

GOKHALE INSTITUTE OF POLITICS AND ECONOMICS

Deemed to be University u/s 3 of the UGC Act, 1956

PUNE 411004

(Approved by Board of Studies 26/02/2024 & 28/05/2024; Approved by Academic Council 5-6-2024)

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M.A. (Economics)

COURSE STRUCTURE & SYLLABUS

Program Outcomes:

Disciplinary knowledge: Capable of demonstrating comprehensive knowledge and understanding of one or more disciplines that form a part of an undergraduate /postgraduate program of study.

Communication Skills: Ability to express thoughts and ideas effectively in writing and orally; Communicate with others using appropriate media; confidently share one's views and express herself/himself; demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups.

Critical thinking, Problem solving and Analytical reasoning: Capability to apply analytic thought to a body of knowledge; analyses and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories, philosophies.

Acquiring research-related skills, scientific reasoning and reflective thinking: A sense of inquiry and capability for asking relevant/appropriate questions; ability to recognize cause-and-effect relationships, define problems, formulate and test hypotheses, analyses, interpret and draw conclusions from data; ability to plan, execute and report the results of an experiment or investigation.

Self-directed lifelong learning: Capability to use ICT in a variety of learning situations; ability to work independently, identify appropriate resources required for a project; ability to acquire knowledge and skills, through self-paced and self-directed learning aimed at personal development.

Employability Options: All the programs prepare the students for job profiles that demand numerical, analytical, and problem-solving skills, such as financial management, market research, business planning, budgeting, resource allocation, etc.

The present curriculum goes with Learning Outcome-based Curriculum Framework (LOCF) for all its programs. The approach is envisioned to provide a focused, outcome-based syllabus with an agenda to structure the teaching-learning experiences in a more student-centric manner. The LOCF approach has been adopted to strengthen students' experiences as they engage themselves in the program of their choice. Each program vividly elaborates its nature and promises the outcomes that are to be accomplished by studying the courses. Our students became eligible for all competitive exams like SSC, Indian Administrators, Insurance sector, Data Analyst, Tourism, Environment Management, Bank PO's, Media, MNC, NGO, and to prepare them for start-ups. In short, each program prepares students for sustainability and life-long learning.

Program Specific Outcomes:

- PSO 1: This program blends economics with other social science disciplines, namely, civics and politics, to develop a holistic understanding of the political economy.
- PSO 2: This program will provide the students with the opportunity to pursue courses that emphasize quantitative and theoretical aspects of Economics.
- PSO 3: It prepares students to develop own thinking /opinion regarding current national or international policies and issues
- PSO 4: Better employability through skill building in quantitative research, computational packages, add-on courses and compulsory Internship program

Pedagogy of this course:

- Encouraging discussions in class, active learning
- Inculcating team spirit, providing activities to be done in groups
- Various modes of teaching, to help students adapt to different modes of work they will face post-graduation, to name a few, power point presentations, computer exercises etc.,
- Online simulation exercises since working with software packages and languages is inevitable these days.
- Providing research exercises, encouraging to do literature review or to write summary of an article.
- Assignments to be given to be able to apply theories to real-world examples.
- Quizzes to have clarity of concepts.

Note: Various evaluation methods for students to develop different skills along the way.

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Sr. No.	Course Code No.	Name of the Course
COMPULSORY PAPERS		
1	C-01	Microeconomics
2	C-02	Macroeconomics
3	C-03	Statistics
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5	MA-A-05	Mathematics For Economics
6	MA-A-08	Economic Growth and Development
7	MA-A-09	Public Economics
8	MA-A-10	International Economics
9	MA-A-11	Financial Institutions and Markets
10	MA-A-12	Indian Economy
11	MA-A-13	Environmental Economics
12	MA-A-14	Quantitative Aptitude
13	MA-A-17	Research Methodology
14	MA-A-18	Money Banking And Financial Markets
15	MA-A-19	Public Policy and Administration
16	MA-A-20	Political Economy of India's Development
OPTIONAL PAPERS (Any four to be opted)		
1	MA-B-01	Indian Agricultural Economics
2	MA-B-02	Economics of Labour
3	MA-B-03	International Relations
4	MA-B-04	International Economic Institutions
5	MA-B-07	Population Studies
6	MA-B-08	Indian Political System
7	MA-B-09	Linear Economics I
8	MA-B-10	Linear Economics II
9	MA-B-11	Study of social exclusion and inclusive policy
10	MA-B-12	Business Analytics
11	MA-B-13	Insurance Economics
12	MA-B-14	Insurance Economics (Advanced Practices)
13	MA-B-15	Urban Economics
14	MA-B-16	Advanced Microeconomics
15	MA-B-01	Indian Agricultural Economics

Course Code: C-01

Course Name: Microeconomics

Course Outcomes:

To acquaint the students with introductory consumer theory and the limitations with an orientation towards behavioural approach (Module I)

- To understand how the choice will be made under uncertainty and how the attitude towards risk will be determined. (Module II)
- To introduce to the students, the concepts associated with the functioning of a firm. (Module III)
- To study the various types of markets prevalent in an economy and the nature of their decision making (Module IV)
- To study the information economics i.e. role of asymmetric information and its way out, designing of optimum incentive scheme under information asymmetry (Module V)
- To acquaint the students with the basics of game theory (Module VI)

Module 1:

Consumer Theory (8 hrs)

- Preference Relation and Its Properties.
- Consumer Preferences and Representation of Preferences by Utility Functions.
- Budget Constraint, Utility Maximization and Derivation of the Demand Function, The Indirect Utility Function and Its Properties, Roy's Identity
- Revealed Preferences. Endowments in the Budget Constraint, Difference between revealed and normative preference
- Limitations of the Consumer Theory
- Behavioral Approach

Module 2:

Choice Under Uncertainty (12 hrs)

- The Expected Utility Model, Utility on Lotteries, Axioms and Preferences under Uncertainty
- Critiques of the Expected Utility Model, Prospect Theory
- Measures of Risk--Domar-Musgrave Index, Roy's Safety Index, Mean-Variance, Semi Variance Mini-max Regret
- Lotteries, Preference Relation over Lotteries, N-M Expected Utility Theory
- Basic Axiom and Representation Theorem Violations of EU theory.
- Subjective Probabilities
- Risk Aversion – Jensen's Inequality, Acceptance Set and Risk Aversion
- Various Measures of Risk Aversion like Arrow-Pratt Measure of Absolute Risk Aversion, Relative Risk Aversion
- Certainty Equivalent and Risk Premium
- Arrow-Pratt Approximation of Risk Premium
- Pratt's Theorem
- Classes of Utility Functions: Decreasing Absolute Risk Aversion (DARA), Constant Absolute Risk Aversion (CARA), Increasing Absolute Risk Aversion (IARA), Decreasing Relative Risk Aversion (DRRA), Increasing Relative Risk Aversion (IRRA), Constant Relative Risk Aversion (CRRA) etc. and their comparative statics
- Applications to Various Settings and Comparative Static Results.

Module 3:

Theory of Firm (6 hrs)

- Theory of Organization. Measurements of Inputs and Outputs
- Profit Maximization, Comparative Statics, Profit Function. Hotelling's Lemma, Factor Demand Functions, Supply Function.
- Cost Minimization, Cost Functions, Average and Marginal Cost Functions, Short-Run and Long-Run Costs, Marginal Cost Pricing, Aggregation – Industry Supply Function, Shephard's Lemma, Conditional Factor Demand Functions.
- The Duality Between Production and Cost Functions.

Module 4:

Theory of Market (8 hrs)

- Perfect Competition: Short-Run and Long-Run Market Equilibrium.
- Monopoly: Monopoly Power, Equilibrium Output and Prices, Effect on Welfare, Price Discrimination – First, Second, And Third-Degree, Quality Choice Under Monopoly. Market Power, Sources of Market Power, Monopoly & Regulation of Monopoly. HHI or Any Other Index Used to Measure the Concentration of Firms.
- Monopolistic Competition.
- Oligopoly: Cournot Equilibrium, Stability, Comparative Statics, Bertrand Equilibrium. Quantity Leadership, Price Leadership. Conjectural Variations.
- Spatial Competition: Linear City Model, Circular City Model.
- Market failure, public goods and introduction to welfare economics,

Module 5:

Information Economics (10 hrs)

- Introduction: The Elements of the Problem
- Types of Asymmetric Information Problems– Moral Hazard, Adverse Selection, Signalling
- Static Full Information Benchmark
- Hidden Action in a Two Action-Two outcome model as well as in a Simple Continuous Action and Continuous Outcome Case
- Solution through First Order Approach and its Validity
- Value of Information and Characteristics of the Optimal contract
- Adverse Selection and Signalling: Akerlof's Model of Lemons,
- Signalling in the Spence's Model of Education
- The Notions of Pooling and Separating Equilibria.

Module 6:

Game theory (introduction) (6 hrs)

- Description of a Game, Normal Form Representation of the Game, Extensive Form Representation of The Game
- Solution Concepts—Nash Equilibrium, Mixed Strategies, Repeated Games, Sequential Games.

Suggested Readings:

Books:

- Serrano.R and Feldman. M.A. (2018). A Short Course in Intermediate Microeconomics with Calculus. Cambridge University Press
- Gravelle, H. and Rees R, 2003, Microeconomics, 3rd Edition, *Prentice Hall*
- Kreps, David. (1992). A Course in Microeconomic Theory, Eastern Economy Edition, *Prentice Hall of India*
- Mas-Colell.A, Whinston &Green, Microeconomic Theory. (1995). Oxford *University Press*
- Perloff.J. (2019). Microeconomics, 7th Edition, *Pearsom Education*.
- Pindyck, Robert S. and Rubinfeld, Daniel L. (2017), 9th Edition Microeconomics, *Pearson College*

Articles:

- Arrow, K.J. (1965) Aspects of the Theory of Risk Bearing. Yrjo Jahnssonin Saatio, Helsinki.
- Hadar, J. and Russell, W. (1969). **Rules for ordering uncertain Prospects**. AER.
- Yan Sun & Shu Li, 2010. **The effect of risk on intertemporal choice**, Journal of Risk Research, Taylor & Francis Journals, vol. 13(6), pages 805-820, September.
- Kahneman, D.and Tversky, A. (1979). Prospect Theory: An Analysis of Decision under Risk.Econometrica. 47(2),pp263-291

Course Code: C-02

Course Name: Macroeconomics

Course Outcomes:

The course will enable the students:

- To familiarize the students with the contributions of various schools of thought in Macroeconomics. (Module 2 and 3)
- To provide a wider vision of present discourse in Macroeconomics. (Module 6)
- To develop aptitude to relate concepts with research and policy. (Module 5)
- To paraphrase macro-economic policy initiatives both in global and domestic context (Module 2)
- To demonstrate an understanding of the macroeconomic tools to manage business fluctuations. (Module 4)

Module 1:

Macroeconomic Measurement (8 hours)

- An overview of National Accounting.
 - Conventions about National Accounting Sectors.
 - Concept of value added by production.
 - National Product at market price and factor cost.
 - Gross and Net Production.
- Methods of Income estimation.
 - The Product Approach, The Expenditure Approach, The Income Approach.
- Accounting for Environmental and Social Dimensions.
 - Physical quality of life index and Human Development Index.
 - Environmentally Adjusted Net Domestic Product.

Module 2:

Background Concepts. (8 hours)

- History of macroeconomic thought- Classical, Keynesian and schools of thought after Keynes.
- Behavioral foundations of Macroeconomics:
- Consumption Function: Keynes Psychological Law and Kuznet's consumption puzzle, Fisher's intertemporal Choice Model, Permanent Income Hypothesis, Life Cycle Hypothesis and Relative Income Hypothesis.
- Investment Function: Neo-Classical Theory of Investment, Stock Market and Tobin's q-ratio, Accelerator Theory of Investment (simple and flexible acceleration models)
- The Monetarist School: The quantity theory of money approach.

Module 3:

Rational Expectations and new Classical Macroeconomics (4 hours)

- The basic concepts – the Phillips curve and Lucas Supply equation

Module 4:

Real Business Cycle School (6 hours)

- Real Business Cycle School and inter temporal substitution of labor.
- Real Business Cycle theory- technology shocks- neutrality of money and flexibility of wages and prices.
- Real Business cycle view on great depression.

Module 5:

Micro Foundations of real and nominal rigidities: New Keynesian School (8 hours)

- Imperfect competition and price setting- Real rigidity- Coordination failure models.
- Real Non Walrasian Theories- Small Menu Cost model and Staggering of prices, implicit wage.
- Contract theory- efficiency wage theory- Insider- Outsider model.

Module 6:

Basic Infinite Horizon Models (8 hours)

- Ramsey Problem: Command Economy, Decentralized economy, dynamic efficiency - Government in the decentralized economy.
- Overlapping Generations Model.
- OLG with production: two period lives, dynamic inefficiency and altruism, Social Security Models under OLG

Suggested Readings:

Books;

- Barro, Robert J. & Sala-i- Martin, Xavier (1995), *Economic Growth*, McGraw Hill.
- Blanchard, Olivier (2000), *Macroeconomics*, Prentice Hall.
- Blanchard, Olivier and Stanley, Fischer (1989), “*Lectures on Macroeconomics*”, The MIT Press
- Dornbusch, Rudiger, Fischer, Stanley & Startz, Richard (2004), *Macroeconomics*, 9th Edition, McGraw Hill.
- Mankiw Gregory (2002), *Macroeconomics*, 5th Edition, Worth Publishers
- Romer, David (2003), *Advanced Macroeconomics*, 3rd Edition, McGraw Hill Publishers.
- Snowdon Brian and Vane Howard R, (2005) *Modern Macroeconomics: Its Origin, Development and Current State*, Edward Elgar Publishing Ltd.

Additional Reading List: Website Link

- <https://www.imf.org/en/Publications/WEO/Issues/2022/07/26/world-economic-outlookupdate-july-2022>
- <https://www.federalreserve.gov/newsevents/pressreleases/monetary20220727a.htm>
- <https://www.ecb.europa.eu/press/pr/date/2022/html/ecb.mp220721~53e5bdd317.en.html>
- <https://www.ecb.europa.eu/press/blog/date/2022/html/ecb.blog220723~c2b1d4b654.en.html>
- https://www.ecb.europa.eu/ecb/educational/explainers/tell-memore/html/interest_rates.en.html
- https://www.rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=53904
- <https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21035>
- <https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21038>
- https://dea.gov.in/sites/default/files/MER%20June%202022_Final.pdf
- <https://www.indiabudget.gov.in/doc/frbm1.pdf> 16. <https://www.rbi.org.in>

Course Code: C-03

Course Name: Statistics

Course outcomes:

The course will enable the students:

- To acquaint the students with hypothesis testing and to familiarize its use in real life. (module 1)
- To familiarize the students with distribution and its various types. (module 2)
- To acquaint the students with estimation, inference and its various methods (module 3)
- To familiarize the students with various qualitative tests. (module 4)
- To identify the various types of nonparametric statistics. (module 5)
- To acquaint the students with operational research and its various solving methods. (module 6)
- To improve the students' analytical and problem-solving skills, familiarize the students with various real life examples of linear programming problems. (module 7)

Module 1:

Testing hypotheses.

- Simple versus composite hypothesis.
- critical region, type I and type II errors, power of a test.
- The Decision Rule, trinity of classical tests (Wald test, Lagrange multiplier, likelihood ratio).
- application of hypothesis testing with known and unknown variances, test for correlation.

Module 2:

Special Distributions.

- Introduction
- Various types of distributions (The Poisson Distribution, The Normal Distribution, The Geometric Distribution, The Negative Binomial Distribution, The Gamma Distribution,
- The Central Limit Theorem.

Module 3:

Estimation and Inference.

- Introduction.
- Estimating Parameters.
- The Method of Maximum Likelihood, the Method of Moments.
- Interval Estimation, Properties of Estimators, Minimum-Variance Estimators.
- The Cramer-Rao Lower Bound, Sufficient Estimators, Consistency, Bayesian Estimation.

Module 4:

Bivariate Distributions.

