

Semester	FIVE
Paper Number	HSTCR5122T & HSTCR5122P
Paper Title	Economic Statistics and Demography
No. of Credits	6
Theory/Composite	Composite
No. of periods assigned	Th: 4 Pr: 3
Module	2 Module 1: Units 1 & 2 (2 periods) Module 2: Units 3 & 4 (2 periods)
Course description/objective	<i>At the end of the course a student should</i> <ul style="list-style-type: none"> ○ Have preliminary ideas of formulating statistical measures to account for inflation/deflation and economic growth of a country. ○ Have knowledge on comparative social statistics. ○ Have an idea about a population and population study. ○ Know some of the basic as well as derived measures for the study of human population. ○ Understand the concept of a life table and its significance in real life. ○ Be familiar with the notion of growth of a population along with methods of estimating and forecasting the same.
Syllabus	<p>UNIT 1: <i>Index Numbers:</i> price, quantity and value indices, choice of weights, Various formulae and their comparisons. Tests of index numbers. Fisher's ideal index number. Chain Index Number. [10L]</p> <p><i>Some important indices:</i> Consumer Price Index, Wholesale Price index & Index of industrial Production- methods of construction and uses. [3L]</p> <p><i>National accounts:</i> Definition of national income. A brief account of product, expenditure and income approaches for estimation of National Income. [3L]</p> <p>UNIT 2: <i>Measurement of poverty and inequality:</i> Desirable properties and different descriptive measures including Gini's coefficient, Lorenz curve. Use of Pareto and Log Normal distributions. Measures of unemployment. [7L]</p> <p><i>Comparative Social Statistics:</i> Indices related to human development and gender disparity. [3L]</p> <p>UNIT 3: <i>Introduction:</i> Demographic events and processes. Sources of population data, Census and registration. Errors in census and registration data. Rates and ratios of vital events. [3L]</p>

	<p>Measurements of mortality: Crude death rate (CDR), Specific death rate (SDR), Infant mortality rate (IMR) and Standardized death rates. Life (Mortality) tables: assumption, description and uses. Stable and Stationary population. [7L]</p> <p>UNIT 4:</p> <p>Measurements of Fertility: Crude Birth Rate (CBR), General Fertility rate (GFR), Specific Fertility rate (SFR) and total Fertility rate (TFR). [6L]</p> <p>Measurement of population growth: Crude rates of natural increase, Pearl's Vital index, Gross Reproduction Rate (GRR) and Net reproduction rate (NRR). [4L]</p> <p>Population estimation, Projection and Forecasting: Use of AP and GP methods for population estimates. Fitting of population curve for population forecasting using Rhode's method. [6L]</p>	
List of Practical	<ol style="list-style-type: none"> 1. Calculate price and quantity index numbers using simple and weighted average of price relatives. 2. To calculate the Chain Base index numbers. 3. Problems on cost of living index numbers. 4. Lorenz curve. 5. Pareto and lognormal fitting. 6. Measures of mortality 7. Life Tables 8. Measures of fertility and population growth 9. Population Estimation and Projection 10. Fitting of logistic equation by Rhode's method 	
Reading/Reference Lists	<ol style="list-style-type: none"> 1. Mudgett Bruce D (1951): Index Numbers, N.Y : Wiley. 2. Goon A.M., Gupta M.K. and Dasgupta B. (2002): Fundamentals of Statistics, Vol. II, 8th Edn. The World Press, Kolkata. 3. Nagar A.L, Das R.K (1997): Basic statistics, Oxford University Press. 4. Ramakumar R (2002) Technical Demography, New Age. 	
Evaluation	<p style="text-align: center;">Theory</p> <p>CIA- 10 End Sem (Module 1) - 25 End Sem (Module 2)- 25 Total - 60</p>	<p style="text-align: center;">Practical</p> <p>Continuous assessment: 40</p>

Paper structure for End Sem Theory	Short questions (5 marks each)	Long questions(15 marks each)
Module 1	2 out of 3	1 out of 2
Module 2	2 out of 3	1 out of 2