </ul>
<p><b>Websites</b></p>	<ul style="list-style-type: none"> <li>• <a href="https://tribal.nic.in/">https://tribal.nic.in/</a></li> <li>• <a href="https://ncst.nic.in/">https://ncst.nic.in/</a></li> <li>• <a href="http://trdi.tripura.gov.in/">http://trdi.tripura.gov.in/</a></li> <li>• <a href="https://tribal.nic.in/national-tribal-welfare-portal">https://tribal.nic.in/national-tribal-welfare-portal</a></li> <li>• <a href="http://ctds.org.in/">http://ctds.org.in/</a></li> </ul>
<p><b>Course Outcomes</b></p>	<p>On completion of the course, students should be able to</p> <p>C01: Understand the fundamental aspects of tribes, including marriage, kinship, family, economy, social change, religion, and development.</p> <p>C02: Analyze the complexities of tribal life, including economic activities, social changes, and religious practices.</p> <p>C03: Evaluate the impact of legislation, government agencies, and policies on tribal development and welfare.</p> <p>C04: Critically assess tribal development policies, programmes, and their historical and contemporary significance.</p> <p>C05: Understand the role of tribes in the national freedom movement and their contributions to India's socio-political landscape.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	2	1	2	2	2	2	3	2	2	1	1	2
2	1	2	2	3	3	3	2	3	3	3	2	2
3	1	2	2	3	3	2	2	2	2	2	2	2
4	2	1	2	2	3	2	2	2	1	2	2	2
5	1	1	2	2	2	3	3	2	1	2	2	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	CONTEMPORARY POLICY ISSUES AND DEVELOPMENT (24ARUC4220)				
	Credit: 4	Semester – VIII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1 Understand the policy issues on contemporary development				
	K-2 Learn the development aspects of various sectors and its issues				
	K-3 Study the Indian context of policy development issues				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>Analyze the economic performance of India since independence</li> <li>Review India's planning history, along with their economic and political impacts.</li> <li>Evaluate the performance of Indian agriculture and the impacts of policy changes,</li> <li>Examine the development of the industrial sector, the significance of small-scale industries in employment generation</li> <li>Discuss inflation, monetary policy, tax policy, and the informal sector's growth, and review the measures taken to protect weaker sections and generate employment.</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Public Policy:</b> Definition, Scope, Features, Types. Process of Public Policy Formation. Analysis of India's Economic Performance: National Income Accounts since Independence –Closed Economy Policy and Open Economy Policy– Economic Growth, employment and equity review of poverty studies in India.</p>				12
II	<p><b>Planning history of India:</b> Declining importance of planning and the adoption of SAP – its economic and political compulsions. Indian agriculture – review of performance – the transition from a community – centered to a technocratic approach impact of SAP and the new patent regime on agriculture – export promotion and food security. Planning Commission to Niti Aayog.</p>				13
III	<p><b>Industrial Policies:</b> Mahalanobis model and its contribution – comparison with the wage-goods model-small scale industries and their importance in employment generation. Entry of foreign capital and impact on domestic industry – the demand for a level playing field Power; endemic shortages and the reasons – analysis of shortage visa viz opening up the sector to foreign capital and environmental opposition.</p>				13

<b>IV</b>	<b>Tax policy:</b> Parallel economy and the Laffer curve. Deficit reduction and implications for the weaker sections, State efforts to protect the weaker sections – subsidies, reservations and their record.	<b>13</b>
<b>V</b>	<b>Internal and External Monetary Policy:</b> Money, supply and inflation, rate, and its regulatory record. Unemployment and efforts to generate employment review of programs. Informal sector its growth and importance. Foreign Policy - The emerging international trade scenario in India.	<b>13</b>
<b>References</b>	<ul style="list-style-type: none"> <li>● Ahluwalia, M. S. (2002). Economic Reforms in India Since 1991: Has Gradualism Worked? Journal of Economic Perspectives, 16(3), 67-88.</li> <li>● Sen, A. (2005). The Argumentative Indian: Writings on Indian History, Culture and Identity. Picador: New York.</li> <li>● Joshi, V., &amp; Little, I. M. D. (1996). India's Economic Reforms 1991-2001. Oxford University Press: New Delhi.</li> <li>● Panagariya, A. (2019). India: The Emerging Giant. Oxford University Press: New York.</li> <li>● Acharya, S. (2011). Indian Economy: Some Issues and Answers. Academic Foundation: New Delhi.</li> <li>● Dreze, J., &amp; Sen, A. (2013). An Uncertain Glory: India and its Contradictions. Princeton University Press: Princeton, NJ.</li> </ul>	
<b>Text Books</b>	<ul style="list-style-type: none"> <li>● Datt, R., &amp; Sundharam, K. P. M. (2020). Indian Economy. S. Chand Publishing: New Delhi.</li> <li>● Kapila, U. (2021). Indian Economy Since Independence. Academic Foundation: New Delhi.</li> <li>● Bardhan, P. (1998). The Political Economy of Development in India. Oxford University Press: New Delhi.</li> <li>● Misra, S. K., &amp; Puri, V. K. (2021). Indian Economy: Its Development Experience. Himalaya Publishing House: Mumbai.</li> <li>● Gupta, S. B. (2021). Monetary Economics: Institutions, Theory, and Policy. S. Chand Publishing: New Delhi.</li> <li>● Ray, D. (1998). Development Economics. Princeton University Press: Princeton, NJ.</li> </ul>	
<b>Websites</b>	<ul style="list-style-type: none"> <li>● <a href="https://www.niti.gov.in/">https://www.niti.gov.in/</a></li> <li>● <a href="https://www.rbi.org.in/">https://www.rbi.org.in/</a></li> <li>● <a href="https://finmin.gov.in/">https://finmin.gov.in/</a></li> <li>● <a href="https://www.cmie.com/">https://www.cmie.com/</a></li> <li>● <a href="https://www.epw.in/">https://www.epw.in/</a></li> </ul>	