- Contingency tables, joint and conditional distributions.
 - Odds ratio, test of independence.
 - Analysis of Variance (ANOVA), analysis of covariance.
- Module V: Nonparametric Statistics.

- Introduction.
- Sign Test, Wilcoxon Tests, The Kruskal-Wallis Test, The Friedman Test.
- Testing for Randomness, Comparing Parametric and Nonparametric Procedures.

Module 5:

Introduction to OR.

- Basic algorithms; Linear programming (LP).
- Graphical and Simplex.
- LP Formulation and LP with solver and sensitivity analysis.
- Transportation and transshipment models; Simulation; Decision Analysis.

Module 6:

Advanced algorithms in OR.

- Goal Programming; Queuing Theory, Networking Models.
- Markov chains; Data Envelopment Analysis (DEA); Analytical Hierarchical processing (AHP).

Reference list:

- Larsen, R. J., and Morris L. M. (2001): *An Introduction to Mathematical Statistics and its Applications*. 3rd ed. Upper Saddle River, NJ: Prentice Hall.
- Lewis M. (2011): *Applied Statistics for Economists*, Routledge.
- Newbold P. (2007): *Statistics for Business and Economics* (6th edition or later), Prentice Hall.
- Sweet, S. and Karen G.- M. (2008): *Data Analysis with SPSS: A First Course in Statistics*, Allyn & Bacon, 3rd Edition.
- Field A. (2013): *Discovering Statistics using IBM SPSS Statistics*. Fourth Edition, SAGE
- Render and Stair. (2012): *Quantitative Analysis for Managerial Decision Making*.
- Hiller and Liberman. (2011): *Operations Research*.
- Hamdy and Taha. (2013): *Operations Research*.

Course Code: C-04

Course Name: Basic Econometrics

Course Outcome:

The course will enable the students:

- To provide an overview of the subject and build understanding about the concepts and techniques used in econometrics. (Module 1, 6, 8 & 9)
- To examine basic econometric techniques that are widely used in empirical work in economics and other related disciplines. (Module 3 and 5)
- To enable conceptual understanding and 'hands on' applications using economic data drawn from real-world examples, rather than on formal theoretical proofs alone. (Module 2, 4 and 7)
- By the end of the course, students should be able to develop simple econometric models and interpret the econometric and statistical results reported in other studies.

Note: Students will be taught software packages for performing econometric applications. Computer exercises will be given.

Module 1:

The nature of Econometrics and Economic Data:

- Introduction, Model Specification and applied research
- The role of data in model specification
- The Structure of Economic Data
- Steps in Empirical Analysis
- Causality and the Notation of Ceteris Paribus in Econometrics, etc.

Module 2:

The Classical Linear Regression Model:

- Estimation and Inference: Ordinary least squares (OLS) estimation, the Classical assumptions, the Gauss-Markov theorem and properties of the OLS estimators
- Interval estimation and hypothesis testing and prediction
- Reporting and interpreting regression results
- Maximum Likelihood techniques
- Restricted Least Square estimation
- Likelihood Ratio (LR)
- Wald and Lagrange Multiplier (LM) Test
- Minimum Variance Bound (Rao-Cramer Inequality Theorem).

Module 3:

Non-linear regression:

- Conversion of non-linear forms into linear forms
- Testing linear versus non-linear functional form
- Appropriateness and relevance of the choice of functional form.

Module 4:

Regression Analysis with Qualitative information: Binary (or Dummy) Variables:

- Exogenous Dummy Variable- Formulating and interpreting coefficients on dummy explanatory variables

- Interactions involving dummy variables and use of dummy variables in seasonal analysis
- Piecewise regression analysis
- The dummy variable alternative to chow test.
- Discrete and Limited Dependent variable - Linear Probability Model, Problems relating to LPM
- Logit and Probit Model
- Multinomial Choice Models: Ordered Response Model; Unordered Response Model, Censored and Truncated Regression Model

Module 5:

Multicollinearity:

- Introduction, perfect versus imperfect Multicollinearity
- Consequences, tests for detection and remedies for Multicollinearity.

Module 6:

Violation of the OLS Assumptions:

- Introduction, Consequences of violation of OLS assumption
- GLS Estimation- Aitken's generalization of Gauss Marks Theorem.
- Heteroscedasticity & Autocorrelation: Causes and consequences, diagnostic tests and remedial procedural

Module 7:

Specifications: Choosing the Independent Variables and Functional Form

- Omitted variables: Too few variables, Irrelevant variables: variable overload, Criterion of choice, superfluous variables etc.
- The use and Interpretation of constant term
- Alternative Functional forms, Problem with incorrect functional form, test for choosing the appropriate functional form.

Module 8:

Lagged Variables and Distributed- Lag Models:

- Introduction, Consequences of applying OLS
- Almon's lag approach
- Koyak Transformation: Partial adjustment hypothesis and adaptive expectations hypothesis, estimation of distributed lag models etc.

Module 9:

Simultaneous Equation Models (SEM):

- Introduction, Structural, reduced form and final form model
- Rational behind the use of SEM - simultaneous bias and inconsistency of the OLS estimator
- Problem of Identification: Rank and Orders conditions
- Methods of estimation: ILS, 2SLS, Instrumental Variable, LIML (LVR), Mixed estimation Method, 3 SLS and FIML methods.

References

Books:

- Green, William H. (2014), *Econometric Analysis*, *Prentice Hall*.
- Griffiths, Hill and Judge (1993), *Learning and Practicing Econometrics*, *Wiley*, New York.
- Gujarati, Damodar, (2003), *Basic Econometrics*, 4th Edition, *Tata McGraw Hill Publishing Company*, New Delhi
- Johnston and Dinardo (1997), *Econometric Methods*, 4th Edition *McGraw-Hill International Edition*.
- Judge, G.G. et al., *Introduction to the theory and Practice of econometrics*, 2nd Edition *John Wiley and Sons*.
- Koutsoyiannis, A (2004), *Theory of Econometrics*, 2nd edition, *Palgrave*, N. Y.
- Madala G.S. (2001), *Introduction to Econometrics*, *John Wiley & Sons*.
- Pindyck & Rubinfeld (1997), *Econometrics Models & Economic Forecast*, 4th edition, *McGraw-Hill/Irwin*.
- Studenmund, A.H., (2005), *Using Econometrics: A Practical Guide*, *Addison Wesley Publishing Company*, Boston.
- Wooldridge J. (2009), *Introductory Econometrics: A Modern Approach*, *South-Western College Pub*.

Articles:

- Amemiya , Takeshi (1980), 'Selection of Regressors', *International Economic Review*, Vol. 21, No. 2, June, pp. 331-354,
- Amin and Islam (2014), 'Are There More Female Managers in the Retail Sector? Evidence from Survey Data in Developing Countries,' Policy Research Working Paper-6843, *World Bank*.
- Angrist and Kruger (2001), 'Instrumental Variables and search for Identification: From Supply and Demand to Natural Experiments,' *Journal of Economic Perspective*, Volume 15, November 4- Fell 2001, P 69-85
- Chen, Dhal, and Khan(2002), 'Nonparametric Identification and Estimation of a Censored Regression Model with an Application to Unemployment Insurance Receipt', *Center For Labor Economics University of California*, Berkeley Working Paper No. 54
- Chintagunta and Honore (1996), 'Investigating the effects of marketing variables and unobserved heterogeneity in a multinomial probit model,' *International Journal of Research in Marketing, Elsevier Science*, 13(1996) 1-15
- Comanor William S. and Wilson Thomas A. (1967), 'Advertising Market Structure and Performance', *The Review of Economics and Statistics*, Vol. 49, No. 4, Nov., pp. 423-440
- Dornbusch, R.and Pechman, Clarice (1985), 'The Bid-Ask Spread in the Black Market for Dollars in Brazil', *Journal of Money, Credit and Banking*, Vol. 17, No. 4, Part 1, November, pp. 517-520.
- Halvorsen, R. and Palmquist, R. (1980), 'The Interpretation of Dummy Variables in Semi logarithmic Equations', *The American Economic Review*, Vol. 70, No. 3, June. pp. 474-475
- Harvey, A. C. (1976), 'Estimating Regression Models with Multiplicative

Course Code: MA-A-05

Course Name: Mathematics for Economics

Objective:

The course aims at providing students an understanding of mathematical concepts alongwith economic applications, and introduce them to mathematical thinking and vocabulary. The concepts and techniques discussed in this course will find applications in the various branches of Economics. The expectation is that the instructor will sketch/prove theorems depending on the level of the class and focus on problems drawn from the microeconomics and macroeconomics courses.

Module 1:

Introduction: Exponents; Polynomials; Factoring; Equations: Linear and Quadratic; Completing the Square; Simultaneous Equations; Functions; Graphs, Slopes and Intercepts; Graphs of Nonlinear Functions; Isocost Lines; Supply and Demand Analysis; Income Determination Models; IS-LM Analysis; Production-Possibilities Frontiers.

Module 2:

The Derivative and Rules of Differentiation: Limits; Continuity; Slope of a Curvilinear Function; The Derivative; Differentiability and Continuity; Derivative Notations; Rules of Differentiation; Higher Order Derivatives; Implicit Differentiation.

Module 3:

Uses of the Derivative in Mathematics and Economics: Increasing and Decreasing Functions; Concavity and Convexity; Relative Extrema; Inflection Points; Optimization of Functions; Marginal Concepts; Optimizing Economic Functions; Price Elasticity of Demand and Supply Relationship among Total, Marginal and Average Concepts.

Module 4:

Calculus of Multivariable Functions: Functions of Several Variables; Rules of Partial Differentiation; Second Order Partial Derivatives; Optimization of Multivariable Function; Constrained Optimization with Lagrange Multiplier; Significance of Lagrange Multiplier; Differentials; Total and Partial Differentials; Total Derivatives; Implicit and Inverse Function Rules.

Module 5:

Exponential and Logarithmic Functions: Exponential Functions; Logarithmic Functions; Properties of Exponents and Logarithms; Natural Exponential and Logarithmic Functions;

Solving Natural Exponential and Logarithmic Functions; Logarithmic Transformations and Nonlinear Functions.

Module 6:

Fundamentals of Linear Algebra and Matrix Inversion: The Rule of Linear Algebra; Definitions and Terms; Addition and Subscription of Matrices; Scalar Multiplication; Vector Multiplication; Multiplication of Matrices; Commutative, Associative and Distributive Laws in Matrix Algebra; Identify and Null Matrices; Matrix Expressions of a System of Linear Equations; Row Operations; Augmented Matrix; Gaussian Method of Solving Linear Equations; Determinants and Non-singularity; Third Order Determinants; Minor and Cofactors; Laplace Expansion and Higher Order Determinants; Properties of Determinants; Cofactor and Adjoint Matrices; Inverse Matrices; Solving Linear Equations with the inverse; Cramer's Rule for Matrix Solutions; Gaussian Method of Inversing of Matrix.

Readings:

- Dowling Edward T., Mathematics for Economics, Shaume's series.
- Chiang, A.C., Fundamentals Methods of Mathematical Economics, McGraw-Hill, 2005
- Simon, Carl P. and Lawrence Blume, Mathematics for Economists, W. W. Norton & Company, Inc., 1994

Additional Readings:

- Anton H. and Chris Rorres, Elementary Linear Algebra, Wiley India, 2005
- Bartle R. G. and D. R. Sherbert, Introduction to Real Analysis, John Wiley & Sons, 2000
- 3. Binmore, K., Foundations of Analysis, Books 1, Cambridge University Press, 1980
- 4. Binmore, K., Foundations of Analysis, Books 2, Cambridge University Press, 1981
- 5. Dhrymes, P. J., Mathematics for Econometrics, Springer, 2013
- Strang, G., Linear Algebra and Its Applications, Cengage Learning, 2007

Course Code - MA-A-08

Course Name - Economic Growth and Development

Learning Outcomes:

- To familiarize students with the multidimensionality of the concept of ‘development’ (Module I)
- To discuss the major theoretical developments in areas of growth economics and policy discourse (Module II)
- To elaborate the development theories pertaining to underdevelopment problems of the least-developed or developing countries (Module III, V)
- To provide detailed accounts of secular problems faced by developing countries such as slow growth, high poverty rates, high income inequality etc. (Module IV, VI)

Module 1:

Introduction

- Economic growth, Economic development, Human Development
- Approaches to evaluate growth : trickle down effect, basic needs approach
- Approaches to evaluate development: Rights-based approach, Capability approach ; Development as Freedom
- Growth and development indicators such as GDP, GNP, Per Capita Income, Human Development Index and its extensions, Gender related Development Index (GDI), Gender Empowerment Measure (GEM), Methodology of computation and measurement issues

Module 2:

Growth Theories:

- Harrod-Domar Model
- Solow growth model and its application to convergence of country growth rates
- New growth theories: Human capital, Externalities and ideas; endogenous technological progress and development

Module 3:

Development theories:

- Vicious Circle of Poverty
- Low-level Equilibrium Trap
- Rostow’s Stages of Growth
- Big Push, Balanced and Unbalanced growth
- Dual-economy models by Lewis, Ranis-Fei,
- Rural-urban migration and urban unemployment (Harriss-Todaro model and extensions),
- Rural-urban wage-gap (Labour turnover model and wage- efficiency model – their extensions and limitations)
- Myrdal’s model of Geographical Dualism

Module 4:

Institutions & economic development

- Institutions, role of institutions in long-run growth and development
- Which institutions matter?
- Why Poor nations remain poor?

- Institutions for well-functioning market economies, Market failures
- Government failures
- Community and Economic Development, Management of common property resource, Community Failures

Module 5:

Poverty and Inequality:

- Measures of poverty- absolute versus relative poverty, poverty gap ratio, poverty lines, Multidimensional Poverty Index (MPI), debates about poverty lines, Inclusive Growth
- Measures of Inequality - Kuznets ratio, Lorenz curve, GINI Coefficient
- Linkages with development - capital versus labour market, Kuznet's Inverted U-shaped hypothesis, Income and Wealth Inequalities, Social Inequality,
- Basic equality and social security and Health care
- India's performance in case of poverty and inequality reduction, lessons learned from RCTs

Module 6:

Development Experiences and Policy Lessons

- International comparison of India with other countries on growth and development indicators
- Inter-state or inter-district comparison on various development indicators and development policies
- Overview of SDGs - targets and achievements

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- Basu, K. (2003), *Analytical Development Economics: The Less Developed Economy Revisited*, The MIT Press.
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Additional Reading List

Module I:

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Module II:

- Aghion, P. and Howitt, P. *Endogenous Growth Theory*. The MIT Press, 1997.
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 Module III:

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Bardhan, P. (1988), 'Alternative approaches to development economics' Oxford University Press, New Delhi,

Chenery and Srinivasan (eds) 1995. Handbook of Development Economics, Vol. 1, Elsevier

Bardhan, P. and C. Udry (1999), Development Microeconomics, oxford University press.

Basu, K. (2003), Analytical Development Economics: The Less Developed Economy Revisited, The MIT Press.

Booth, D. (1995), 'Marxism and Development Sociology: Interpreting the Impasse', In: Corbridge, Development Studies, London: Edward Arnold.

Frank, G. (1984), 'The development of underdevelopment' in The Political Economy of Development and Underdevelopment, ed. Charles K. Wilber. New York: Random House. 1984. Pp. 100

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Ray, D. (2009), Development Economics, Princeton University Press.

Thirlwall, AP (2006), 8th Edition, Growth and Development, Palgrave Macmillan.
 Module IV:

Bardhan, P. (1989), 'The New Institutional Economics and Development Theory', World Development, Vol.17 (9), pp.1389-1395.

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Hayami, Y. (1997), Development Economics: From the Poverty to the Wealth of Nations, Oxford: Clarendon Press.

Module V

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Fields, Gary S. (1981) Poverty, Inequality, and Development: A Distributional Approach, Journal of Policy Modeling, 3(3), 295-315

Fields, Gary S., 1981. "Poverty, Inequality, and Development," Cambridge Books, Cambridge University Press.

Gary S. Fields (2001) "Distribution and Development A New Look at the Developing World", The MIT Press, DOI: <https://doi.org/10.7551/mitpress/2465.001.0001>, ISBN (electronic): 9780262272605

Pomeranz K, The Great Divergence: China, Europe and the Making of the Modern World, Princeton UP 2000

Piketty. T. Capital in the Twenty-First Century, Editions du Seuil,, Belknap Press, 2014

Grusky, David B., Kanbur Ravi, Sen Amartya (2006) "Poverty and Inequality", Stanford University Press

Reports by various committees on poverty line

Reports of Planning Commission / NITI Aayog, India

Reports of World Bank

Reports of UNDP

HDR reports

Oxfam reports

Module VI

World Bank reports
Maddison Historical Statistics: Maddison Project Database 2020
NITI Aayog - SDG India Index and Dashboard
NITI Aayog - Reports on SDGs

Course Code: MA-A-09

Course Name: Public Economics

Objective

The objective of this course is to familiarize students about the rationale for and role of government intervention in economic activities and how the government makes economic decisions. The course will examine the recent developments in both theoretical and empirical literature in the area. The Indian case studies will be discussed in detail for a better familiarity with Indian public economics.

Module 1:

Economic Rationale of the Modern State and Macro Economic Perspective of Public Finance

Issues related to market failure and the government intervention. The role of State in Allocation, Distribution, Regulation and Stabilization. The changing role of the State: Issues in a globalizing world with special emphasis on global public goods. Macroeconomics of Public Finance: The interaction between fiscal and monetary policy and fiscal stabilization.

Module 2:

Economic Analysis of Public Goods

Public goods: pure and impure public goods. Optimal provision of public goods – voting and public choice – preference revelation mechanisms – Lindahl and successors, free riding, mobility. The theory of clubs and local public goods. Public goods and the private cost of public goods- Pseudo- market mechanism for Preference Revelation.

Module 3:

Economic decision making in government

Normative social choice theory – Arrow's theorem – majority voting – The median voter model – representative democracy. Positive social choice theory: The Leviathan hypothesis – rent – seeking – lobbying and interest groups.

Module 4:

Theory of Taxation

The conflict between efficiency and equity - horizontal and vertical equity- welfare analysis with uncertainty. Shifting and Incidence of Tax: The Partial and General Equilibrium Analysis- the Harberger model Canons of taxation. Theory of Optimal Taxation. Taxation and economic efficiency. Issues related to tax policy in developing countries.

Module 5:

Tax Policy Issues in India

Indian Tax System: An assessment Practical Issues of Tax reforms in India An introduction to Value Added Tax Value Added Tax: Design, Issues and Options.

An introduction to MODVAT, CENVAT and Goods and Services Tax (GST) Issues in the taxation of Services in India.

Module 6:**Public Expenditure Theory**

Pure theory of public expenditure- Empirical evidence on public expenditure theories. Public Sector Pricing- Pricing of Public Utilities. Public expenditure management and control Concept, measurement and magnitude of subsidies. Social infrastructure and financing of human development. Growth, nature and composition of public expenditure in India Sustainability issues of Centre and State expenditure in India Issues related to subsidies in India. Social Security and State level pension reforms in India.

Module 7:**Fiscal Federalism**

Theory of Fiscal Federalism: The decentralization theorem. Economic efficiency issues in multilevel government. Assignment issues in multilevel government. Theory of intergovernmental transfers.

Module 8:**Fiscal Federalism in India**

Centre-State Financial relations in India - Constitutional provisions and various committee recommendations on sharing of revenue. Fiscal Decentralization in India in the context of 73rd and 74th Constitutional Amendments. Implication of recommendations of Finance Commission. Centrally Sponsored Schemes and its implications for federalism. Sub national fiscal reforms in India.

Module 9:**Fiscal Imbalance and Management of Public Debt**

Measurement and macro-economic impact of deficits- alternative paradigms. The concept of budget. Fiscal deficit and interest rates: Analytical and empirical issues. Public debt burden and intergenerational equity. Issues related to public debt sustainability. Trends and developments in Indian Fiscal Policy. Recent experience with stabilization functions of India government. Fiscal Responsibility and Budget Management Act: An Evaluation. Trends in and Financing pattern of deficits in India and its macro-economic implication

Basic Reading Books

- Alan Peacock (1979), *The Economic Analysis of Governments*, St. Martin Press, New York.
- Atkinson, A. and Stiglitz, J. (1980), *Lectures in Public Economics*, McGraw Hill, London.
- Auerbach, A., and M. Feldstein (1987), *Handbook of Public Economics*, Vol. 1 & 2. North Holland, Amsterdam
- Boadway, R. (1984), *Public Sector Economics*, 2nd Sub edition, Scott Foresman & Co., London.
- Cullis, J. And Jones, P. (1998), *Public Finance and Public Choice*, 2nd Edition, Oxford University Press, Oxford.
- Due, John F. and Friedlander, Ann F. (1977), *Government finance: Economics of the public sector*, 6th Edition, Richard D. Irwin Inc., Homewood.
- Helpman, E., Razin, A. and Sadka, E. (1988) Editors, *Economic Effects of the Government Budget*, MIT Press, Cambridge, Mass.
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- Stiglitz, J.E. (1989) *Economics of the Public Sector*, W.W. Norton & Company, London.
- Thompson, F. And Green, M. T. (1998), *Handbook of Public Finance*, Marcel Dekker, New York.
- World Bank (1996), *From Plan to Market*, World Development Report, The World Bank, Washington DC.
- World Bank (1997), *The State in a Changing World*, World Development Report, The World Bank, Washington DC.
- World Bank (1999), *Knowledge for Development*, World Development Report, The World Bank, Washington DC.

Articles

- Agno Sandmo (1976): *Optimal Taxation: An Introduction to Literature*, *Journal of Public Economics*, 6, pp 37-54.
- Berry, Steven T. and Joel Waldfogel (1999): "Public Radio in the U.S.: Does it Correct Market Failure of Cannibalize Commercial Stations?" *Journal of Public Economics* 71, 189-211.
- Charles Tiebout (1956): "A Pure Theory of Local Expenditures", *Journal of Public Economics*, 6, 416-424.
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- Buitner, W.H. (1990): 'Principles of Budgetary and Financial Policy', *Harvester Wheatsheaf*, New York.
- Cebula, R. (1988): 'Federal Government Deficits and Interest rates: An Empirical Analysis

of United States, 1955-1984', *Public Finance*, 43(3). 206-210

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- Coase (1974): *The Lighthouse in Economics*, *Journal of Law and Economics*, Vol. 17, No.2. (Oct.1974), pp. 357-376
- Feldstein, Martin (2001) *The Transformation of Public Economics Research: 1970-2000*, NBERwebsite.
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- James M. Buchanan (1965): *An Economic Theory of Clubs*, *Economica*, New Series, Vol. 32, No.125. pp. 1-14.
- Oates, Wallace, (1999): *An Essay on Fiscal Federalism*, *Journal of Economic Literature*, Vol. XXXVII.
- Samuelson, Paul A. (1954): "The Pure Theory of Public Expenditure." *Review of Economics and Statistics*, 387-389.
- Samuelson, Paul A. (1955): "A Diagrammatic Exposition of the Theory of Public Expenditures." *Review of Economics and Statistics* (Nov.)

Course Code: MA-A-10

Course Name: International Economics

Preamble

The course provides a deep understanding about the broad principles and theories, which tend to govern the flow of trade in goods, services and capital — both short-term and long-term — at the global level. The contents of the paper, spread over different modules, lay stress on the theory and nature of the subject which, in turn, will greatly help them to examine the impact of the trade policies followed both at the national and international levels as also their welfare implications at macro level and the distribution of gains from trade to North and South with particular reference to India. The study of the paper under the present era of globalization will train the students about the likely consequences on income, employment and social standards and possible policy solutions.

Module 1:

Inter-regional versus international trade - Mercantilist doctrine of balance of trade - Adam Smith and absolute advantage theory of trade - Ricardo and comparative advantage, its limitations - production possibility curve - Community indifference curve - Gain from trade - Offer curve - Determination of international equilibrium price - Different concepts of terms of trade - Factors affecting terms of trade.

Module 2:

Comparative advantage in Heckscher Ohlin Model - definitions of factor abundance - relationship between factor prices and commodity prices - Factor price equalisation theorem - Factor intensity reversal - the empirical evidence on Heckscher Ohlin theory - the Leontief Paradox.

Module 3:

The rationale of tariffs, quotas and subsidies – infant industry argument – tariffs and factor income distribution – Stolper-Samuelson Theorem – Rybczynski Theorem – tariffs, terms of trade and domestic prices – the optimum tariff rate – tariffs, subsidies and distortions in commodity and factor markets – effective rate of protection. Welfare implications of tariffs – Non-tariff barriers. Effects of quotas and other quantitative restrictions – tariffs versus quotas, Theory of customs union.

Module 4:

Trade and growth – export led or outward looking industrialization – case of East Asian economies – import substituting or inward looking industrialization – Case of South Asian economies with special reference to India – Growth and terms of trade – immiserising growth – Foreign exchange constraint on growth.

Module 5:

Equilibrium and disequilibrium in BOP – role of international reserves – preliminary concepts about payments adjustments – domestic monetary and fiscal policies and BOP. Foreign trade multiplier, national income and BOP – multiplier in the presence of foreign repercussions – international transmission of business cycles.

Module 6:

The demand for and supply of foreign exchange – fixed and flexible exchange rates – spot and forward markets for foreign exchange – speculation and arbitrage – role of expectations.

Module 7:

Automatic adjustment under gold standard – expenditure reducing and expenditure switching policies – Depreciation and elasticity approach – absorption approach – Multiple exchange rates– Exchange and trade controls.

Module 8:

Formation of regional trade blocs, Regional trade blocs and barriers to free flows of trade. Asian Financial Crisis of 1997, Global Financial Crisis of 2008 and Euro Zone Crisis- Causes and Impact. World Trade Organization and fair trade.

Basic Reading List

- Bhagwati & Srinivasan (1983), Lectures on international trade, The MIT Press.
- Bhagwati, Jagdish (1964), “The Pure Theory of International Trade”, Economic Journal, Vol. 74, pp. 1-78.
- Borkakoti, J. (1998), International trade: Causes & Consequences, MacMillan, London.
- Caves, R. E., Frankel, J. A., Jones, R. W. (1993), World Trade and Payments, 6th edition, HarperCollins, New York
- Chacholiades, M. (1981), Principles of International economics, McGraw-Hill, New York.
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- Chipman, J. S. (1965), “A Survey of the Theory of International Trade: Part 2, The Neo-Classical Theory,” Econometrica, October, Vol. 33, No. 4, pp. 685{760}.
- Chipman, J. S. (1966), “A Survey of the Theory of International Trade: Part 3, The Modern Theory,” Econometrica, Vol. 34, No. 1, January, pp. 18{76}.
- Ethier, W. J. (1995), Modern International economics, 3rd edition, W.W. Norton & Co.
- Heffernan & Sinclair, (1991), Modern International economics, Illustrated edition, Wiley-Blackwell
- Heller, H. R. (1973), International trade: Theory and empirical evidence, 2nd Edition, Prentice-Hall, Englewood Cliff, New Jersey.
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- Neary, J. P. (1995), Readings in International Trade: Volume I, Welfare and Trade Policy; Volume II, Production Structure, Trade and Growth, International Library of Critical Writings in Economics, Edward Elgar, Cheltenham.
- Pugel & Lindert (1999), International economics, 11th edition, Irwin/McGraw-Hill, December 13.

Additional Reading List

Module 1:

- Batra (1973), Studies in the Pure Theory of International Trade, St. Martin's Press, August.
- Borkakoti, J. (1987), International trade: Causes & Consequences, Palgrave, MacMillan.
- Bhagwati, J. N. (1987), International trade: Selected readings, 2nd Edition, MIT Press, Cambridge, Mass.
- Takayama (1972), International Trade, Holt, Rinehart and Winston, New York

Module 2:

- Bhagwati, Jagdish (1964), “The Pure Theory of International Trade”, Economic Journal, Vol. 74, pp. 1-78.
- Jhonson, Harry (1958), International trade & economic growth, Harvard University Press, Cambridge.
- Leontief, W. (1986), Input output economics, Oxford University Press, USA.
- Minhas, Bagicha S. (1962), “The Homohypallagic Production Function, Factor-Intensity Reversals, and the Heckscher-Ohlin Theorem,” Journal of Political Economy, April, Vol. 70, pp. 138-156.
- Neary, J. P. (ed.) (1995), Readings in International Trade: Volume I, Welfare and

Trade Policy; Volume II, Production Structure, Trade and Growth, International Library of Critical Writings in Economics, Edward Elgar, Cheltenham.

Module 3:

- Brander, James A. & Spencer, Barbara J. (1985), "Export subsidies and international market share rivalry," Journal of International Economics, Elsevier, Vol. 18(1-2), February, pages 83-100.
- Kravis, Irving B. (1956), "'Availability' and Other Influences on the Commodity Composition of Trade," Journal of Political Economy, Vol. 64, No.2, April, pp. 143-155.
- Krugman, Paul, (1979), A model of innovation, technology transfer & the world distribution of income, Journal of Political Economy, Vol. 87, April, pp. 253-266.
- Krugman, Paul R. (1994), Rethinking international trade, MIT Press.
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- Patibandla, M. (1994), New Theories of International Trade: A Survey of Literature, The Indian Economic Journal, January- March
- Vernon, Raymond (1966), "International Investment and International Trade in the Product Cycle," Quarterly Journal of Economics, Vol. 80, May, pp. 190-207.

Module 4:

- Bhagwati, J. N. (1987), International trade: Selected readings, Second Edition, MIT Press, Cambridge, Massachusetts
- Bhagwati, Jagdish (1969), Trade tariffs & growth, The MIT Press, November 15
- Corden (1971), Theory of Protection, Clarendon Press, Oxford.
- Greenaway, David (1983), International trade policy: From Tariffs to the New Protectionism, Macmillan Publishers Limited, London.
- Neary, J. P. (ed.) (1995), Readings in International Trade: Volume I, Welfare and Trade Policy; Volume II, Production Structure, Trade and Growth, International Library of Critical Writings in Economics, Edward Elgar, Cheltenham.
- Pearce & Batra, Theory of nominal tariffs & subsidies.

Module 5:

- Corden (1971), Theory of Protection, Clarendon Press, Oxford.
- Greenaway, David (1983), International trade policy: From Tariffs to the New Protectionism, Macmillan Publishers Limited, London.
- Helpman & Krugman (1989), Trade policy and market structure, The MIT Press, March 30

Module 6:

- Bhagwati, J. N. (1987), International trade: Selected readings, 2nd Edition, Cambridge, MIT Press, Massachusetts

- Lipsey, R. G.(1957) The theory of customs unions trade diversion and welfare, The Review of Economic Studies, *Economica*, Vol. 24, No. 93, Feb, pp. 40-46.

Module 7:

- Bhagwati, J. N. (1987), *International trade: Selected readings*, Second Edition, MIT Press, Cambridge, Massachusetts
- Honson, Harry (1958), *International trade & economic growth: Studies in Pure Theory*, Harvard University Press, Cambridge, Chap. 5
- Neary, J. P. (1995), *Readings in International Trade: Volume I, Welfare and Trade Policy; Volume II, Production Structure, Trade and Growth*, International Library of Critical Writings in Economics, Edward Elgar, Cheltenham.

Module 8:

- Aggarwal, M. R. (1979), *Regional Economic Cooperation in South Asia*, S. Chand and Co., New Delhi.
- Bhalla, & Bhalla, (1997), *Regional Blocs*, Palgrave MacMillan.
- Bhandari, S. (1998), *WTO & Developing Countries*, 1st edition, Deep & Deep Publications, June

Additional Reading List:

- Caves & Johnson, (1968), Readings in International Trade, Homewood, IL-Irwin Yeager
- Leland B.(1966), International Monetary Relations Theory, History & Policy, The Journal of Finance, Blackwell Publishing for the American Finance Association, vii, pp 544-46
- Richard D. (1968), Readings in the Theory, Homewood, Ill. A.E.A.: Irwin, Inc. Salvatore, D ., International Economics 8th edition John Wiley and Sons, Inc
- Clement, M. O (1967)., Theoretical Issues in International Economics, Houghton Mifflin Boston
- Frankel, Jeffrey, (1997), Regional Trading Blocs in the World Economic System, Institute for International Economics, Washington, DC
- I. M. F. Occasional papers (1993), Experience with regional integration Industrial countries.
- 6.Kenen, P. B. (1995), Economic and Monetary Union in Europe, Cambridge University Press, U.K.
- 7.Pomfret, Richard (2001), The economics of regional trading arrangements, Oxford University Press.