<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Demonstrate an understanding of India's economic growth, sectoral changes, and their implications on employment and equity.</p> <p>C02: Critically assess the shift from planned economic strategies to market-driven approaches and its implications on various sectors.</p> <p>C03: Evaluate the effects of agricultural policies and external influences on agricultural performance and food security.</p> <p>C04: Analyze the role of industrial policies, small-scale industries, and foreign investments in shaping India's industrial landscape.</p> <p>C05: Discuss the intricacies of monetary policy, inflation, taxation, and employment programs, and their impact on India's economy, particularly on vulnerable groups.</p>
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### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	1	1	3	1	2	2	2	2	2	2	1	2
<b>2</b>	1	2	2	2	1	2	2	2	2	2	1	2
<b>3</b>	2	2	3	2	2	2	2	2	2	2	1	2
<b>4</b>	3	2	3	3	2	2	3	2	2	2	1	2
<b>5</b>	2	1	2	2	3	2	3	3	3	3	2	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	INCLUSIVE DEVELOPMENT (24ARUC4221)				
	Credit: 4	Semester – VIII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Recall and describe the fundamental concepts and principles of inclusive development.				
	K-2: Explain the barriers to inclusivity and analyze strategies and policies aimed at overcoming these barriers.				
	K-3: Apply theoretical knowledge to assess real-world inclusive development initiatives and design practical solutions.				
Course Objectives	<p><b>The course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the definition, scope, and importance of inclusive development in contemporary development discourse</li> <li>• Analyze the various social, economic, institutional, environmental, and cultural barriers to inclusive development</li> <li>• Evaluate policy interventions, economic strategies, and social inclusion strategies that promote inclusive development</li> <li>• Study the socio-economic classification and characteristics of weaker sections</li> <li>• Comprehend the needs and importance of special welfare programs and administrative setups for weaker sections</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Inclusive Development:</b> Definition and Scope - Historical Perspective and Evolution -Importance and Principles - Relevance in contemporary development discourse. Global Trends and Initiatives aimed at fostering inclusive development.				12
II	<b>Barriers to Inclusive Development:</b> Social and Economic Barriers - poverty, inequality, and discrimination. Institutional and Structural Barriers - Governance, policy gaps, and institutional inefficiencies obstruct inclusivity. Environmental Barriers - climate change and natural disasters on marginalized communities. Cultural and Attitudinal Barriers - stereotypes, prejudices, and cultural norms that prevent social inclusion.				12
III	<b>Strategies and Approaches to Inclusive Development:</b> Policy Interventions - Reviewing social protection measures, and governmental interventions. Economic Strategies: growth models, microfinance initiatives, and the role of cooperatives. Social Inclusion Strategies. Role of community involvement and empowerment in development processes.				14

IV	<b>Weaker Sections and Development:</b> Meaning - Socio economic demographic classification - Scheduled Caste and Scheduled Tribes: Concept, Criteria, Classification, Characteristics and Disabilities. Other Backward Classes. Welfare of the Physically and Mentally Challenged. Inclusion of LGBTQIA+.	13
V	<b>Special Welfare Programs:</b> Needs and Importance for the Weaker Sections - Administrative setup –Central, State, and District. Rehabilitation of Weaker Sections - National Rehabilitation Policy of India. Constitutional provisions for Inclusive Development.	13
References	<ul style="list-style-type: none"> <li>• Sen, A. (1999). Development as Freedom. Alfred A. Knopf.</li> <li>• Todaro, M. P., &amp; Smith, S. C. (2015). Economic Development. Pearson.</li> <li>• Chambers, R. (1997). Whose Reality Counts? Putting the First Last. Intermediate Technology Publications.</li> <li>• Alkire, S., &amp; Santos, M. E. (2014). Multidimensional Poverty Index: Ten Years of Insights and Implications. Oxford Poverty and Human Development Initiative.</li> <li>• Desai, M. (2006). Inclusive Growth and Development. Academic Foundation.</li> </ul>	
Textbooks	<ul style="list-style-type: none"> <li>• Gupta, J., &amp; Vegelin, C. (2016). Sustainable Development Goals and Inclusive Development. Routledge.</li> <li>• Hickey, S., Sen, K., &amp; Bukenya, B. (Eds.). (2014). The Politics of Inclusive Development: Interrogating the Evidence. Oxford University Press.</li> <li>• Thakur, R. (2019). Inclusive Development and Governance. Oxford University Press.</li> <li>• Radcliffe, S. A. (2015). Development Alternatives: Practice, Dilemmas and Theory. Routledge.</li> <li>• Weiss, T. G., &amp; Wilkinson, R. (2014). International Organization and Global Governance. Routledge.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://chatgpt.com/c/d3f6c25d-a789-4376-bd94-990cac9019fc">https://chatgpt.com/c/d3f6c25d-a789-4376-bd94-990cac9019fc</a></li> <li>• <a href="https://www.worldbank.org/en/home">https://www.worldbank.org/en/home</a></li> <li>• <a href="https://www.ilo.org/">https://www.ilo.org/</a></li> <li>• <a href="https://www.adb.org/">https://www.adb.org/</a></li> <li>• <a href="https://www.unsdsn.org/">https://www.unsdsn.org/</a></li> </ul>	
Course Outcomes	<p>On completion of the course, students should be able to</p> <p>C01: Describe the key concepts, principles, and historical evolution of inclusive development.</p> <p>C02: Analyze and identify the social, economic, institutional, environmental, and cultural barriers to inclusive development.</p> <p>C03: Evaluate various policy interventions, economic strategies, and social inclusion strategies that promote inclusive development.</p> <p>C04: Understand the socio-economic classification and characteristics of weaker sections</p> <p>C05: Gain knowledge about the needs and importance of special welfare programs, the administrative setup for weaker sections</p>	

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	2	3	3	3	3	1	3	3	2	3
2	2	3	3	3	3	2	3	2	3	3	3	3
3	2	3	3	2	3	3	2	3	2	1	3	3
4	1	2	2	2	2	2	3	3	3	2	2	2
5	1	1	1	2	2	2	3	3	3	2	3	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	GENDER AND REPRODUCTIVE HEALTH (24ARUC4222)				
	Credit: 4	Semester – VIII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Understand the key concepts and theories related to Gender and Reproductive Health				
	K-2: Getting to know about Gender and Social Institution in India				
	K-3: Understanding the concept of Gender based Violence.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Import knowledge on gender issues related to population, development and health</li> <li>• Build skills to analyze and understand evidence relating to institutional context of gender</li> <li>• Build skills to analyze and understand evidence relating to gender based inequalities and linkages between gender, population, development and reproductive health</li> <li>• Learn about Female Status and Autonomy, Women’s Empowerment and their relationship with Reproductive health and development</li> <li>• Learn about Rights Based Approach to Gender Equality and Reproductive health</li> </ul>				
UNIT	Content				No. of Hours
I	<p><b>Basic Concepts:</b> Gender, Gender Equality, Gender Disparities, Gender Inequality, Gender Main Streaming, Gender Sensitive Planning and Gender Budgeting. Feminists Theories: Evaluation of Feminism, Shift from Women Status and Autonomy, Women’s Empowerment and their relationship with Reproductive Health and Development.</p>				13
II	<p><b>Gender and Social Institution:</b> Family, Marriage, Society, Religion, Legal System: Customs and Patterns, Dowry System. Gender and Mass Media – Language, Image and Portrayal of Women in Different Mass Media, Gender Mainstreaming.</p>				13
III	<p><b>Gender Based Violence:</b> Violence – Types, Forms, Causes and Consequences - Implications for sex Ratio Trends and Patterns in India. Male Child Preference Syndrome. Sex Selective Abortion and Sex Ratio at Birth. Assisted Reproductive Technologies and its Use and Misuse, Measures to Address Infertility in India. Safeguarding Legal Measures.</p>				13
IV	<p><b>Reproductive Health:</b> Definition, Components, Life Cycle Approach, and Rationale of Reproductive Health. Infertility – Measurements of Infertility, Sexual Dysfunction.</p>				13