Course Code: MA-A-11

Course Name: Financial Institutions and Markets

Course Outcome:

The course will enable the students:

- i. To introduce the various domestic and foreign financial markets and describe the special functions of financial institutions (Module 1 and 8).
- ii. To look at factors that determine interest rate levels, as well as their past, present, and expected future movements (Module 2).
- iii. To describe the central bank's role and how monetary policy implemented by the monetary authority affects interest rates and, ultimately, the overall economy; to summarize the operations of commercial banks, describe the key characteristics and recent trends in the commercial and co-operative banking sector; to provide a comprehensive look at the regulations under which these financial institutions operate and, particularly, the effect of recent changes in regulation (Module 3).
- iv. To take an analytical look at how financial markets and institutions benefit today's economy; to present an overview of the various securities markets and describe each securities market, its participants, the securities traded in each, the trading process, and how changes in interest rates, inflation, and foreign exchange rates impact a financial manager's decisions to hedge risk; to analyze the ways in which financial institutions can insulate themselves from liquidity risk and the key role deposit insurance and other guarantee schemes play in reducing liquidity risk. (Modules 4, 5 and 7).
- v. To provide an overview describing the key characteristics and regulatory features of international financial institutions (Module 6).
- vi. In the context of the unifying framework of the nation's financial and monetary regime, this course offers different perspectives, both in terms of pedagogical presentation and issues.

Module 1:

Financial System and Market Risk Management: (6 hours)

- Structure of Financial System
- Indian Financial System
- The Place of Financial Markets in the Economy
- Real Assets and Financial Claims – A Framework for Macro-Economic Analysis of Financial and Non-Financial Flows
- The Relation Between Stocks and Flows
- Types of Risk - Importance of Risks in the Competitive Management of the Banking Institutions

Module 2:

Rate of Interest, International Transactions and Exchange Rates: (6 hours)

- Rate of Interest
- International Transactions
- Exchange Rates

Module 3:

The Central Bank, Commercial Banks and Co-operative Banks: (6 hours)

- Functions of Central Banks
- The Aims and Objectives of the Monetary Policy in Developed and Developing

- Countries
- Instruments of Monetary Policy
- Effectiveness of Monetary Policy
- Credit Creation and Control
- Commercial Banks - Profitability, Efficiency, Role in the Economy
- Co-operative Banks - Role in the Economy

Module 4:

Specialized Financial Institutions: (6 hours)

- Industrial Finance Corporation of India (IFCI)
- Industrial Development Bank of India (IDBI)
- Industrial Credit and Investment Corporation of India (ICICI)
- Industrial Investment Bank of India (IIBI)
- Small Industries Development Bank of India (SIDBI)
- Shipping Credit and Investment Corporation of India (SCICI)
- National Bank for Agriculture and Rural Development (NABARD)
- Export Import Bank of India (EXIM)
- National Housing Bank (NHB)

Module 5:

Other Financial Institutions: (6 hours)

- Insurance Companies
- Types of Insurance Companies
- Securities Firms
- Investment Banks
- Finance Companies
- Mutual Funds
- Pension Funds

Module 6:

International Financial Institutions: (6 hours)

- International Monetary Fund (IMF)
- World Bank
- International Finance Corporation (IFC)
- Asian Development Bank (ADB)
- International Development Association (IDA)
- Bank of International Settlements (BIS)
- International Financial Standards and Codes and Issues of Financial Contagion

Module 7:

Financial Markets and Market Regulations: (7 hours)

- Primary Markets Vs. Secondary Markets
- Securities Firms and Securities Industry
- Government Securities Markets and Dealerships
- Money Markets
- Capital Markets
- Structure And Operations of Indian Money Market
- Bond Markets

- Mortgage Markets
- Stock Markets
- Foreign Exchange Market
- Call Money Market
- Treasury Bill Market
- Commercial Bill Market
- Markets For Commercial Papers and Certificates of Deposit
- Discount Market
- Market for Financial Guarantees
- Government (Gilt-Edged) Securities Market
- Industrial Securities Market
- Derivative Markets
- Capital Market Regulations
- Money Market Regulations
- Stock Market Regulations
- Role of SEBI - Its Impact on the Working of Capital Market in India
- IRDA And its Role in Financial Markets
- Management of Liquidity and Risk
- Bank Safety and Prudential Regulations;
- The Role of Central Banks
- Government Guarantees
- Deposit Insurance
- Security Market Regulation
- Pension Fund Regulation
- Insurance Regulation and Accounting Practices

Module 8:

International Markets: (7 hours)

- US Money and Capital Markets
- London Money Markets
- London Capital Markets
- Foreign Trade Finance
- External Commercial Borrowings
- GDRs and ADRs
- Eurocurrency and Eurobond Markets

References Books:

- Bhole, L.M. (2003), Financial Institutions and Markets, 3rd edition, Tata Mc Graw Hill Company Ltd., New Delhi
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- Joshi, P. R., Global Capital Markets: Shopping for Finance, (2nd ed.), Tata McGraw-Hill.
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- Dufey, G. & Giddy, I.H. (1994), The International Money Market, Prentice Hall, New Jersey.
- Saksena, R.M. (1970), Development Banking in India, 1st edition, Vora.
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- Ghosh, D. N. (1979), Banking Policy in India: An Evaluation, Allied.
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Vasudevan, A. (2003), Central Banking for Emerging Market Economies, (October 1), Academic Foundation.

Rose, Peter S. (2002), Money & Capital Markets, 8th edition (July 22), McGraw-Hill/Irwin.

Mathur, B. L. (2000), Financial Sector Reforms, RBSA Publishers.

RBI, Report on Trend & Progress of Banking in India, 2005-06.

Ministry of Finance, Government of India – Economic Survey.

Additional Reading List:

Module 1

Bishop, P. and D. Dixon (1992), Foreign Exchange Handbook, McGraw Hill, New York.

Chandra, P. (1997), Financial Markets, (4th Edition), Tata McGraw Hill, New Delhi.

Farrell, J.L. (1997), Portfolio Management, (2nd Edition), McGraw Hill, New York.

Machiraju, H.R. (1997), International Financial Markets in India, Wheeler Publishing, Allahabad.

Shaw, E.S. (1983), Financial Deepening in Economic Development, Oxford University Press, London.

Module 2

Fenstermaker, J.V. (1969), Readings in Financial Markets and Institutions, Appleton, New York.

Shaw, E.S. (1983), Financial Deepening in Economic Development, Oxford University Press, London.

Smith, P.F. (1978), Money and Financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cliffs, New Jersey.

Module 3

Chandler L.V., and S.M. Goldfeld (1977), The Economics of Money and Banking, Harper & Row, New York.

Gupta, S.B. (1983), Monetary Economics, S. Chand & Company, New Delhi.

Rangaranjan, C. (1999), Indian Economics: Essays on Money and Finance, UBS Publication, New Delhi.

RBI (1983), Functions and Working of RBI.

Sayers, R.S. (1967), Modern Banking, Oxford University Press, New Delhi.

Verma, J.S. (1989), A Manual of Merchant Banking, Bharat Law House, New Delhi.

Module 4

Cline, D. K., & Mazumder, S. (2022). Money, banking, and financial markets: A modern introduction to macroeconomics. Routledge.

Ritter, L. S., Silber, W. L., & Udell, G. F. (2008). Principles of money, banking & financial markets. Prentice Hall.

Module 5

Bhatt, R.S. (1996), Unit Trust of India and Mutual Funds: A Study, UTI Institute of Capital Markets, Mumbai.

Sahadevan, K.G. and M.T. Thiripalraju (1997), Mutual Funds, Prentice Hall of India, New Delhi.

Module 6

Schoenholtz, K., & Cecchetti, S. (2014). Money, banking and financial markets. McGraw- Hill Education.

Module 7

Fisher, G.E. and R.J. Jordon (1992), Security Analysis and Portfolio Management, Eastern Economy Edition, New Delhi.

Goss, B.A. and B.S. Yamey (1978), *The Economics of Futures Trading*, Macmillan, London.

R.B.I. (1985), *Report of The Committee to Review the Working of the Monetary system (Chakravarty Committee)*, Bombay.

Weller P. (1992), *The Theory of Future Markets*, Blackwell, Oxford.

Gupta, L.C. (Ed.) (1999), *India's Financial Markets and Institutions*, Society for Capital Research and Development, Delhi.

Module 8

Brahmananda, P.R. (1982), *IMF Loan and India's Economic Future*, Himalaya Publishing House, Bombay.

Chamberlain, G. (1981), *Trading in Options*, Woodhed-Faulker, Cambridge.

Crocker, A. (1982), *International Money: Issues and Analysis*, The English Language Book Society, Nelson, London.

Kindleberger, C.P. (1996), *A History of Financial Crisis, Manias, Panics and Crashes*, John Wiley & Sons, New York.

Mackinnon, R.J. (1979), *Money in International Exchange*, Oxford University Press, Oxford.

Niehans, J. (1984), *International Monetary Economics*, John Hopkins University Press, New York.

R.B.I. (1995), *Report of the Working Group on Foreign Exchange Market in India*, (Sodhani Group), Mumbai.

Redseth, A. (2000), *Open Economy Macroeconomics*, Cambridge University Press, Cambridge.

Yeager, L.B. (1976), *International Monetary Relations: Theory, History and Policy*, Harper and Row, New York.

Course Name: MA-A-12

Course Name: Indian Economy

This course aims at understanding of various dimensions of Indian economy and historical perspective of the various rounds of reforms carried out in different sectors of the economy after the independence.

Module 1:

History of development and planning:

Alternative development strategies—goal of self-reliance based on import substitution and protection, the post-1991 globalization strategies based on stabilization and structural adjustment packages: fiscal reforms, financial sector reforms and trade reforms.

Module 2:

Federal Finance:

Constitutional provisions relating to fiscal and financial powers of the States, Finance Commissions and their formulae for sharing taxes, Financial aspect of Sarkaria Commission Report, financial aspects of 73rd and 74th Constitutional Amendments.

Module 3:

Budgeting and Fiscal Policy: Tax, expenditure, budgetary deficits, pension and fiscal reforms, Public debt management and reforms, Fiscal Responsibility and Budget Management (FRBM) Act, Black money and Parallel economy in India—definition, estimates, genesis, consequences and remedies.

Module 4:

Poverty, Unemployment and Human Development:

Estimates of inequality and poverty measures for India, appraisal of Government measures, India's human development record in global perspective. India's population policy and development.

Module 5:

Agriculture and Rural Development Strategies:

Technologies and institutions, land relations and land reforms, rural credit, modern farm inputs and marketing— price policy and subsidies; commercialization and diversification. Rural development programmes including poverty alleviation programmes, development of economic and social infrastructure and New Rural Employment Guarantee Scheme.

Module 6:

India's experience with Urbanization and Migration:

Different types of migratory flows and their impact on the economies of their origin and destination, the process of growth of urban settlements; urban development strategies.

Module 7:

Industry: Strategy of industrial development: Industrial Policy Reform; Reservation Policy relating to small scale industries. Competition policy, Sources of industrial finances. Bank, share market, insurance companies, pension funds, non-banking sources and foreign

direct investment, role of foreign capital for direct investment and portfolio investment, Public sector reform, privatization and disinvestment.

Module 8:

Labour: Employment, unemployment and underemployment, industrial relations and labour welfare— strategies for employment generation—Urban labour market and informal sector employment, Report of National Commission on Labour, Social issues relating to labour e.g. Child Labour, Bonded Labour International Labour Standard and its impact.

Module 9:

Foreign trade: Salient features of India's foreign trade, composition, direction and organisation of trade, recent changes in trade, balance of payments, tariff policy, exchange rate, India and WTO requirements. Bilateral Trade Agreements and their implications.

Module 10:

Inflation: Definition, trends, estimates, consequences and remedies (control): Wholesale Price Index. Consumer Price Index: components and trends.

Basic Reading List

1. Uma Kapila, Indian Economy (2019), 20th Edition, Academic Foundation Publication.
2. Datta and Sundaram, Indian Economy (2019), 72nd Edition, S. Chand Publication.
3. Puri V.K., Misra S.K., Indian Economy (2019), 37th Edition, Himalaya Publishing House.

Course Code: MA-A-13

Course Name: Environmental Economics

Preamble:

The present paper intends to study the various issues concerning the environment. The study of environment in Economics is of recent origin. Economic dimension of the environment is very much important. Its study enables to understand the economic values of the environment and its services. Economics of Environment is not only an applied branch of main stream Economics, but also a normative one. It is against this overall backdrop, the present paper endeavours to study some of the environmental issues, theoretical as well as applied.

Section – I

Module 1:

Introduction to Environmental Economics:

1.1 Meaning, nature, Scope and Significance of Economics of Environment 1.2 Economic Development and the Environment- 1.3 Common Property Resources and their depletion, Ecosystems – Loss of Biodiversity 1.4 Sustainable development.

Module 2:

Environmental Problems of Industrial Development:

2.1 Environmental Problems of Industrial development: Water Pollution, Air Pollution, Noise Pollution 2.2 Depletion of ozone layer- Carbon Credit- Environment Friendly size of firm 2.3 Limits to growth theory 2.4 Special Economic Zones and the environment.

Module 3:

Environmental Problems of Agricultural Development:

3.1 Environmental Problems of Agricultural development- Salinity, water logging, desertification of land 3.2 Excess use of water, fertilizers and pesticides, farm implements cropping pattern 3.3 Natural farming 4.4 Environmental education and awareness among farmers 4.5 Forest depletion: Causes and impact, importance of social forestry.

Module 4:

Role of Various Sectors in Environment Protection:

4.1 Role of Public / Government, Private and Co-operative Sectors in Environment Protection - Role of NGOs, 4.2 World Wildlife Fund (WWF) 4.3 Chipco movement, 4.4 Save the Western Ghats.

Module 5:

Economics Of Environmental Pollution:

5.1 Cost-benefit analysis- Environmental Impact Assessment- Environmental Audit – 5.2 Environmental policy- 5.3 Economics of Recycling 5.4 Energy Sources- Energy Production from waste.

Module: 6**Rural and Urban Environmental Problems:**

6.1 Rural and Urban environmental problems – Population and the Environment- Housing and Slums and the environment- 6.2 Rural Sanitation Scheme 6.3 Poverty and the Environment.

Module-7:**Global Environmental Issues:**

7.1 WTO and environment - World Bank and the environment 7.2 Polluter pays principle – trade and environment- Climate Change- 7.3 Natural Resource Accounting 7.4 International attempts to protect the environment: Movements, Laws, and Agreements.

Module- 8:**Environmental Policy in India:**

8.1 Environmental Policy in India- Environment protection laws in India 8.2 Central pollution Control Board, 8.3 State Pollution Control Boards 8.4 Local Bodies and Environment protection.

Basic Reading List:

- Bhattacharya R.N. (Ed) (2001), Environmental Economics: An Indian Perspective, OxfordUniversity Press, New Delhi.
- U.Shankar (Ed)(2001), Environmental Economics , Oxford University Press, New Delhi.
- Hanley, Shogren & White (2004), Environmental Economics in Theory and Practice, MacmillanIndia limited, Delhi.
- Baumal, W. J. & W. E. (1997), The Theory of Environmental Policy, Prentice Hall, Englewood-Cliffs.
- Bharadwaj, R. (1983), Managing Limits to Growth, Asian and Pacific Development Centre, KulaLumpur.
- Dorfman, R. & N. Dorfman (Eds.) (1977), Economics of the Environment, W W. Norton, New York.
- Nijkamp, P. (Ed.) (1976), Environmental Economics, Vol. I & II, Martinus Nijhoft, Leiden
- Charles Perring (1987), Economy and Environment Cambridge University Press, New York.
- Ali, S. A. (1979), Resources for Future Economic Growth, Vikas Publishing House, New Delhi
- Rathore, M. S. (Ed.) (1996), Environmental and Development, Rawat Publications Jaipur.
- Garge, M. R. (Ed.) (1996), Environmental Pollution and Protection, Deep and Deep Publications,New Delhi.
- Lodha, S. L. (Ed.) (1991), Economics of Environment, RBSA Publishers, Jaipur.
- Singh, G. N. (Ed.) (1991), Environmental Economics, Mittal Publications, New Delhi
- Mehta, C. S. (1994), Environment and Law, RBSA Publishers, New Delhi.
- Karpagam, M. (1993), Environmental Economics, Sterling Publishers, New Delhi
- World Bank Report on Human Development.