V	<b>Rights Based Approach to Reproductive Health:</b> Gender Equality and Reproductive Health- HIV/AIDS and Its Demographic Impact, Reproductive Rights and Ethical Issues; Human Rights and Values in Reproductive Health Services, Information, Liberty of Choice, and professional concerns.	12
References	<ul style="list-style-type: none"> <li>• Berer, M (2000), Making Abortions Safe: A Matter of Good Public Health Policy and Practice, Bulletin, WHO, Vol. 78(5), pp. 590 – 592.</li> <li>• Dyson, Tim and Mick Moore, (1983). “On Kinship structure, female autonomy, and demographic behaviour in India”, Population and Development Review vol. 9(1), pp.35-60.</li> <li>• Ershong G A O (2008), Reproductive Health, Gender and Development: An International Perspective, BR Publishing Corporation, India.</li> <li>• F. Ram, Sayeed Unisa, T. V. Sekher (2011), Population, Gender and Reproductive Health, Rawat Publications, New Delhi.</li> <li>• Folbre, Nancy. (1992). Improper arts: Sex in classical political economy. Population and Development Review. 18(1): 105-112.</li> </ul>	
Text Books	<ul style="list-style-type: none"> <li>• Basa, Alaka M (1992), Culture, The Status of Women and Demographic Behaviour, Oxford University, New York.</li> <li>• Carolina Matos (2023), Gender, Communications and Reproductive Health in International Development, McGill-Queen’s University Press, Canada.</li> <li>• Ellsberg Mary and Heise Lori L. (2005), Researching violence against women: A practical guide for researchers and activists. WHO and Path, Washington D.C</li> <li>• Gita Sen, Adreinne Germain and Lincoln C. Chen, (Eds.), (1994), Population Policies Reconsidered: Health and Empowerment and Rights, Harvard University Press, Harvard.</li> <li>• Guang Zhen Wang (2016), Reproductive Health and Gender Equality: Methods, Measurement and Implications, Routledge, New York.</li> </ul>	
Websites	<ul style="list-style-type: none"> <li>• <a href="https://archiv.ub.uni-heidelberg.de/volltextserver/19579/1/Sieverding_Gender_and_reproductive_health.pdf">https://archiv.ub.uni-heidelberg.de/volltextserver/19579/1/Sieverding_Gender_and_reproductive_health.pdf</a></li> <li>• <a href="https://pdf.usaid.gov/pdf_docs/Pnacm452.pdf">https://pdf.usaid.gov/pdf_docs/Pnacm452.pdf</a></li> <li>• <a href="https://iris.who.int/bitstream/handle/10665/67233/WHO_RHR_01.29.pdf">https://iris.who.int/bitstream/handle/10665/67233/WHO_RHR_01.29.pdf</a></li> <li>• <a href="https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/rh_hss_final.pdf">https://www.cartercenter.org/resources/pdfs/health/ephti/library/lecture_notes/health_science_students/rh_hss_final.pdf</a></li> <li>• <a href="https://www.unfpa.org/sites/default/files/pub-pdf/SRH_Framework.pdf">https://www.unfpa.org/sites/default/files/pub-pdf/SRH_Framework.pdf</a></li> </ul>	

<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Gain knowledge on gender issues related to population, development and health</p> <p>C02: getting skills to analyze and understand evidence relating to institutional context of gender</p> <p>C03: getting skills to analyze and understand evidence relating to gender based inequalities and linkages between gender, population, development and reproductive health</p> <p>C04: Understand about Female Status and Autonomy, Women's Empowerment and their relationship with Reproductive health and development</p> <p>C05: Understand about Rights Based Approach to Gender Equality and Reproductive health</p>
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### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	3	3	3	2	3	2	3	3	2	3	2	2
<b>2</b>	2	3	3	2	2	3	2	2	2	2	2	2
<b>3</b>	3	3	3	2	3	3	3	3	2	2	3	2
<b>4</b>	3	3	3	3	3	3	2	2	3	3	2	2
<b>5</b>	2	3	3	3	2	2	2	3	3	2	2	2

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	ENERGY ECONOMICS (24ARUC4223)				
	Credit: 4	Semester - VIII	CFA: 40	ESE: 60	Total :100
Class	B.A. (Hons.) Demography and Development Studies				
Cognitive Level	K-1: Enable students to understand the basic concepts and terminology of energy economics.				
	K-2: Predict the impacts of energy policies on economic and energy systems and interpret key energy indicators.				
	K-3: Evaluate the effectiveness of energy policies and economic strategies in addressing energy issues and promoting sustainable energy solutions.				
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Grasp the dynamics of natural resources and energy.</li> <li>• Explore the correlation between energy and development.</li> <li>• Analyze the interconnectedness of energy and the environment.</li> <li>• Develop proficiency in energy planning and management.</li> <li>• Understand the energy landscape of India.</li> </ul>				
UNIT	Content				No. of Hours
I	<b>Introduction to Energy Economics:</b> Energy Resources – Classification – Properties and Forms of Energy – Energy Economics – Origin, Nature and Scope.				10
II	<b>Energy and Development:</b> Energy and Economic Development – Energy Indicators – Energy Intensity and Energy Elasticity – National and International Comparison – Per capita Energy and per capita Income.				14
III	<b>Energy and Environment:</b> Energy Nexus Environment Crisis – Causes and Consequences – Remedial Measures – Impact of Energy Consumption and production on Environment.				12
IV	<b>Energy Planning and Management:</b> Energy Planning and Energy conservation – Meaning, Objectives, Importance, Issues and Challenges. Energy management – Objectives and Importance.				14
V	<b>Indian Energy Sector:</b> Indian Energy Sector – Organizational Structure – Energy Supply and Demand in India – Renewable energy Policies and Programmes in India- Green Energy - Scope, Opportunities and Barriers.				14
References	<ul style="list-style-type: none"> <li>• Agarwal, M.C. and Monga, J.R. (1992) 'Economic and Commercial Geography', National Publishing House, Delhi</li> <li>• Anandan, M. and Ramaswamy, S., (2016) 'Oil Economics' MJP Publishers, Delhi.</li> <li>• Kneese. A.V and Sweeny, J.L, eds, (1993) 'Handbook of Natural Resource and Energy Economics', North Holland, Amsterdam, pp.61-124.</li> </ul>				

	<ul style="list-style-type: none"> <li>• Munasinghe, M. and Meier, P (1993) 'Energy Policy and Modelling', Cambridge University Press, UK</li> <li>• Ramaswamy. S. and Anandan, M., (2019) 'Energy Development Issues and Policies' MJP Publishers, Delhi.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Agarwal, S.K. (1985) 'Environment and Natural Resources Economics', Scott Foresman &amp; Co., London.</li> <li>• Common, M. (1985) 'Environment and Resource Economics', London.</li> <li>• R. Perman, Y. Ma, J. Mc Gilvray, M. Common (2003) 'Natural Resource and Environmental Economics' Pearson, 3rd edition.</li> <li>• Richard Eden (1981) 'Energy Economics – Growth, Resources and Policies', Cambridge University Press, London.</li> <li>• TERI (2019) 'Teri Energy Data Directory and Year Book 2018 – 19', The Energy Research Institute, Delhi.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.iea.org/">https://www.iea.org/</a></li> <li>• <a href="https://www.eia.gov/">https://www.eia.gov/</a></li> <li>• <a href="https://www.sciencedirect.com/journal/energy-economics">https://www.sciencedirect.com/journal/energy-economics</a></li> <li>• <a href="https://www.oxfordenergy.org/">https://www.oxfordenergy.org/</a></li> <li>• <a href="https://www.worldenergy.org/">https://www.worldenergy.org/</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: Understand the concept of energy economics.</p> <p>CO2: Learn the nexus between energy consumption and economic development.</p> <p>CO3: Compare and contrast between energy and environment.</p> <p>CO4: Realize the significance of energy conservation and management.</p> <p>CO5: Gain skills to compile the profile of various energy sources in India.</p>

### Mapping of COs with POs and PSOs

Course Outcomes	Program Outcome (PO)						Program Specific Outcome (PSO)					
	1	2	3	4	5	6	1	2	3	4	5	6
<b>1</b>	1	2	2	3	3	3	3	3	3	3	2	3
<b>2</b>	3	3	2	3	3	2	3	3	3	3	2	3
<b>3</b>	3	2	3	2	3	3	2	3	3	3	2	3
<b>4</b>	2	2	2	2	3	3	3	3	3	3	2	3
<b>5</b>	2	3	2	2	3	3	2	3	3	3	2	3

**0: No Correlation**

**2: Moderately Correlating**

**1: Weakly Correlating**

**3: Strongly Correlating**

Course Code & Title	APPLIED STATISTICS (24ARUI1201)		
Class	Multidisciplinary - UG Programme	Semester	II
Cognitive Level	K-1 Imparting the knowledge on applications of Statistics on various disciplines.		
	K-2 Understanding various methods of performing sampling, correlation and regression.		
	K-3 Learning how to estimate errors and perform testing.		
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Be familiar with the basic concepts and terminology of statistics.</li> <li>• Understand the importance and application of statistics in different disciplines</li> <li>• Choose appropriate sampling procedure and decide sample size.</li> <li>• Develop skill in reading and understanding the results from data analysis</li> <li>• Able to demonstrate competence in analyzing statistical data using software.</li> </ul>		
UNIT	Content		No. of Hours
I	<p><b>Introduction to Statistics:</b> Origin, scope, limitations and misuses of Statistics – Stages of Statistics. Statistical Organizational set up in Central and State Governments. Recent trends in the application of Statistics – Types of Data base – Big data.</p>		12
II	<p><b>Sampling Techniques:</b> Basic Concepts of Census and sampling method, characteristics of a good sample, sampling unit, sampling frame. Determination of sample size. Random sampling –Non-random sampling. Sampling and Non-sampling errors.</p>		13
III	<p><b>Data Collection and Classification:</b> Sources and types of statistical data. Classification of data, Scoring and Coding, Tabulation and presentation of data – Frequency distribution. Diagrammatic presentation of data: one, two and three-dimensional diagrams – Graphical representation of data.</p>		13
IV	<p><b>Descriptive Statistics</b> – Measures of central tendency: mean, median, mode. Measures of Dispersion: Mean deviation, Quartile deviation and Standard deviation– Coefficient of variation, Measures of Skewness (Pearson’s and Bowley’s) and Kurtosis, Measures of Association – Correlation and Regression analysis.</p>		13
V	<p><b>Statistical Inference:</b> Sampling distribution and standard error, Parameter and Statistic. Testing of Hypothesis - Estimator and estimate. Parametric and non-parametric tests - Students ‘t’ test and ‘z’ test, ‘F’ test, Chi-square test. Factor Analysis and Structural Equation modeling (SEM) – Uses and applications. Using software for statistical analysis.</p>		13

<b>References</b>	<ul style="list-style-type: none"> <li>• Agarwal, Y.P, Statistical Methods, New Delhi: Sultan Chand and Sons, 1996.</li> <li>• Gupta, S.P and Gupta.M.P, Business Statistics, New Delhi: Sultan Chand and Sons, (19<sup>th</sup> Ed), 2019.</li> <li>• Gupta, S.P., Statistical Methods, Sultan Chand Publishers, New Delhi, (13<sup>th</sup>Ed), 2019.</li> <li>• Kothari.C.R, Quantitative Techniques, New Delhi: Vikas Publishing House, 1998.</li> <li>• W.G.Cochran, Sampling Techniques, Wiley Eastern Ltd, New Delhi, 1985.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Gupta, S.C. Fundamentals of Statistics, Mumbai: Himalaya Publishing House, 2018.</li> <li>• Goon, A. M., M.K. Gupta, and B. Dasgupta, Fundamentals of Statistics, Vol. II, World Press, Kolkata, 2016.</li> <li>• Gupta. S.C. and Kapoor. V.k, Fundamentals of Mathematical Statistics, Sultan Chand &amp; Sons, (12<sup>th</sup> Ed), 2020.</li> <li>• ParimalMukopadhyay, Mathematical Statistics (Third Edition), Books and Allied Private Limited, Kolkata, 2006.</li> <li>• Siegel, Sidney, Non-Parametric Statistics for Behavioural Sciences, New Delhi: McGraw Hill, 2006.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.bl.uk/reshelp/findhelpsubject/socsci/topbib/quantmethods/quantitative.pdf">https://www.bl.uk/reshelp/findhelpsubject/socsci/topbib/quantmethods/quantitative.pdf</a></li> <li>• <a href="https://www.sciencedirect.com/topics/nursing-and-health-professions/statistical-tool">https://www.sciencedirect.com/topics/nursing-and-health-professions/statistical-tool</a></li> <li>• <a href="https://www.edx.org/course/biostatistics-0">https://www.edx.org/course/biostatistics-0</a></li> <li>• <a href="http://www.calculator.net/sample-size-calculator.html">http://www.calculator.net/sample-size-calculator.html</a></li> <li>• <a href="https://www.statisticssolutions.com/spss-statistics-help">https://www.statisticssolutions.com/spss-statistics-help</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to do</p> <p>CO1: Get exposed to the recent trends in the application of Statistics.</p> <p>CO2: Obtain insight in sampling techniques.</p> <p>CO3: Learn data collection and its visualization techniques.</p> <p>CO4: Study the concepts in Descriptive Statistics.</p> <p>CO5: Acquiring knowledge on errors and test method.</p>