Course Code: MA-A-14

Course Name: Quantitative Aptitude

The basic aim of this course is to prepare students for the advance quantitative techniques used in Economics. At the same time, it also aims to provide basic quantitative aptitude required for various competitive exams.

Module 1:

Number system, Average, Banker's Discount, Simple Interest, Compound Interests, Partnership, Percentages, Proportions, Percentage, Permutations and Combinations, LCM and HCF, Progressions, Simplification.

Module 2:

Height and Distance, Mensuration, Odd Man Out and Series, Problems on Age, Problems on Trains, Pipes and Cistern, Races and Games, Time, Work and Distance.

Module 3:

Profit and Loss, Ratio and Proportion, Relations and Functions, Square and Cube Root, Surds and Indices, Trigonometry, Volume Surface Area and Perimeter, Vector, Probability.

Module 4:

Binomial Theorem, Boats and Streams, Calculus, Calendar, Chain Rule, Clock, Complex Number and Quadratic Equations, Coordinate Geometry, Decimal Fractions, Logarithm, Linear Equations.

Module 5:

Numerical Ability: Numerical computation, numerical estimation, numerical reasoning and data interpretation.

References:

- Aggarwal, R S, 'Quantitative Aptitude', S Chand Publications, 2008, New Delhi.
- Verma, Rajesh, 'Fast Track Objective Arithmetic', Arihant Publications, New Delhi.
- Lang, Serge, 'Basic Mathematics', Springer Publications, 1998,

Course Code: MA-A-17

Course Name: Research Methodology

This paper enables students to understand the basics of research methods, concepts and types of research. It also includes various research designs and steps in research. It familiarizes students with quantitative and qualitative techniques of data collection and its actual process. Various software for data collection and analysis are introduced in this paper. The introduction of research communication, an important aspect of any research, makes this course extremely important. Further, students will get acquainted with how to write a research grant or fellowship application including ethical guidelines and other regulatory requirements.

Module 1:

Scientific Methods of Research

- Definition of Research
- Aims, objectives and scope of social research, Assumptions, Operations and Aims of Scientific Research, Steps in research, Formulation of a research problem, Operationalisation of concepts, Research Process: conceptual, Empirical and Analytical Phases of Research, Essentials Criteria of Scientific methods.

Module 2:

Research Designs and Logic in research

- Experimental research design: Pre experimental, True experimental and Quasi experimental research design, RCT
- Non-experimental research design: Descriptive, exploratory, Explanatory and Monitoring and Evaluation
- Reliability and Validity- Face, content, construct, convergent, concurrent, and predictive validity
- Inductive and deductive reasoning; Measurements
- Non-random and random errors, Scaling and composite indices

Module 3:

Data collection: Quantitative and Qualitative

- Quantitative: Survey methods and their application to public health research, Conceptual framework; Mixed-method design; Survey design and planning, sampling; Construction of questionnaire; Data collection and analysis; Large sample surveys – Techniques
- Qualitative: Types of qualitative research, approaches in qualitative Research- Ethnography, Grounded Theory, Historical research
- Qualitative data collection methods: In Depth Interview, Focus Group Discussion, Observation, Case Study, Participatory methods, KII
- Sampling and Analytical approaches- thematic analysis, content analysis, narrative analysis

Module 4:

Communication and Proposal Development

- Scientific writing, Writing and Presentation of literature review, report, papers, manuals, Research Brief, Plagiarism, Ethics in research
- Select a topic, identify a research gap, Frame research questions, Develop objectives
- Select a study design, Write the detailed methodology, Develop the analysis format
- Write proposal for grant

Module 5:

Monitoring and Evaluation

- Principles of Monitoring & Evaluation: Introduction to M&E – roles and uses; Results paradigm: inputs, activities, outputs, outcomes and impact/goal; M&E in Project Cycle; Stakeholder Analysis – who, needs and roles.
- M&E Frameworks: LFA; Logic model; Results frame; M&E plan in general
- Theory of Change: Theory of change – project design, M&E frame Knowledge & Skills for efficiency and productivity in development
- Quantitative Impact Evaluation: Estimation of Counterfactual – Theoretical concept; Descriptive comparison - Why simple difference is insufficient; Difference in Differences (DiD); Regression Discontinuity Design (RDD); Propensity Score Matching (PSM)

References :

- Kothari. C. R. (2004). Quantitative Techniques (2nd edition). Vikas Publishing House Pvt. Ltd., New Delhi
- Forum (1994). Focus Group for Health Research. Health Transition Review, 4(1): 81-104.
- Sharma, R. A. (2000). Essentials of Scientific Behavioural Research'. R. Lall book depot, Meerut (UP).
- Singh, K. (2007). Quantitative social research methods. Sage.
- Bernard, H. R. (2017). Research methods in anthropology: Qualitative and quantitative approaches. Rowman & Littlefield.
- Kish, L. (1995). Survey Sampling.", John Wiley and Sons Inc., New York.
- Lohr, S. (1999). Sampling design and analysis. Duxbury Press Pacific Grove. CA, 221, 249.
- Lwanga, S. K., Lemeshow, S., & World Health Organization. (1991). Sample size determination in health studies: a practical manual. World Health Organization.
- Singleton R.A. and Straits B.C. (1999). Approaches to Social Research. Oxford University Press.
- Young P. V. (1994). Scientific Social Surveys and Research (4th Edition). Prentice-Hall, New York.
- Tolley, E. E., Ulin, P. R., Mack, N., Robinson, E. T., & Succop, S. M. (2016). Qualitative methods in public health: a field guide for applied research. John Wiley & Sons.
- Bernard, H. R., Wutich, A., & Ryan, G. W. (2016). Analyzing qualitative data: Systematic approaches. SAGE publications.
- Green, J., & Thorogood, N. (2004). Qualitative methods for Health Research sage. New York.
- Silverman, D. (2006). Credible qualitative research. Interpreting qualitative data, 271-314.

Course Code: MA-A-18

Course Name: Money, Banking and Financial Markets

Learning Outcome

- To acquaint the students with concept of money and debates related to its definitions
- To help the students to understand the behaviour of interest rates.
- To understand the banking structure and financial stability.
- To understand the money bond and forex market and the interlinkages of these markets.

Module 1:

Introduction to Money, Banking, and Financial Markets

- Why Study Money, Banking, and Financial Markets?
- Evolution of the Payments System
- Interlinkages of Money, Banking and Financial Markets
- The Debate Relating to the Definition of Money
- Measuring Money and the Components of Money Stock in India
- Liquidity Theory- Guelry and Shaw Hypothesis

Module 2:

Supply of Money

- Central Banks's Balance Sheet
- Base Money, Its Control and Multiplier
- Factors that Determine the Money Supply
- Issues Regarding Endogenous and Exogenous Supply of Money
- Central Bank Digital Currency

Module 3:

Demand for Money

- Quantity Theory of Money
- Keynes's Liquidity Preference Theory
- Further Developments in the Keynesian Approach
- Friedman's Modern Quantity Theory of Money
- Distinguishing Between the Friedman and Keynesian Theories
- Empirical Evidence on the Demand for Money

Module 4:

- Money and Inflation
- The Discretionary/Nondiscretionary Policy Debate
- Inflation Management in U.S., Euro Zone and India
- The Lucas Critique of Policy Evaluations
- Unanticipated and Anticipated Policy- New Classical and New Keynesian

Module 5:

Understanding the behaviour of Interest Rates

- Interest Rates and Returns and Real and Nominal Interest Rates
- Determinants of Asset Demand
- Supply and Demand in the Bond Market

- Supply and Demand in the Market for Money
- Term Structure of Interest Rates

Module 6:

- Banking Structure and the Management of Financial Institutions
- Basic Banking
- The Bank Balance Sheet
- Off-Balance-Sheet Activities
- General Principles of Bank Management- Liquidity, Asset, Liability and Capital Adequacy management
- Banking Structure and Competition
- Shadow Banking
- Overview of Banking in India

Module 7:

- Financial Market
- Overview of Financial Markets
- Foreign Exchange Market
- Exchange rate regimes
- Exchange Rates in the Long and Short Run
- Covered and uncovered Interest Rate Parity Conditions
- Volatility Drivers, Pass Through and Intervention/sterilisation
- Interlinkages of Money, Bond and Foreign Exchange Market

References Books

- The Economics of Money, Banking and Financial Markets by Frederic S. Mishkin., Ninth Edition, Pearson
- Macro Economics, by Rudiger Dornbusch, Stanley Fischer and Richard Startz, Twelfth Edition, McGraw Hill
- Macro Economics,by N.Gregory Mankiew Ninth Edition, Worth Publishers

Module –wise References

Module 1

The Economics of Money, Banking and Financial Markets by Frederic S. Mishkin., Ninth Edition, Pearson

Reserve Bank of India website : Annual Report, Monthly Bulletin, Hand book of Statistics on Indian Economy, Weekly Statistical Supplement.

Concept note on Central bank Digital Currency, RBI press release October 07, 2022

Monetary Economics Institutions, theory and Policy, Suraj B. Gupta, S. Chand & Company.

Module 2

The Economics of Money, Banking and Financial Markets by Frederic S. Mishkin., Ninth Edition, Pearson

Macro Economics, by Rudiger Dornbusch, Stanley Fischer and Richard Startz, Twelfth Edition, McGraw Hill Macro Economics,by N.Gregory Mankiew Ninth Edition, Worth Publishers.

Reserve bank of India, Annual Report

Reserve Bank of India, Report on Currency and Finance, March, 2006 Chapter VIII, Balance sheet of Reserve Bank of India

Reserve Bank of India, Report on Currency and Finance, March, 2013 Chapter IV, Fiscal operations and The Balance sheet of Reserve Bank of India

Module 3

The Economics of Money, Banking and Financial Markets by Frederic S. Mishkin., Ninth Edition, Pearson

Macro Economics, by Rudiger Dornbusch, Stanley Fischer and Richard Startz, Twelfth Edition, McGraw Hill Macro Economics,by N.Gregory Mankiew Ninth Edition, Worth Publishers Macro Economics, Policy and Practice, Fredric S. Mishkin, Pearson , second Edition

Module 4

The Economics of Money, Banking and Financial Markets by Frederic S. Mishkin., Ninth Edition, Pearson

Fisher’s Theory of interest Rate and the notion of “Real”: A critique working paper no 483, The Levy Economic Institute, 2006 Interest Rates in India: Status and Issues, June3, 1998, YV Reddy, Deputy Governor, RBI Uncovered Interest Parity, IMF Working Paper, April 2006

Module 5

The Economics of Money, Banking and Financial Markets by Frederic S. Mishkin., Ninth Edition, Pearson

Fifty years of Indian Banking through the lens of Basic Statistical Returns Speech by RBI deputy governor ,October 28, 2022

A bank should be something one can bank upon, speech by DG RBI April 28, 2017

Banking Beyond tomorrow, Speech by RBI Governor, July 22, 2022

Financial sector in the new decade, speech by RBI governor, March 25, 2021
Banking landscape in the 21st Century, speech by RBI governor, February 24, 2022
Trend and Progress of banking, RBI
What is Shadow banking? Finance & Development, IMF June 2013, vol50, No 2
What is Shadow banking? IMF Working paper, WP/14/23 2014

Module 6

The Economics of Money, Banking and Financial Markets by Frederic S. Mishkin., Ninth Edition, Pearson

Exchange Rate pass through in Emerging Economies, RBI Working paper 01/2020,
Foreign Exchange Market & Cross border transaction, speech by deputy governor RBI, June 11, 2016

Exchange rate volatility in emerging markets, RBI Bulletin August 18, 2022

Managing exchange rate volatility in times of Covid-19, RBI Bulletin 2020

Major Episodes of Volatility in Indian foreign Exchange market in the last two decades (1993-2013): Central Bank response, RBI Occasional paper vol33, no 1 & 2 , 2012

Further Sources:

RBI – Official Website

IMF official Website

CCIL official website

Course Code: MA-A-19

Course Name: Public Administration and Policy

Module 1:

Indian Administration

Historical Context, Central Administration, State Administration, Field and Local Administration, Citizen and Administration, Emerging Issues, Personnel Administration.

Module 2:

Administrative Theory

The Nature of Public Administration, Public Organizations the Paradigms, Bureaucracy, Concepts in Organization.

Module 3:

Administrative Theory

Concepts and Approaches, Development Strategy and Planning, Planning Process, Bureaucracy and Development, Decentralization and Development, Public Sector and Development

Module 4:

Personnel Administration

Personnel Administration, Civil Services in India, Various Concepts in Organization

Module 5:

Financial Administration

Financial Administration Basic and Objectives, Budgeting and Budgetary Systems, Resource Mobilization, Investment of Public Funds, Financial Control, Accounts and Audit, Financial Administration of Public Enterprises, Local Finance

Module 6 :

Public Policy

Introduction to Public Policy, Policy Making Structures and Processes, Public Policy-Making Major Determinants, Policy Implementation, Policy Intervention Case Study, Policy Impact and Evaluation, Models of Policy Making

Books and Reference

- Arora, R.K and Rajni Goyal (1995). Indian Public Administration. New Delhi: Wishwa Prahashan.
- Basu, Rumki (2017). Public Administration. New Delhi: Sterling Publications.
- Bhattacharya, Mohit (2008). Horizons of Public Administration. New Delhi: Sterling Publications.
- Charabarty, Bidyut (2012). Public Administrations in a Globalising World. New Delhi: Sage Publications.
- Charabarty, Bidyut and Prakash Chand (2019). Public Policy : Concept, Theory and Practice. New Delhi: Sage Publications.
- Dwivedi, O.P (1994). Development Administration: From Underdevelopment to Sustainable Development. UK: Macmillan.
- Maheshwari, Shriram (1994). Indian Administration: An Historical Account. New Delhi: Sterling Publications.
- Prasad.D.Ravindra, Sivalinga Prasad and P. Satyanarayana (1980). Administrative Thinkers. New Delhi: Sterling Publications.
- Sapru, Radha Krishnan (2006). Administrative Theories and Management Thought. New Delhi: PHI Learning Private Limited.

Course Code: MA-A-20

Course Name: Political Economy of India's Development

Preamble

This course is designed to offer a broad structure of major issues, debates, dilemmas, relating to the key trends, aspects, features, and the future of India's economy. The course, which is oriented in a political economy perspective, aims at imparting rich analytical insights and understanding about India's economy so that students can develop a strong sense of potential, possible, and useful areas for further research on India's development from political economy perspective

Module 1:

Evolution of the debate over the role and ramifications of the British colonial rule for India's economy.

Module 2:

India's population/demography since Independence

Broad features, major trends, and regional dimensions

Module 3:

Planning in India up to 1991

Historical roots, evolution of plan models, limitations and lessons.

Module 4:

Poverty and inequality in India

Diversity of measures and estimates; debates over the trends in the post-liberalisation period; poverty alleviation programmes and REGS and their efficacy; Self-Help Groups

Module 5:

Reforms/Liberalisation in India

Its political economy and impact, roles of market, state, and planning in India's development and its future

Reading List

Module 1:

- Baran, P. (1957), *Political Economy of Growth*, Monthly Review Press.
- Morriss, D. Morriss (1969), *Indian Economy in the Nineteenth Century: A symposium*, Delhi: Indian Economic and Social History Association.
- Tomlinson, B.R. (1993), *Economy of Modern India 1860-1970*, New Cambridge History, Cambridge University Press.
- Roy, T. (2002), 'Economic History and Modern India: Redefining the Link', *Journal of - Economic Perspectives*, 16(3).
- Iyer, Lakshmi (2003), 'Long-term Impact of Colonial Rule: Evidence from India' (mimeo), Boston: MIT.
- Elingingsmith, D. and Williamson, J. (2004), 'India's de-industrialisation under British rule: New Ideas, New Evidence', Working Paper 10586, NBER, Cambridge, MA, USA.