Course Code & Title	ELEMENTS OF OPERATION RESEARCH (24ARUI1202)		
Class	Multidisciplinary - UG Programme	Semester	II
Cognitive Level	<b>K-1</b> Understanding basic concepts in Operation Research		
	<b>K-2</b> Developing a skill on solving Linear Programming Problems		
	<b>K-3</b> Developing a skill on solving Transportation and Assignment Problems		
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Be familiar with the basic Concepts of Operation Research.</li> <li>• Learn about techniques of solving Linear Programming Problems.</li> <li>• Acquiring knowledge on solving Transportation Problems</li> <li>• Get knowledge on solving Assignment Problems</li> <li>• Understand the methods on solving Networking Problems</li> </ul>		
UNIT	Content		No. of Hours
I	<b>Introduction:</b> Operation Research – Meaning – Definition – Origin and History – Characteristic Features – Importance – Scope – Applications – Limitations.		<b>12</b>
II	<b>Linear Programming Problem:</b> Meaning – Requirements – Assumptions – Applications – Formulating LPP – Advantages – Limitations. Methods of LPP: Graphical Method – Simplex Method (Simple Problems Only)		<b>13</b>
III	<p><b>Transportation Problem:</b> Mathematical Formulation – Basic Feasible Solution – North West Corner Rule – Least Cost Methods – Vogel's Approximation Method.</p> <p><b>Assignment Problems:</b> Mathematical Formulation – Comparison with Transportation Model. Hungarian Method - Unbalanced Assignment Problem. (Simple Problems Only).</p>		<b>13</b>
IV	<b>Game Theory:</b> Meaning – Types of Games – Basic Assumptions – Finding Value of Game for Pure Strategy – Mixed Strategy – Graphical Methods – Pure Strategy – Saddle Point Payoff Matrix - Value of Game (Simple Problems Only)		<b>13</b>
V	<b>Network:</b> Project Network Diagram – CPM and PERT Computations and time analysis – Cost time trade off (Simple Problems Only).		<b>13</b>
References	<ul style="list-style-type: none"> <li>• Dr. Paria, Linear Programming, Transportation, Assignment Game, Book and Allied (P) Ltd. 1999</li> <li>• V. Sundaresan K S, Ganaapathy Subramanian and K. Ganesan, Resource</li> </ul>		

	<p>Management Techniques, A.R. Publications.</p> <ul style="list-style-type: none"> <li>• Hamdy A. Taha, Operation Research An Introduction, 10<sup>th</sup> Edition, Pearson, 2017.</li> <li>• P. Rama Murthy, Operation Research, 2<sup>nd</sup> Edition, New Age, 2007</li> <li>• G. Srinivasan, Operations Research, 2<sup>nd</sup> Edition, PHI Learning, Pvt. Ltd., 2010.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Gauss S. I. Linear Programming, McGraw – Hill Book Company</li> <li>• Gupta P. K. and Hira D. S. Problems in Operation Research, S.Chand&amp; Co.</li> <li>• KantiSwaroop, Gupta P. K. and Monmohan, Problems in Operation Research, Sultan &amp; Sons.</li> <li>• Ravindran A, Phillips D. T. and Solberge J J. Operation Research, John wiley</li> <li>• Taha H.A. Operation Research, Macmillan Publication Company, New York.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="http://ebooks.lpude.in.operationsresearch/">http://ebooks.lpude.in.operationsresearch/</a></li> <li>• <a href="https://ocw.mit.edu/">https://ocw.mit.edu/</a></li> <li>• <a href="https://www.bbau.ac.in/dept/UIET/EME-601%20Operation%20 Research.pdf">https://www.bbau.ac.in/dept/UIET/EME-601%20Operation%20 Research.pdf</a></li> <li>• <a href="https://nibmehub.com/opac-service/pdf/read/Operations%20Research%20Principles%20and%20Applications.pdf">https://nibmehub.com/opac-service/pdf/read/Operations%20Research%20Principles%20and%20Applications.pdf</a></li> <li>• <a href="https://zalamsyah.staff.unja.ac.id/wp-content/uploads/sites/286/2019/11/9-Operations-Research-An-Introduction-10th-Ed.-Hamdy-A-Taha.pdf">https://zalamsyah.staff.unja.ac.id/wp-content/uploads/sites/286/2019/11/9-Operations-Research-An-Introduction-10th-Ed.-Hamdy-A-Taha.pdf</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to do</p> <p>C01: Acquiring knowledge on Concepts of Operation Research.</p> <p>C02: Solving Linear Programming Problems.</p> <p>C03: Solving Transportation Problems</p> <p>C04: Solving Assignment Problems</p> <p>C05: Solving Networking Problems</p>

Course Code & Title	<b>BUSINESS STATISTICS (24ARUI1203)</b>		
Class	Multidisciplinary - UG Programme	Semester	II
Cognitive Level	<b>K-1</b> Understanding basic concepts of Statistics		
	<b>K-2</b> Learn the various methods of performing in Statistics.		
	<b>K-3</b> Developing a skill on solving Time Series Problems		
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand and use the descriptive statistics in decision making</li> <li>• Process the data collected in the field and to analyze using appropriate statistical methods</li> <li>• Acquire knowledge on time series data for business forecasting</li> <li>• Develop skill in reading and understanding the results from data analysis</li> <li>• Acquire knowledge on index numbers</li> </ul>		
UNIT	Content		No. of Hours
I	<b>Introduction:</b> Meaning and Definition of Statistics – Collection and Tabulation of Statistical Data – Presentation of Statistical Data – Graphs and Diagrams.		12
II	<b>Measures of Central Tendency and Dispersion:</b> Measures of Central Tendency – Mean – Median – Mode. Measures of Dispersion – Range – Mean Deviation – Quartile Deviation – Standard Deviation. (Simple Problems Only).		13
III	<b>Correlation and Regression:</b> Simple Correlation – Scatter Diagram – Karl Pearson’s Correlation – Spearman’s Rank Correlation – Regression – Meaning – Linear Regression. (Simple Problems Only).		12
IV	<b>Time Series:</b> Analysis of Time Series – Causes of Variation – Components of Time Series – Additive and Multiplicative Models – Determination of Trend by Semi Average – Moving Average and least Squares Methods. (Simple Problems Only).		13
V	<b>Index Numbers:</b> Meaning and Types of Index Numbers – Problems in Construction of Index Numbers – Methods of Construction of Price and Quantity Indices – Test of Adequacy. (Simple Problems Only).		12
References	<ul style="list-style-type: none"> <li>• Gerald Keller, (2014). <b>Statistics for Management and Economics</b>, 10<sup>th</sup> Edition, Congage Learning.</li> <li>• Sonia Taylor (2007). <b>Business Statistics: for Non-Mathematician</b>, Palgrave Macmillan, Macmillan India Limited Chennai.</li> <li>• Srivastava, T, Rago. S, (2012). <b>Statistics for Management</b>, Tata McGraw Hill</li> </ul>		

	<ul style="list-style-type: none"> <li>• Thomas J. Quirk (2016). <b>Excel 2016 for Business Statistics, a guide solve practical problems</b>, Springer (India) Private Limited, New Delhi</li> <li>• Kumbhojkar G. V. (2017) Business Statistics, PhadkePrakashan</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Gupta, S.P. (2014). <b>Statistical Methods</b>, 13th Edition Sultan Chand Publishers.</li> <li>• Gupta S.C (2019), <b>Fundamentals of Statistics</b>, Himalaya Publication house.</li> <li>• Levin, Rubin, (2013). <b>Statics for Management</b>, 13<sup>th</sup> Editions, Pearson Education</li> <li>• Sharma, J. I (2014). <b>Fundamentals of Business Statistics</b>, Vikas Publication, New Delhi</li> <li>• Desai S. S. (2017) <b>Business Statistics</b>, Jay-Gauri.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.statista.com/">https://www.statista.com/</a></li> <li>• <a href="https://www.statistics.com/introductory-statistics/">https://www.statistics.com/introductory-statistics/</a></li> <li>• <a href="https://www.khanacademy.org/math/statistics-probability/">https://www.khanacademy.org/math/statistics-probability/</a></li> <li>• <a href="https://statistics-made-easy.com/">https://statistics-made-easy.com/</a></li> <li>• <a href="https://www.geeksforgeeks.org/business-statistics-importance-application-and-types/">https://www.geeksforgeeks.org/business-statistics-importance-application-and-types/</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to do</p> <p>CO1: Get exposed to the recent trends in the application of Statistics.</p> <p>CO2: Learn data collection and its visualization techniques.</p> <p>CO3: Study the concepts in Descriptive Statistics.</p> <p>CO4: Study the concepts of Time series Analysis</p> <p>CO5: Study the concepts of Index Numbers.</p>

Course Code & Title	DEMOGRAPHY AND VITAL STATISTICS (24ARUI1204)		
Class	Multidisciplinary - PG Programme	Semester	II
Cognitive Level	<b>K-1</b> Obtaining the knowledge of Demography and Vital statistics		
	<b>K-2</b> Understanding the various measurements in demography and vital statistics		
	<b>K-3</b> Learning to how Life tables are constructed and growth pattern of population		
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Make the students understand the meaning of demographic data and demographic surveys.</li> <li>• Acquire knowledge about migration, Gross and Net reproduction rates and their interpretation.</li> <li>• Enable the students to have an exposure to civil registration and educate the application of vital statistics.</li> <li>• Learn basic measures of mortality, fertility and population growth.</li> <li>• Impart knowledge about the description and construction of a life table and their relationships.</li> </ul>		
UNIT	Content		No. of Hours
I	<b>Demographic Data:</b> Meaning - Sources of Demographic data - Civil Registration - Population Census - Registration Method for Demographic Surveys - Vital Registration - Population Register and other Administrative Records - Registration of Population in India.		12
II	<b>Fertility Measurements:</b> Crude Birth Rates - General, Specific and Total Fertility Rates - Gross and Net Reproduction Rates and their Interpretation.		13
III	<b>Mortality Measurements:</b> Crude Death rate- Specific Death Rate - Standardized Death Rate - Infant Mortality Rate - Maternal Mortality Rate - Case Fertility Rate.		12
IV	<b>Life Table and Migration:</b> Description and construction of various columns of a Life table and their Relationships - Uses of Life Table - Migration - Factors Effecting Migration - Gross and Net Migration Rates.		13
V	<b>Population Growth:</b> Population Estimation and Projection - Arithmetic, Geometric and Exponential Growth Rates - Logistic curve fitting and its use for graduating population data - Basic ideas of stationary and stable population.		12
References	<ul style="list-style-type: none"> <li>• Mukhopadhyay P. (1999): Applied Statistics, Books and Allied (P) Ltd.</li> <li>• Goon A. M. Gupta. M. K and Das Gupta B (1993), Fundamentals of Statistics, World Press, Kolkata.</li> </ul>		

	<ul style="list-style-type: none"> <li>• Gun, A.M., Gupta, M.K. and Dasgupta, B. (2008): Fundamentals of Statistics, Vol. II, 9th Edition, World Press.</li> <li>• Bhende A. A and Karitkar T (1994), Principles of Population Studies, Himalaya, Mumbai.</li> <li>• Biswas, S. (1988): Stochastic Processes in Demography &amp; Application, Wiley Eastern Ltd.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Gupta S. C and Kapoor V. K (2007), Fundamentals of Applied Statistics, Sultan Chand &amp; Sons, New Delhi.</li> <li>• Hansraj D. R (1981), Fundamentals of Demography, Surjeet publications, New Delhi.</li> <li>• Benjamin B (1975), Demographic Analysis, George Allen and Unwin Limited.</li> <li>• Cox P. R (1978), Demography (Fifth Edition), Cambridge University Press.</li> <li>• Bogue Donald J (1976), Principles of Demography, John Wiley, New York.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="http://ocw.jhsph.edu/courses/DemographicMethods/PDFs/idm-sec1.pdf">http://ocw.jhsph.edu/courses/DemographicMethods/PDFs/idm-sec1.pdf</a></li> <li>• <a href="http://semmelweis.hu/nepegeszsegtan/files/2015/05/1415_Introduction-to-demography1.pdf">http://semmelweis.hu/nepegeszsegtan/files/2015/05/1415_Introduction-to-demography1.pdf</a></li> <li>• <a href="https://www.worldometers.info/demographics/india-demographics/">https://www.worldometers.info/demographics/india-demographics/</a></li> <li>• <a href="http://www.medicine.mcgill.ca/epidemiology/hanley/c609/Material/DemographyEoB.pdf">http://www.medicine.mcgill.ca/epidemiology/hanley/c609/Material/DemographyEoB.pdf</a></li> <li>• <a href="https://www.demogr.mpg.de/books/drm/011/978-3-642-35858-6_Book_Online.pdf">https://www.demogr.mpg.de/books/drm/011/978-3-642-35858-6_Book_Online.pdf</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to do</p> <p>CO1: Measure the growth of population, birth and death rates and to estimate life expectancy.</p> <p>CO2: Understand the uses of vital statistics, life tables and population projection techniques.</p> <p>CO3: Apply the methods of estimating net migration rates.</p> <p>CO4: Execute the various fertility measures and compare the advantages and disadvantages of different sources of demographic data.</p> <p>CO5: Know about the concept of life tables, their construction and uses.</p>