Module 2:

- Dyson, T. R. Cassen, and L. Visaria (2004), *Twenty-First Century India*, Oxford: Oxford University Press.
- Davis, K. (1951), *Population of India and Pakistan*, Princeton.
- Dyson, T. and N. Crook (1984), *India's demography: Essays on contemporary population*, New Delhi: South Asian Publishers.

Module 3:

- Bhagwati, J. and S. Chakravarty (1969), 'Contributions to Indian Economic Analysis: A survey', *American Economic Review* 59 Supplement.
- Chakravarty, S. (1998), *Development Planning: The Indian Experience*, Oxford: OUP.
- Rudra, A. (1975), *Indian Plan Models*, Allied Publishers.
- Bhagwati, J. and P. Desai (1970), *India: Planning for Industrialisation*, OUP.
- Chakravarty, S. (1991), 'Development Planning: a reappraisal', *Cambridge Journal of Economics*, 15, pp. 5-20.
- Bardhan, P. (1998), *Political Economy of Development in India*, Oxford: Oxford University Press.

Module 4:

- Deaton, A. and V. Kozel (ed) (2005): *The great Indian poverty debate*, New Delhi: Macmillan.
- *India Development Reports*, Oxford University Press.
- Dubey, A. and R. Palmer-Jones (2005), 'Poverty in India since 1983: new poverty counts and robust poverty comparisons', *Artha Vijnana*
- Patnaik, Utsa (2005), 'Poverty and Neo-Liberalism', *Artha Vijnana*, Sept-December.
- Datt, G. and Ravallion, M. (1998), 'Farm Productivity and Rural Poverty in India', *Journal of Development Studies*, Vol. 34, No. 4, pp. 62-85.
- Ravallion, M, G. Datt, and S. Chaudhuri (1993), "Does Maharashtra Employment Guarantee Scheme Guarantee Employment?: Effects of the 1988 Wage Increase", *Economic Development and Cultural Change*, Vol. 41, No. 2, pp. 251-275.

- Sen, Abhijit (2002), 'Agriculture, Employment and Poverty: Recent Trends in Rural India' in: Ramachandran, V.K. and M. Swaminathan (eds): *Agrarian Studies: Essays on Agrarian Relations in Less-Developed Countries*, Kolkata: Tulika.

Module 5:

- Bardhan (1999), *Political Economy of Reforms in India*, New Delhi: NCAER.
- Basu, K. (ed) (2004), *India's Emerging Economy*, New Delhi: OUP.
- Dreze, J. and A. Sen (2003), *Development and Participation*, Delhi: OUP.
- Rakshit, M. (2004), 'Some macroeconomics of India's Reform Experience', in Basu
- Ahluwalia, M. (2002), 'State-level performance under economic reforms in India', In: Krueger, A. (ed) (2002), *Economic Policy Reforms and Indian Economy*, New Delhi: OUP.
- Chandrasekhar, C.P. and Jayati Ghosh, (2002), *Market that failed: Decade of neo-liberal reforms in India*, New Delhi: Left Word Books.
- Human Development Reports (various years).
- DeLong, Bradford (2001) (mimeo), 'India since Independence: An analytic growth narrative' <http://www.j-bradford-delong.net>
- Frankel, F. (2005), *India's Political Economy: a gradual revolution, 1947-2004*, Oxford University Press.

Course Code: MA-B-01:

Course Name: Indian Agricultural Economics

Course Outcomes:

- The objective of this course is to provide a detailed treatment of issues in Indian agricultural economics. (Module 1, 2 and 3)
- To formalize students with policy issues that are relevant to Indian Agricultural Economics. (Module 4, 5 and 6)
- To enable them to analyze the issues, using basic macro-economic concepts, which will be followed by micro-economic concepts in the follow up course farm management economics. (Module 7 and 8)
- Overall, the course helps students to appreciate the climate of agricultural economics in India through various modules.

Module 1:

Scope and Subject matter of Agricultural Economics, Nature and Utility of Agricultural Economics, Role and Importance of Agriculture in National Economy: share in National income, Source of livelihood, Employment generation, Industrial development and trade and economic planning.

Module 2:

National Resource base of Indian agriculture; climate, land resources, water resources, India's position in World Agriculture, Comparison of India with other countries.

Module 3:

Agricultural Growth in India during pre and post-Independence period; contribution of area and yields, sources of agricultural, levels and growth of crop yields, value of crop output, challenges ahead.

Module 4:

Factors responsible for agricultural development in India, Growth in use of technological factors in production such as irrigation, seed, fertilizers, capital during last five decades
Syllabus: M.Sc. (Economics) w.e.f. AY 2022-23. (Approved by Board of Studies on 17-01-2023; Academic Council on 6-02-2023)

Module 5:

Land Utilization Pattern, Changes in agrarian structure in India, Patterns of Cropping in different regions, Shift in Cropping Pattern and its Implications on Food Security.

Module 6:

Credit in Indian agriculture: purposes of loans, Sources of finance and changes in these over the plan period. Factors determining demand for credit. Recent policy changes in regard to farm credit and their implications.

Module 7:

Marketing: Characteristics of primary agricultural markets in India, Regulated markets and market intervention, Marketing efficiency, Marketed and Marketable surplus, Marketing Channels and Functionaries

Module 8:

Farm prices, Trends in relative prices of farm products, Supply response to prices in agriculture;
Behavior of marketed surplus, Price policy in India and its basis, Cost concepts

Suggested Readings:

- Acharya and Agarwal, 1987, Agricultural Marketing in India, Oxford & IBH Publishing Company.
- Agricultural Research Data Book 2009, Indian Agricultural Statistics Research Institute, Pusa, New Delhi 110 012
- Agricultural Statistics at a Glance 2010, Directorate of Economics and Statistics, Ministry of Agriculture, Government of India, New Delhi.
- Bhalla, G. S. and Singh G., 2001, Indian Agriculture: Four Decades of Development, Sage Publications.

Articles

- Acharya, S.S., 2007, “Agribusiness in India: Facts and Emerging Issues”, Agricultural Economics Research Review, Vol. 20, Conference Issue, pp. 409-424
- Arora, V.P.S., 2010, Promoting Agribusiness in India, Indian Journal of Agricultural Marketing, Vol. 24, No. 3, p. 1-31.
- Chand, R., 2001, Emerging Trends and Issues in Public and Private Investments in Indian Agriculture: A Statewise Analysis, Indian Journal Of Agricultural Economics, Vol 56, No. 2, April-June 2001
- Gulati, A. and Sharma, P.K., 1991, Government Interventions in Agricultural Markets : Nature Impact and Implications, Journal of the Indian School of Political Economy, Vol 3, No. 2, April- June, 1991.
- Joshi, P.K., Birthal, P.S. and Monot, N., 2006, Sources of Agricultural Growth in India: Role of Diversification towards High Value Crops, MTID Discussion Paper No. 98, International Food Policy Research Institute, Washington DC, USA
- Kannan, E. and Sundaram, S., 2011, Analysis of Trends in India’s Agricultural Growth, Working Paper 276, ISEC, Bangalore
- Kumar, A., Singh, D.K. and Kumar, P., 2007, Performance of Rural Credit and factors Affecting the Choice of Credit Source, Indian Journal of Agricultural Economics, Vol. 62, No. 3, pp. 297- 313.

Syllabus: M.Sc. (Economics) w.e.f. AY 2022-23. (Approved by Board of Studies on 17-01-2023; Academic Council on 6-02-2023)

- Srivastava, R., Saxena, N.C. and Thorat, S., 2008, Land Institutions, Policy and Reforms in India, in The Dragon and the Elephant, Agricultural and Rural reforms in China and India edited by Ashok Gulati and Shenggen Fan, Oxford 2008.

Course Code: MA-B-02

Course Name: Economics of Labour

Preamble

This course provides an introduction to labour economics and surveys existing research on a number of topics of current (if not perennial) interest in labor economics. The course is both empirical and theoretical: for each of the topics in the program, we will study some theoretical and some empirical papers, making links between the two. It will emphasise on labour market institutions and government policies that regulate the labour market.

Students will develop an appreciation of the application of economic analysis to understanding the functioning of labor markets. They will deepen their understanding of the theoretical concepts they gained in principles of economics through an in-depth study of the behavior of households and businesses in the labor market. Students will become familiar with publicly available sources of labor market data and their use in understanding labor market conditions. Knowledge of the distinctive institutional structure of labor markets in India will be obtained. Students will be able to identify and understand the major theoretical and policy issues in labor economics.

Module 1:

Supply

Static Labour-Leisure Choice – Effects of Social Programs and Income Taxes – The Life-Cycle Model – Investments in Human Capital – Collective Models of Household Labour Supply – Occupational Choice

Module 2:

Demand

Static Cost, Profit and Labour Demand Functions – Elasticity of Derived demand: the Hicks-Marshall Rules – Adjustment Costs and Dynamic Labour Demand

Module 3:

Equilibrium

Compensating Differences – Adam Smith – Evidence on Premium for Risky or Nasty Jobs – Efficiency Wages – Segmented Labour markets – Migration

Module 4:

Wage Structure

Industry Wage Differentials – Productivity and Real wages – Returns to Education – Signaling - Pensions and Retirement – Training – Minimum Wage Laws

Module 5:

The Distribution of Income

Earnings by Size – The Roy Model – Functional Distribution – Intergenerational Income Mobility

Module 6:**Cyclical Fluctuations**

Equilibrium Models of Employment Fluctuations – Real Wages over the Business Cycle

Module 7:**Discrimination**

Economic Effects of Prejudice: Theoretical Analysis – Wage Differentials by Race and Sex

Module 8:**Unemployment**

Definition and Measurement – Variations over time and Space – Job Search – Effects of Unemployment Insurance

Module 9:**Macroeconomics of Labour Market**

Classical Analysis – Neoclassical Analysis – Keynesian Analysis – Dual and Segmented Labour Market Theory – Marxian Alternative – Human Capital theory – Flexibility and Institutions in Labour Market

Module 10: Unions

Objectives and Political Structure–Bargaining Theories–Relative Wage Effects–Strikes–Union Growth and Decline–Unions in the Public Sector – Union-Oligopoly Models

Module 11:**Labour Contracts**

Employment Determination–Allocation of Risk–Compensation–Bonding; Tournaments; Incentive Pay – Multi- tasking–Team Production–Relational Contracts–Career Concerns–Wages and Promotions

Module 12:**Regulations and International Labour Standards**

Regulation of Labour – Experience of India vis-à-vis Other Countries – Entry and Product Market Regulation – International Labour Standards – Comparative Analysis – International Trade and Labour Markets

Basic Reading List

Part A:

Indian Labour Market: Concepts, Definitions and Statistics

- Sundaram, K, 2001, 'Employment- Unemployment Situation in the Nineties: Some Results from the NSS 55th Round Survey', Economic and Political Weekly, P.931-40.
- Pais, Jesim, 2002, 'Casualisation of Urban Labour Force: Analysis of Trends in Manufacturing' Economic and Political Weekly, P.631-652.
- Unni, Jeemol and Uma Rani, 2003, 'Employment and Income in the Informal Economy: A Micro Perspective' in Renana Jhabvala, Ratna M Sudarshan and Jeemol Unni (eds.) Informal Economy Centrestage: New Structures of Employment, Sage Publications, New Delhi.

Classical View on Employment - Say's Law and Free Market Theory

- Stephen R King and McConnell Rick M, 1993, Macro Economics, New York.
- Robinson, Joan, R, 1936, 'Disguised Unemployment', The Economic Journal, June.
- **Keynesian View on the Labour Market**
- Keynes, J M, 1936, The General Theory of Employment, Interest and Money, Macmillan, London.
- Chapple, Simon, 1995, 'The Kaleckian Origins of the Keynesian Model', Oxford Economic Papers, 47(3): 525-537.
- Banerjee, P C, 1960, 'Full Employment and Low Full Employment in a Developing Economy', Indian Journal of Labour Economics, 2(4): 227-243.
- Rakshit, Mihir, 1983, The Labour Surplus Economy: A Neo-Keynesian Approach, Macmillan India Limited, New Delhi.

Extra Readings:

- Bhaduri, Amit, 1984, The Economic Structure of Backward Agriculture, Macmillan India Limited, New Delhi. (Chapter 7: Class Relations and the Pattern of Accumulation in Backward Agriculture).

6. J C H Fei and G Ranis, 1964, Development of the Labour Surplus Economy: Theory and Policy, Richard D Irwin, Inc, Homewood Illinois.

Neo-Classical Labour Market: Labour Supply, Labour Demand and Equilibrium

- Ashenfelter, O. and Layard, R. The Handbook of Labor Economics, Volumes 1 & 2, North-Holland, 1986; Volume 3A, 3B & 3C, 1999
- Borjas, G. (1996): Labor Economics, New York: McGraw-Hill Companies
- Killingsworth, M. (1983): Labor Supply, Cambridge University Press, Chapters 1, 2 & 7.
- Hamermesh, D. (1993): Labor Demand, Princeton University Press, Chapters 2 and 3.
- Seth, V K and S C Aggarwal, The Economics of Labour Markets: Policy Regime Changes and The Process of Labour Adjustment in the Organised Industry in India. New Delhi: Ane Books, 2004.

Extra Readings:

- Ben Fine, Labour Market Theory: A Constructive Reassessment. London and New York: Routledge, 1998.
- Joyce P Jacobsen and Gilbert L Skillman, Labour Markets and Employment Relationships: A Comprehensive Approach. London: Blackwell Publishing, 2004.
- Kaufman, B. E. and Hotchkiss, J. L. (1999) The Economics of Labor Markets, (fifth

edition). FortWorth: TX: Dryden Press.

- Bardhan, Pranab, 1986, Land, Labour and Rural Poverty: Essays in Development Economics, Delhi: Oxford University Press. Chapters 1 and 5.

Dual Labour Markets and Segmented Labour Market Theory

- Lewis, Arthur, 1954, 1954, Economic Development with Unlimited Supplies of Labour, The Manchester School.
- D Jorgenson, 1961, 'The Development of a Dual Economy' Economic Journal.
- J C H Fei and G Ranis, 1966, 'Agrarianism, Dualism and Economic Development' in Irma Adelman and E Thorbecke (eds.) The Theory and Design of Economic Development, John Hopkins Press, Baltimore.
- M P Todaro, 1969, 'A Model of Labour Migration and Urban Unemployment in Less Developed Countries', American Economic Review.
- J R Harriss and M P Todaro, 1970, 'Migration, Unemployment and Development: A Two-Sector Analysis' American Economic Review.
- Basu, K, 1984, The Less Developed Economy: A Critique of Contemporary Theory, New Delhi: Oxford India Paperbacks. (Chapter 5: The structure of Dual Economy; Chapter 6: Migration and Unemployment).
- A Dixit, 1973, 'Models of Dual Economies' in J A Mirrlees and N H Stern, Models of Economic Growth, Macmillan, London.
- Tokman, V E, 1978, 'An Exploration into the Nature of Informal-Formal Sector Relationships', World Development, 6 (9/10): 1065-75.
- Moser, Caroline, M, 1978, 'Informal Sector or Petty Commodity Production: Dualism or Dependence in Urban Development', World Development, 6 (9/10): 1041-64.
- Chaudhuri, T D, 1989, 'A Theoretical Analysis of the Informal Sector, World Development, 17(3): 351-55.
- Gibson, B and B Kelley, 1994, 'A Classical Theory of the Informal Sector' The Manchester School, Vol. LXII, No.1.
- Davies, Rob, 1979, 'Informal Sector or Subordinate Mode of Production', in Ray Bromley and Chris Gerry (ed.) Casual Work and Poverty in the Third World Cities, John Wiley and Sons.
- Loveridge, R and A L Mok, Theories of Labour Market Segmentation: A Critique, Martinus Nijhoff Social Science Division, The Hague, (Chapter 3: Segmented Labour Markets).
- Rodgers, G, 1993, 'The Creation of Employment in Segmented Labour Markets: A General Problem and its Implications in India', Indian Journal of Labour Economics, 35(1): 32-47.
- Ben Fine, Labour Market Theory: A Constructive Reassessment. London and New York: Routledge, 1998.
-

Extra Readings

- Godfrey, Martin, 'Rural- Urban Migration in a Lewis Model Context, The Manchester School.
- Patel, U and P Srivatsava, 1996, 'Macroeconomic Policy and Output Comovement: The Formal and Informal Sectors in India', World Development, 24 (12): 1915-23.

Marxian Labour Theory of Value

- Ben Fine, Labour Market Theory: A Constructive Reassessment. London and New York:

Routledge, 1998.

- Custers, P, 1997, Capital Accumulation of Women's Labour in Asian Economies, Vistaar Publications, New Delhi. (Chapter 5: Home Based Women Labourers in the Garment Industry in.

Course Code: MA-B-03:

Course Name: International Relations

Objectives:

This course acquaints students with the core concepts, processes, and issues of international relations such as power, the international system, balance of power, hegemony, conflict, cooperation, integration, globalization, interdependence, dependence, regimes etc., The course identifies the key actors in international relations including states, intergovernmental organizations, non-governmental organizations, transnational corporations, global civil society, and individuals, and attempts to understand how these actors interact to give substance to international relations. The course aims to demonstrate knowledge of the key dimensions, events and processes of international relations within their historic and economic context, such as the features and effects of globalizing market capitalism, growing environmental problems, and human rights.

Module 1:

Introduction

- Introducing the discipline, its nature and scope
- International Relations Theory- Realism, Liberalism, Marxist approach

Module 2:

Brief History of World Politics post-1945

- Rise of the Super Powers- the USA and USSR
- Cold War-ideological and strategic bipolarity; End of Cold War
- Post 1991 World Order- Unipolarity, US hegemony
- Contemporary scenario- decline of USA and rise of the rest

Module 3:

International Political Economy

- Introduction to the study of international political economy-evolution of international economic relations in trade, finance, and economic development
- The workings of the international order from the point of view of political economy, MNCs and TNCs
- Examination of effects of national policies and international collaboration of public and private international financial institutions, in particular management of international debt crisis, economic policy coordination, and the role of international lender of last resort.

Module 4:

The Politics of International Trade and Finance

- Theories of trade and protectionism, focusing both on relations among advanced industrial nations and on relations between developed and developing countries. standard and strategic trade theory, nontariff barriers to trade, export-led growth strategies, regional trade agreements, and the future of the WTO.
- The welfare and distributional aspects of international trade and finance as they relate to the politics of economic policy making; globalization in historical perspective; origins and consequences of trade policy; exchange-rate arrangements;

international capital flows; currency crises; economic development

Module 5:

International Law and Organizations

- International Economic and Trade law, International Environmental Law, International Nuclear and space law, International Diplomatic law, International Human Rights Law: Migrant Population., Conflict between international legal obligations and domestic politics of citizenship, immigration, asylum, and human trafficking.
- The theory and function of IOs (UN, NATO, EU, World Bank, IMF) in promoting international cooperation in security, peace-keeping, trade, environment, and human rights and challenges faced by them.

Module 6:

Special and Contemporary Issues in International Relations:

- Growing Regional Cooperation in International Relations
- Terrorism
- Nuclear Proliferation
- Climate Change
- Human Rights and Gender Justice

Module 7:

India's Foreign Policy

- Making of India's Foreign Policy: - Foundations of Indian foreign policy and its evolution since 1947; objectives, strategies of engagement – bilateralism and multilateralism
- India's Nuclear and Security Policies
- India's Interface with its Neighbors
- Foreign Policy of India towards South Asian Countries, position of India in SAARC, India's bi-lateral engagements with the South Asian countries, i.e Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka, Maldives, Afghanistan.
- India and the Major Powers – USA, EU, Russia, Japan, and China.
- India's approach to major global issues; Disarmament – arms control - cross border terrorism, environmental position, and Human right

References:-

- Baylis, John and Steve Smith(ed) Globalization of World Politics- An Introduction to international relations OUP ,2014
- Goldstein, Joshua S and Pevehouse. Jon C, 2010 International Relations, Pearson 3. Gilpin, Robert; Global Political Economy, Princeton University Press, 2001
- Harihara Das, Principles of International Law and Organization (New Delhi: Vikas Publishing House Pvt. Ltd., 1994).
- 5. J. N. Dixit, Indian Foreign Policy and its Neighbours, New Delhi: Gyan Publishing, 2001. 6. Jawaharlal Nehru, India's Foreign Policy: Selected Speeches, September 1946-April 1961 New Delhi: Publications Division, Ministry of Information and Broadcasting, Govt. of India, 1961 7. **Klein, Naomi (2014), *This Changes Everything: Capitalism vs. The Climate Change*, New York: Simon & Schuster**
- Margaret Karns and Karen Mingst, eds., International Organizations: The Politics and Processes of Global Governance Lynne Rienner Publishers, 2009.
- Mohan, C Raja (2003), Crossing the Rubicon: The Shaping of India's New Foreign Policy, New Delhi: Penguin Books
- **Muni, S. D and Iftikhar A. Lodhi (2010), *The Emerging Dimensions of SAARC*, New Delhi:**

Foundation Books.

- Muni, S.D and Girijesh Pant (2005), India's Search for Energy Security: Prospects for Co-operation with Extended Neighborhood, New Delhi: Observer Research Foundation.
- Nehru, Jawaharlal (1934), Glimpses of World History, London: Penguin Books.
- Prasad, Vijay (2009), The Darker Nations: A Biography of the Short-lived Third World, New Delhi: Left Words.

Articles

- Harshe, Rajen (2006), "Culture, Identity and International Relations", Economic and Political Weekly, 41:37, 3945-3951.
- Kahler, Miles (1998), "Rationality in International relations" International Organisation, 52:4, pp. 919-941.
- Tellis, Ashley J (2014), "The geopolitics of the TTIP and the TPP", Adelphi Series, 54:450.
- Wright, Thomas (2015), "The Rise and Fall of the Unipolar Concept", The Washington Quarterly, 34:7, pp. 7-24.

Course Code: MA-B-04

Course Name: International Economic Institutions

Objective:

The objective of the course is to introduce students to the various international economic institutions like WTO, World Bank, IMF, IFC, OECD and their roles and functions in monitoring international flow of capital, goods and services. Also, the course aims at unfolding the international political dimension of these institutions.

Module 1:

Introduction to the Study of International Economic Institutions

Understanding the need for International Economic Institutions. Political Economy of the International economic institutions. Various approaches of institutional economics.

Module 2:

WTO

- Objectives
- Major emerging issues relating to all the agreements
- Brief review of all the important agreements

Module 3:

The World Bank Group

- The IBRD's aims and its financial structure.
- The IBRD's resource-drawing policy.
- The IBRD's loan policy.
- The IBRD and the environment.
- The International Finance Corporation (IFC).
- The International Development Agency (IDA)
- The Multilateral Investment Guarantee Agency (MIGA)
- The World Bank's evolving role in the post-Cold War era.
- The Multilateral Investment Guarantee Agency

Module 4:

The International Monetary Fund (IMF).

- The International Monetary System and the International Monetary Fund (IMF)
- IMF features: the quota system, the Articles of Agreement, membership conditions.
- The IMF's policies and its instruments. Special Drawing Rights (SDR), stand-by arrangements, extended facility, enlarged access
- The IMF's role in the international economy: oversight of exchange-rate stability, debt rescheduling, balance-of-payment assistance.
- The IMF's efforts to battle corruption and bad governance.
- The IMF and its handling of the international debt problem.
- Origins and growth of foreign debt in the seventies.
- The institutional response to the debt crisis: debt renegotiation and rescheduling

following the IMF's lead.

- The 1997 East Asia crisis. Causes and action taken.

Module 5:

The Organization for Economic Cooperation and Development (OECD)

- Objectives and institutional make-up of the OECD
- OECD activities and functions
- The OECD and development: The Committee of Aid for Development

Module 6:

Multilateral Regional Banks: ADB, BRICS Bank (NDB),

SAARC Bank Reading List:

- Thummuluti Siddahiah, (2011), *International Financial Management*, Pearson
- Apte, P. G., (2012) *International Financial Management*, 6th Edition, Tata Mcgraw-hill, New Delhi 3.
- van Meerhaeghe, (1998), *International Economic Institutions*, Seventh edition, Springer, US.

Course Code: MA-B-07

Course Name: Population Studies

Course Outcomes: The course will enable the students:

- To understand the basic tenets of demography as well as key demographic issues and illustrations in Indian context (Module 1, 2 & 8)
- To comprehend the developments in demographic concepts like Fertility, Mortality and Migration. (Module 3, 4 & 5)
- To apply quantitative and the qualitative methods to study the characteristics of human population as well as the population processes. (Module 1 & 6)
- To analyse health care markets by studying the role of government and market failures. (Module 7)
- To evaluate the interplay between demographic processes and economic development. (Module 5 & 7)

Module 1:

Introduction and Sources of Data

Evolution of demography as a scientific discipline

Nature and scope of demography and changes in it over the time

Multi-disciplinary nature of demography and its links with other social science disciplines

Basic demographic concepts

Components of population change

Sources of Data – Population Census, Sample Registration System, Vital registration

System, National Sample Survey, Large sample demographic and health surveys

Quality of demographic data

Demographic transition

Module 2:

Population Size, Growth and Characteristics

Overview of the size and growth of world population by regions and Size and growth of

India's population

Composition by age and sex

Age pyramids

Determinants of age and sex structure and its economic and social implications

Population momentum

Demographic window of opportunity

Population ageing

Social and economic implications of population ageing

Population sex ratios and its variation; Child sex ratio, Sex ratio at birth, Sex ratio of elderly

Changing patterns of sex ratio in India, North-south divide, 'Missing women'

Module 3:

Fertility and Nuptiality

Concepts and measurements of cohort and period fertility

Fertility levels and differentials in developed and developing countries

Fertility levels and differentials in India

Intermediate variables affecting fertility

Intergenerational flow of wealth

Nuptiality – Concept and analysis of marital status, Singulate mean age at marriage; Trends

in age at marriage and its significance

Module 4: Mortality

Concepts and measurement of mortality

Standardization of death rates; Life tables

Levels, trends and determinants of mortality in modern times Causes of death and epidemiological transition Differentials in mortality Infant and child mortality in India - levels, trends, and determinant Maternal mortality Life tables Model life tables

Module 5:

Migration

Concepts and measurement of migration

Theories of migration related to internal migration Causes and consequences of internal migration Differentials in migration

Trends and patterns of internal migration in India

Urbanization – growth and distribution of rural-urban population in developed and developing countries

Urbanization in India - its determinants and consequences

Module 6:

Population Projection

Importance of population projection Component method of population projection Ratio method of population projection

Projection of population at the sub-national level

Module 7:

Population and Development

How is population related to economic development – stimulus, unrelated, detrimental?

Optimists, pessimists and revisionists; Optimum population

Theory of Demographic transition – Notestein, Libenstein, Becker, Easterlin, Caldwell; Cleland and Wilson models

Population and environment Population and Health

Module 8:

Population Policy in India

Evolution of population policy in India – the shift in policy from population control to family welfare, to women empowerment

Coercion versus cooperation as elements in population policy From population control to reproductive health; Safe motherhood National Population Policy 2000

Reading List: Population Studies

- Basu, A.M. (1989), Is Discrimination in Food Really Necessary for Explaining Sex Differentials in Childhood Mortality? *Population Studies*, 43:193-210.
- Bhat, M. (2002), Returning a Favour: Reciprocity between Female Education and Fertility, *World Development*, 39(10).
- Bhat, M. (2002), On the Trial of Missing Indian Females, *Economic and Political Weekly*, 37(51)(52): 5105-518, 5244-5263.
- Bhat, M. and F. Zavier (2003), Fertility Decline and Gender Bias in Northern India, *Demography*, 40(4):637-657.
- Bende, A.A. and T. Kanitkar (2000), *Principles of Population Studies*, Mumbai: Himalayan Publishing House.
- Birdsall, N. (1988), Economic Approaches to Population Growth. In H. Chenery, and T. Srinivasan(eds.), *Handbook of Development Economics*, North Holland.
- Birdsall, N., A.C. Kelley, and S.W. Sinding (2001), *Population Matters*, Oxford: Clarendon Press.
- Brokerhoff, M.P. (2000), An Urbanising World. *Population Bulletin*, Volume 55, Number 3.
Washington: Population Reference Bureau.
- Cleland, J. (2001). The Effects of Improved Survival on Fertility: A Reassessment. In R.A. Bulatao and J. Casterline (eds), *Global Fertility Transition*, Population Council, Supplement to *Population and Development Review*, Volume 27, 2001
- Cleland, J. and Wilson, C. (1987), Demand Theories of the Fertility Transition: An Iconoclastic View, *Population Studies*, 41:5-30.
- Cleland, J. and G. Kaufmann (1998), Education, Fertility, and Child Survival: Unravelling the Links. In A.M. Basu and P. Aaby (eds.), *The Methods and Uses of Anthropological Demography*, Oxford: Clarendon Press.
- Croll, E. (2000), *Endangered Daughters: Discrimination and Development in Asia*, London:Routledge.
- Dasgupta, P. (2000). Population and Resources: An Exploration of Reproductive and Environmental Externalities, *Population and Development Review*, 26(4):643-689.
- Dyson, T. and Moore (1983), On Kinship Structure, Female Autonomy, and Demographic Behaviour, *Population and Development Review*, 9(1):35-60.
- Das Gupta, M. (1987), Selective Discrimination against Female Children in Rural Punjab, *Population Development Review*, 13(1):77-100.
- Drèze, J. and M. Murthi (2001), Fertility, Education, and Development: Evidence from India. *Population and Development Review*, 27(1).
- Dyson, T., R. Cassen and L. Visaria (2004), *Twenty First Century India: Population, Economy, Human Development and the Environment*, New Delhi: Oxford University Press.
- Hinde, A. (1998), *Demographic Methods*, New York: Oxford University Press.
- Jain, A.K. (1985), Determinants of Regional Variations in Infant Mortality in Rural India, *Population Studies*, Volume 39. Pp. 407-424.
- Jain A.K., and P. Visaria (1988), *Infant Mortality in India: Differentials and Determinants*, New Delhi: Sage Publications.
- Lee, R.D. (1986), Malthus and Boserup: A Dynamic Synthesis, In: D. Coleman and R.S. Schofield(eds), *The State of Population Theory: Forward from Malthus*, Oxford: Basil Blackwell.
- Mason, K.O. (1986), The Status of Women: Conceptual and Methodological Issues in Demographic Studies, *Sociological Forum*, 1(2):284-300.
- McFalls Jr, J.A. (1998), *Population: A Lively Introduction*, *Population Bulletin*, Volume 53, Number 3. Washington: Population Reference Bureau

- McNay, K. et al. (2003), Why are Uneducated Women in India Using Contraception: A Multilevel Analysis, *Population Studies*, 57(1):21-40.
- Mosley, W.H. and L.C. Chen (1984), An Analytical Framework for the Study of Child Survival in Developing Countries. *Population and Development Review*, Supplement to Volume 10. Pp. 25-45.
- Murthi, M., A-C. Guio, J. Drèze (1995), Mortality, Fertility and Gender Bias in India: A District- level Analysis, *Population and Development Review*, 21:745-782.
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- Newell, C. (1988), *Methods and Models in Demography*, New York: John Wiley and Sons.
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- Jacob S. Siegel and David a. Swanson (2004): *The Methods and Materials of Demography*, Second Edition, Chapters 1, 2, 3, 7, 9,10, Elsevier Science, USA.
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- Guilmoto, C. Z. and S. Irudaya Rajan, 2001. "Spatial Patterns of Fertility Change in Indian Districts", *Population and Development Review*, 27, 4, 713-738 15.
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 - "update on the number of missing women," *Population and Development Review* 28(2): 285–312.61. Mosley, W. H. and L. C. Chen (1984): *Analytical framework for the study of child survival in developing countries*, *Population and Development Review* 10 (Supplementary Copy).
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 - Victor Fuchs (1982), *Economic Aspects of Health*, The University of Chicago Press, Chicago (edited volume)
 - Tim Ensor and Sophie Witter (2001), *Health economics in low income countries: adapting to the reality of the unofficial economy*, *Health Policy*, Vol. 57, pp. 1-13.