<b>Course Code &amp; Title</b>	<b>RESEARCH METHODS (24ARUI2101)</b>		
<b>Class</b>	Multidisciplinary	<b>Semester</b>	III
<b>Cognitive Level</b>	<b>K-1</b> Understanding the basics of research methodology		
	<b>K-2</b> Constructing tools for data collection in research		
	<b>K-3</b> Developing skill in preparing scientific research report		
<b>Course Objectives</b>	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Identify and formulate a problem for research.</li> <li>• Prepare suitable research design to study the research problem to be formulated</li> <li>• Choose appropriate methods of sampling, tools and techniques of data collection</li> <li>• Process the data collected in the field and analyze it using appropriate statistical methods and</li> <li>• Prepare research report in a professional manner.</li> </ul>		
<b>UNIT</b>	<b>Content</b>		<b>No. of Hours</b>
<b>I</b>	Research: Definition, Characteristics and Functions of Research. Scientific method. Types of research: Pure, Applied and Action Research, Qualitative and Quantitative studies. Research Skills and Ethics, Significance of Ethical Committee.		<b>12</b>
<b>II</b>	Steps in Research: Research Process, Selection and Formulation of Research Problem, Statement of the Problem and Definition of Terms, Objectives. Review of Literature, Data Base and Reference Management Software. Conceptual Framework, Types of Variables – Hypothesis: types, characteristics and functions.		<b>13</b>
<b>III</b>	Preparation of Research Design: Exploratory, Descriptive, Diagnostic and Experimental designs - types. Methods of Research: Multidisciplinary, Interdisciplinary and Transdisciplinary studies, Mixed methods. Participatory research: RRA, PRA and PLA.		<b>13</b>
<b>IV</b>	Sources and types of Data Collection: conduct of Interview, Observation, Schedule and Questionnaire. Sociometry, Psychological test and Projective techniques, Content analysis, Survey, Case study - Scaling Techniques – Online research methods – Pre- test, Test of reliability and validity.		<b>13</b>
<b>V</b>	Research Report: Format - types of reports – Citation styles, Reference Materials, Bibliography, Weblibliography, Footnotes, Glossary, Index and		<b>13</b>

	Appendix. Preparation of Research Proposal, Plagiarism – Impact factor - dissemination of research findings.
<b>References</b>	<ul style="list-style-type: none"> <li>• Alan Bryman, Social research Methods, Oxford Publication, 2018.</li> <li>• Bandarkar and Wilkinson, <i>Methods and techniques of Social Research</i>, Bombay: Himalaya Publishing Co, 2010.</li> <li>• Goode and Hatt, <i>Methods in Social Research</i>, New Delhi: McGraw Hill, 2002.</li> <li>• Kothari.C.R, <i>Research Methodology</i>, New Delhi: VishvaPrakashan, 2001.</li> <li>• Lawrence Neuman.W, <i>Social Research Methods: Qualitative and Quantitative Approaches</i>, Pearson publishers, Chennai, (7<sup>th</sup> Ed), 2014.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Ranjith Kumar, <i>Research Methodology A Step-By-Step Guide for Beginners</i>, Singapore: Sage Publications Aisa- Pacific Pvt., Ltd, 2014.</li> <li>• Simon, Schuster, <i>Methods of Social Research</i>, Kenneth Bailey, 4<sup>th</sup> Edition, 2008</li> <li>• Tony Brown and Liz Jones, <i>Action Research and Postmodernism</i>, Buckingham: Open University Press, 2001</li> <li>• Tony Greenfield and Sue Greener, <i>Research Methods for Post Graduates</i>, John Wiley and Sons Ltd, 2016.</li> <li>• Vijayalakshmi.G. and Sivapragasam.C, <i>Research Methods: Tips and Techniques</i>, Chennai: MJP Publishers, 2009.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.coursera.org/browse/physical-science-and-engineering/research-methods">https://www.coursera.org/browse/physical-science-and-engineering/research-methods</a></li> <li>• <a href="https://docs.wixstatic.com/ugd/87dd0d_ff020fea747047d19cb81d60e371ffaa.pdf?index=true">https://docs.wixstatic.com/ugd/87dd0d_ff020fea747047d19cb81d60e371ffaa.pdf?index=true</a></li> <li>• <a href="https://www.ncrm.ac.uk/">https://www.ncrm.ac.uk/</a></li> <li>• <a href="https://www.scribbr.com/category/methodology/">https://www.scribbr.com/category/methodology/</a></li> <li>• <a href="https://www.liberty.edu/online/courses/CJUS745">https://www.liberty.edu/online/courses/CJUS745</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: Develop expertise and skills to undertake independent research</p> <p>C02: Construct research tools</p> <p>C03: Understand research skills and ethics related issues</p> <p>C04: Apply of statistical tools from application perspective</p> <p>C05: Prepare research article and project report</p>

<b>Course code &amp; Title</b>	<b>SOCIAL RESEARCH METHODS (24ARUI2102)</b>		
<b>Class</b>	Multidisciplinary - UG Programme	Semester	III
<b>Cognitive Level</b>	<b>K-1</b> Understanding the concept of Research Methods		
	<b>K-2</b> Knowing the tools for data collection and analysis of statistical data		
	<b>K-3</b> Comprehending the skill of report writing.		
<b>Course Objectives</b>	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>• Understand the methods and procedures of research, and acquire knowledge in data analysis</li> <li>• Identify and formulate a problem for research</li> <li>• Choose the appropriate tools and techniques of data collection</li> <li>• Prepare a suitable research design to carryout research</li> <li>• Learn different methods of sampling and</li> <li>• Write research report to suit their purpose</li> </ul>		
<b>UNIT</b>	<b>Content</b>		<b>No. of Hours</b>
<b>I</b>	Research: Definition, objectives, characteristics and types of research – Scientific method, Steps in research – Identification and Selection of problem for research – Sources of review of literature – Hypothesis: concept, characteristics and types.		<b>9</b>
<b>II</b>	Preparation of Research Design: Need and components of research design, Methods of research – Explorative, Descriptive, Experimental studies. Case study, Survey and Participatory research. Transdisciplinary Research.		<b>9</b>
<b>III</b>	Types and Sources of data: Tools for Data Collection – Observation, Interview, Schedule, and Questionnaire. Pilot study and Pre-test. Plagiarism – Use of Reference materials. Research Report – Types, Format and Characteristics of a research report.		<b>10</b>
<b>IV</b>	Sampling Techniques: Census vs Sampling methods. Probability and Non-Probability methods, Processing of Data – scoring, coding, classification and tabulation of data, diagrammatic, and graphical presentation.		<b>10</b>
<b>V</b>	Quantitative Data Analysis: Measures of central tendency - mean, median and mode; Measures of dispersion – Range, Variance, Standard Deviation - Correlation and regression analysis, and Uses of Software in data analysis.		<b>10</b>
<b>References</b>	<ul style="list-style-type: none"> <li>• Gosh.B.N, <i>Scientific Methods and Social Research</i>, New Delhi: Sterling Publishers, 1997.</li> <li>• Gupta.S.C, <i>Fundamentals of Statistics</i>, Mumbai: Himalaya Publishing</li> </ul>		

	<p>House, 2018.</p> <ul style="list-style-type: none"> <li>• Hans Raj, <i>Theory and Practice in Social Research</i>, Delhi: Surjeet Publications, 2002.</li> <li>• Kothari.C.R, <i>Research Methodology</i>, New Delhi: VishvaPrakashan, (4<sup>th</sup> Ed) 2019.</li> <li>• Vino Chandra.S.S, Anand Hareendran.S, <i>Research Methodology</i>, Pearson, (1<sup>st</sup> Ed), 2017.</li> </ul>	
<b>Text Book</b>	<ul style="list-style-type: none"> <li>• AnolBhattacharjee, <i>Social Science Research: Principles, Methods, and Practices</i>, University of South Africa: Global Text project Publisher, 2012.</li> <li>• Krishnaswami.O.R. and M.Ranganatham, <i>Methodology of Research in Social Sciences</i>, Mumbai: Himalaya Publishing House, 2010.</li> <li>• Sadhu.A.N. and Singh.A, <i>Research Methodology in Social Sciences</i>, Mumbai: Himalaya Publishing House, 2005.</li> <li>• Thomas William A., <i>Research Methods Quantitative, Qualitative &amp; Mixed Methods</i>, Authors Press, New Delhi 2021.</li> <li>• Vijayalakshmi.G. and Sivapragasam.C, <i>Research Methods: Tips and Techniques</i>, Chennai: MJP Publishers, 2009.</li> </ul>	
<b>Website</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.researchprospect.com/research-methodology/">https://www.researchprospect.com/research-methodology/</a></li> <li>• <a href="https://www.bl.uk/reshelp/findhelpsubject/socsci/topbib/quantmethods/quantitative.pdf">https://www.bl.uk/reshelp/findhelpsubject/socsci/topbib/quantmethods/quantitative.pdf</a></li> <li>• <a href="https://www.researchgate.net/publication/308133810_Basic_statistical_tools_in_research_and_data_analysis">https://www.researchgate.net/publication/308133810 Basic statistical tools in research and data analysis</a></li> <li>• <a href="http://www.calculator.net/sample-size-calculator.html">http://www.calculator.net/sample-size-calculator.html</a></li> <li>• <a href="https://www.statisticssolutions.com/spss-statistics-help">https://www.statisticssolutions.com/spss-statistics-help</a></li> </ul>	
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>CO1: know the basic of research methods and statistics</p> <p>CO2: identify and formulate a problem for research</p> <p>CO3: choose the appropriate tools and techniques of data collection</p> <p>CO4: learn different methods of sampling and</p> <p>CO5: write research report to suit their purpose</p>	

Course Code & Title	RESEARCH METHODS AND STATISTICS (24ARUI2103)		
Class	Multidisciplinary - UG Programme	Semester	III
Cognitive Level	K-1 Understanding the basics of research methods and statistics		
	K-2 Constructing tools for data collection in research		
	K-3 Developing skill in preparing scientific research report		
Course Objectives	<p><b>The Course aims to</b></p> <ul style="list-style-type: none"> <li>Identify and formulate a problem for research.</li> <li>Prepare suitable research design to study a research problem to be formulated</li> <li>Choose appropriate methods of sampling, tools and techniques of data collection</li> <li>Process the data collected in the field and to analyze using appropriate statistical methods</li> <li>Prepare research report in a professional manner.</li> </ul>		
UNIT	Content		No. of Hours
I	Research: objectives, functions, Characteristics of Scientific Research. Types of Research: Pure, Applied and Action Research. Steps in Research – Identifying and Selection of Research problem - review of literature, Conceptual framework, Variables – Hypothesis – formulation and types. Research skills and ethics – Ethical committee and Plagiarism		12
II	Research design: Explorative, Descriptive, Experimental, Case study and Survey. Methods of Research: Multidisciplinary, Interdisciplinary and Transdisciplinary studies. Mixed Methods, Participatory research: RRA, PRA and PLA. Online research methods, Pilot Study and Pre-test.		13
III	Tools for Data collection: Types and sources of data, Interview, Schedule, Questionnaire and Observation. Scaling Techniques – Test of validity and reliability - Research Report – Components, format and types of research report - Reference materials, quotations, bibliography, webliography, footnotes, glossary and appendix, dissemination of research findings.		13
IV	Descriptive Statistics: Measures of central tendency, dispersion, skewness and kurtosis – Correlation, Regression Analysis. Sampling techniques – random and non-random sampling. Statistical software and its uses.		13
V	Inferential Statistics: Basic concepts and Hypothesis testing and Estimation; Steps in hypothesis testing. Tests for Large and small samples – Z test, t-test and F-test, Chi-square test, Mann-Whitney test, and ANOVA.		13

<b>References</b>	<ul style="list-style-type: none"> <li>• Gupta S.P and M.P.Gupta, <i>Business Statistics</i>, New Delhi: Sultan Chand and Sons, (19<sup>th</sup> Ed), 2019.</li> <li>• Gupta.S.C, <i>Fundamentals of Statistics</i>, Mumbai: Himalaya Publishing House, 2018.</li> <li>• PanneerSelvam, <i>Research Methodology</i>, New Delhi: PHI Learning Private Ltd, 2014.</li> <li>• Kothari.C.R, <i>Research Methodology</i>, New Delhi: Wishva Prakashan, 2019.</li> <li>• Tony Greenfield and Sue Greener, <i>Research Methods for Post Graduates</i>, John Wiley and Sons Ltd, 2016.</li> </ul>
<b>Text Books</b>	<ul style="list-style-type: none"> <li>• Cauvery.R. and Girija. M, <i>ResearchMethodology</i>, New Delhi: S.Chand and Company Ltd, 2010.</li> <li>• Gupta, S.P., <i>Statistical Methods</i>, New Delhi; Sultan Chand and Sons, 2012.</li> <li>• Nicholas Walliman, <i>Research Methods: The basics</i>. London; New York: Routledge, 2011.</li> <li>• Shajahan.S, <i>Research Methods for Management (Text and Cases)</i>, New Delh: Jaico Publishing House, 2006.</li> <li>• Vijayalakshmi.G. and Sivapragasam.C, <i>Research Methods: Tips and Techniques</i>, Chennai: MJP Publishers, 2009.</li> </ul>
<b>Websites</b>	<ul style="list-style-type: none"> <li>• <a href="https://www.ggu.edu/courses/syllabus.do?id=29059">https://www.ggu.edu/courses/syllabus.do?id=29059</a></li> <li>• <a href="https://www.ncrm.ac.uk/">https://www.ncrm.ac.uk/</a></li> <li>• <a href="https://www.scribbr.com/category/methodology/">https://www.scribbr.com/category/methodology/</a></li> <li>• <a href="https://www.indiastat.com/">https://www.indiastat.com/</a></li> <li>• <a href="https://online-learning.harvard.edu/subject/statistics">https://online-learning.harvard.edu/subject/statistics</a></li> <li>• <a href="http://www.ddegjust.ac.in/studymaterial/mcom/mc-106.pdf">http://www.ddegjust.ac.in/studymaterial/mcom/mc-106.pdf</a></li> </ul>
<b>Course Outcomes</b>	<p>On completion of the course, students should be able to</p> <p>C01: formulate a research problem</p> <p>C02: prepare suitable research design</p> <p>C03: choose appropriate methods of sampling and tools for data collection</p> <p>C04: process the data collected in the field and to analyze using appropriate statistical methods</p> <p>C05: prepare research report in a professional manner.</p>