Course Code: MA-B-08

Course Name: Indian Political System

Preamble

This course would introduce students to the general studies, especially to the Indian government system and the Indian Polity. As students are expected to be aware about the Indian Constitution and the overall political discourse in India. This course would make them well equipped for the various competitive exams.

Module 1:

The Indian Constitution

Salient Features of Indian Constitution; Dual Citizenship for NRIs; Criticism of Indian Constitution; Effectiveness of India's Constitutional Framework; Preamble: approach to Liberty, Equality and Justice; Secularism: Failures and challenges; Fundamental Rights; Directive Principles of State Policy; Fundamental Duties.

Module 2:

Constitutional Provisions and Institutional Functions

Indian Federal System: Structure and Process; Center State Legislative Relations; Centre-State Administrative Relations; Center State Financial Relations; Politics of Planning vis-a-vis State Autonomy; Politics of President's Rule in the State; The Party System and Political Dynamics of Indian Federalism.

Module 3: Indian Parliament

Indian Parliament: Role and Functioning; Working of Parliament; Office of the President; Prime Minister: Office and Powers; Union Council of Ministers.

Module 4: Party Systems and Elections

Nature of Indian Party System; National Parties; Role of Regional and State Parties; Pressure Groups in Indian Politics; The Election Commission: Organization, Functions and Roles; Electoral Reforms in India; Elections and Political Participation.

Module 5: Judiciary and Democratic Process

Supreme Court in India; Judicial Review in India; Judicial Activism in India; Crime and Politics: The Nexus; National Integration.

Reading List:

- Fadia B.L. (2010), India Government and Politics, 8th Edition, Sahitya Bhavan Publications
- Durga Das Basu, Introduction to the Constitution of India, 21st Edition, LexisNexis Publications.

Course Code: MA-B-09

Course Name: Linear Economics – I

Preamble

This course exposes students to developments in economic theory that have been inspired by the classical economists like Adam Smith and David Ricardo. The course begins by an exposition of the fallacies in the neo-classical theories of value and distribution and the limitations of standard general equilibrium theory. It then proceeds to cover input-output analysis and its empirical applications. Finally, it covers alternatives to the neo-classical theories such including the Kaldor Pasinetti theory of income distribution and the Sraffa and Von Neumann models. Finally, an alternative general equilibrium model is covered which determines prices, outputs, growth and income distribution.

Model 1

Critique of Mashall’s theory of supply based on the law of variable proportions. Critique of the marginal productivity them. Critiques of neo-classical production functions.

Module 2

Economy as a Circular Flow. Static closed and open input output models. Hawkins-Simon conditions. Construction of Input-Output tables. Some applications. Dynamic input-output analysis.

Module 3

The Von Neumann model. The Sraffa system and its properties Standard Commodity. Reductionto dated labour.

Module 4

Alternative theories of income distribution. The Kaldor Pasinetti model and its developments.

Module 5

Closure for the Sraffa system. An alternative general equilibrium model and its empirical relevance.

Course Code: MA-B-10

Course Name: Linear Economics - II

Course Outcome:

- The course will enable the students:
- Incorporation of Money and Finance in General Equilibrium theory (Module 1)
- Proof of Essentiality and non-neutrality of modern money (Module 2 and 3)
- Construction of Keynesian model with deflationary gap (Module 4)
- Multi-country general equilibrium model of exchange rates (Module 5)
- Trade equilibrium with many countries and commodities (Module 6)

Module 1:

Critique of trade models and exchange-rate theories

- Critique of the Heckscher-Olin-Samuelson model of trade
- Non-viability of reduction of reality to $2 \times 2 \times 2$ models.
- Critique of exchange rate theories

Module 2:

Frank D. Graham's theory of multi-country multicommodity trade

- Introducing the theory of Frank D. Graham
- Extensions of the theory to tariffs, intercountry transfers and taxation.
- Trade in intermediate and final goods.

Module 3:

Keynesian Revolution

- Money in general equilibrium theory: Patinkin's findings of Arrow, Clower, Hahn, Ostroy.
- Keynesian Counter revolution.

Module 4:

Building the Keynesian critique of the Classical theory

- The Static Keynesian economy with money.
- Critique of IS-LM model.
- Possibility of unemployment equilibrium. Fiscal Policy. General ineffectiveness of monetary policy instruments including TARP, etc.

Module 5:

Integrated model of the level and structure of spot interest rates.

- Dichotomy in the theories of the level and theories of the term structure of interest rates.
- Integrated model of the level and structure of spot interest rates.

Module 6:

Dynamic Keynesian economy

- The dynamic Keynesian economy with money and several financial assets.
- General disequilibrium.
- Role of fiscal and monetary policies.

Reading List:

Books:

- Graham, F. D. (1948), *The theory of International Values*; Princeton University Press
 - Parchure, Rajas (1994), *The Theory of International Values*, Wiley Eastern, New Delhi
- Article:
- Garegnani (1983) "Two Routes to Effective Demand: Comment on Kregel", in J. A. Kregel (ed).,
 - *Distribution, Growth and International Economic Relations*, London: Macmillan
 - Hahn, F.H. 1965. "On Some Problems of Proving the Existence of an Equilibrium in a Monetary Economy," in *The Theory of Interest Rates*, ed. F.H. Hahn and F.P.R. Brechling, 126-135, London; Macmillan.
 - Hahn, F.H. 1971. "Equilibrium with transaction costs". *Econometrica* 39, 417-39.
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 - Keynes, J.M. 1936. *The General Theory of Employment, Interest and Money*, London: Macmillan. Keynes, J.M. 1937. "The General Theory of Employment" *Quarterly Journal of Economics*, 51, 209-223.
 - Kurz H. D. (2016) *Economic Thought, A Brief History*, New York: Columbia University Press.
 - Kurz, M. 1974. "Equilibrium in a finite sequence of markets with transactions cost". *Econometrica* 42, 1-20.
 - Ostroy, J.M. and Starr, R.M. 1974. "Money and the Decentralization of Exchange", *Econometrica*, 42, 1093-1113.
 - Pigou, A.C. 1943. "The classical stationary state". *Economic Journal*, 53, 343-51.
 - Posner R. (2011) "Walras, Keynes and the 'Great Recession', in Bridels P. (ed.) *General Equilibrium Analysis. A Century after Walras*, New York: Routledge.
 - Shapley, L. and Shubik, M. 1977. "Trade using one commodity as a means of payment". *Journal of Political Economy* 85, 937-68.
 - Smith, A. 1776, 'The Wealth of Nations', J.M. Dent, London.
 - Sraffa P. (1960). "Dr. Hayek on Money and Capital", *The Economic Journal*, 42, 42-63.
 - Starr R. (2010). "Sequence Economies" in *The New Palgrave, Dictionary of Economics*, Palgrave Macmillan.
 - Tobin J. 'A General Equilibrium Approach to Monetary Theory' reprinted in J. Tobin, *Essays in Economics*, 1971, vol.I, 322-338, Amsterdam: North-Holland.
 - Syllabus: M.Sc. (Economics) w.e.f. AY 2022-23. (Approved by Board of Studies on 17-01-2023; Academic Council on 6-02-2023)
 - Sraffa, P. (1962) "The Laws of Returns under Competitive Conditions," *Economic Journal*, Vol.36. Sraffa, P. (1932a) "Dr. Hayek on Money and Capital," *Economic Journal*, Vol.52.
 - Sraffa, P. (1932b) "Rejoinder", *Economic Journal*, Vol.52.
 - Lee, R.D. (1986), *Malthus and Boserup: A Dynamic Synthesis*, In: D. Coleman and R.S. Schofield (eds), *The State of Population Theory: Forward from Malthus*, Oxford: Basil Blackwell. Mason, K.O. (1986), *The Status of Women: Conceptual and Methodological Issues in Demographic Studies*, *Sociological Forum*, 1(2):284-300.

- McFalls Jr, J.A. (1998), Population: A Lively Introduction, Population Bulletin, Volume 53, Number 3. Washington: Population Reference Bureau
- McNay, K. et al. (2003), Why are Uneducated Women in India Using Contraception: A Multilevel Analysis, Population Studies, 57(1):21-40.
- Mosley, W.H. and L.C. Chen (1984), An Analytical Framework for the Study of Child Survival in Developing Countries. Population and Development Review, Supplement to Volume 10. Pp. 25-45.
- Murthi, M., A-C. Guio, J. Drèze (1995), Mortality, Fertility and Gender Bias in India: A District- level Analysis, Population and Development Review, 21:745-782.
- Nag, M. (1988), A Framework for the Study of Proximate Determinants of Infant Mortality in Less Developed Countries. In Jain A.K., and P. Visaria (Eds.), Infant Mortality in India: Differentials and Determinants, New Delhi: Sage Publications.
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- Pandey, A. M.K. Joe, N.Y. Luther, D. Sahu and J. Chand (1998), Infant and Child Mortality in India, National Family Health Survey Subject Reports. Number 11. Mumbai: International Institute for Population Sciences and Honolulu: East-West Programme on Population.
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- Smith, P.C., (1978): Indices of Nuptiality: Asia and Pacific, *Asian Pacific Census Forum*, Vol. 5(2) 56. Anderson, Siwan and Debraj Ray. 2010. "Missing women: Age and disease," *Review of Economic Studies* 77: 1262–1300.
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- Tim Ensor and Sophie Witter (2001), *Health economics in low income countries: adapting to the reality of the unofficial economy*, *Health Policy*, Vol. 57, pp. 1-13.

Course Code: MA-B-11

Course Name: Social Exclusion and Inclusion Policy

Course Outcome:

- To develop an understanding of the origin, basis and different forms of Social Exclusion (Module I)
- To study the diverse theoretical perspectives on discrimination, social choice and welfare. (Module II)
- To understand the social order of different caste and concepts associated with the exclusion of geographically excluded population. (Module III)
- To formulate policy paradigms for their inclusion in the economy. (Module IV)
- To create awareness about the social excluded people from an economic and social policy perspective as well as to analyze social inclusive policy for them. (Module V)
- To study the institutional role in affirmative action and reservation policies for inclusive policies (Module VI)

Module 1:

Understanding Social Exclusion (10 hours)

- Conceptualising Social Exclusion, Origin and Basis of Social Exclusion
- Forms of Social Exclusion like Religion, Race, Caste, Gender, Ethnicity, Region, Culture,
- Language, Disability, Migrants and Refugees
- Excluded Groups and Socio-Economic Disparities: Scheduled Castes, Tribals, Minorities,
- Women, Old Aged and the Physically Challenged;
- Contemporary Discussions on Social Exclusion

Module 2:

Theoretical Perspectives on discrimination (12 hours)

- Economics of Discrimination; Marxist and Liberal Perspective
- Capability Approach and Theories of Poverty
- Economic Justice, Economic Freedom and Welfare
- Social Choice and Human Rights Approach

Module 3:

Social Exclusion of Caste, Tribe and Minority (8 hours)

- Indian society: Social Order in Caste, Tribe and Minority; Caste System as an Institution of
- Exclusion
- Exclusion of Tribes: Nation-State Formation, Industrialisation, Urbanisation, Globalisation
- etc
- Dimensions of Exclusion for Marginality: Development, Issues of Identity and Human
- Rights Violation
- Module IV: Dimensions of exclusions and inclusive policy perspectives (8 hours)
- Scheduled Castes, Minorities and Affirmative Action;

- The Question of Reservation and Affirmative Action – Constitutional Provisions and Contemporary Debates with reference to the Mandal Commission Report and the Sachar Committee Report
- Labour Market Discrimination, Wage Differentials, Problems of Employability, Social Security and Pension
- Access to Finance, Micro Finance and Financial Inclusions of the Excluded People
- Module V: Physically challenged and Old Aged Social Exclusion (10 hours)
- Physically Challenged and Social Exclusion: Constitutional Provisions, National and State Policies and Social Security Policy;
- Community Support, Awareness and Assimilation Activities;
- Aging: Social and Economic Exclusion; Gerontology Outlook in Policy Framework: Government Laws and Welfare Programmes
- Module VI: Institutions and Inclusive Policies (12 hours)
- Inclusive Policy Agenda: United Nations Organisation, Constitutional Provisions, Nodal Government Agencies and Planned State Interventions
- Human Rights Framework, Affirmative Action and Reservation Policies
- Designing Innovative Strategies for Inclusive Policies

Suggested Readings:

- Sen, A. (2000), 'Social Exclusion: Concept, Application, and Scrutiny -*/&, Asian Development Bank, Manila.
- Byrne, David (2003), 'Social Exclusion: Issues in Society', Open University Press, 2005.
- Lal, A.K. (2005) (Ed.), 'Social Exclusion: Essays in Honour of Dr. Bindeshwar Pathak', New Delhi, Concept.
- Hills John, Le Grand, J. and Piachaud, D (2002) (eds.), 'Understanding Social Exclusion', Oxford University Press
- Saith, R. (2001), 'Social Exclusion: The Concept and Application to Developing Countries', Queen Elizabeth House Working Paper Series 72, Queen Elizabeth House, Oxford.
- Jordan, Bill (1996), 'A Theory of Poverty and Social Exclusion', Polity Press.
- Breman, Jan (2002), 'The Labouring Poor in India: Patterns of Exploitation, Subordination, and Exclusion', Oxford University Press.

Course Code: MA-B-12:

Course Name: Business Analytics

Course Outcomes:

To develop a proficiency in analysing data using different techniques. (Module 1 to 8)

- To learn how to build and apply predictive models to forecast future outcomes. (Module 2 and 3)
- To gain knowledge of business outcomes. (Module 1 to 8)
- To apply optimization techniques to solve business problems. (Module 1 to 8)
- To understand the role of business analytics in strategic decision making. (Module 3 and 5)
- To learn skills and techniques for the application of R. (Module 4,6 and 7)

Module 1:

The need for Analytics and Understanding Analytics

- Decision Making – Heuristics and Biases
- The need for analytics
- Impact of analytics on business
- Being analytically competitive
- The difference between analytics and BI
- Introduction to the business Analytics model
- Types of analytics
- Models and algorithms in Analytics
- The Analytics Methodology

Module 2:

Tool and Tech Landscape

- A review of technology used in data storage, data processing, and data science
- Popular tools used in Data Science and when to use each

Module 3:

Descriptive Analytics with excel and Tableau

- An introduction to Tableau
- Using descriptive statistics in analysis and reporting
- Advanced reporting with Tableau

Module 4:

R programming

- An introduction to R
- Importing and exporting data in R
- Data Manipulation with R
- Advanced Data Manipulation with R
- Data Visualization with R

Module 5: Data Pre-processing

- Data Exploration and Assessment for Data Science

- Identifying and dealing with noise in Data
- Preparing data for Data Science Modelling

Module 6:

Predictive Models in R

- Linear Regression Models and their applications
- Logistics Regression Models and Their applications
- Time Series Forecasting

Module 7:

ML Models in R

- Clustering Algorithms and application
- Decision Tree Algorithms and applications
- Random Forest Algorithms and applications

Module 8:

Storytelling with Data

- Communicating data science results
- Effective presentation skills
- Using Data visualizations for storytelling

References:

- Provost, F., & Fawcett, T. (2013). Data science for business: What you need to know about data mining and data-analytic thinking. O'Reilly Media.
- Davenport, T. H., & Harris, J. G. (2017). Competing on analytics: Updated, with a new introduction. Harvard Business Press.
- Evans, J. R., & Paquette, L. (2019). Business analytics: Methods, models, and decisions. Pearson.
- Shmueli, G., Bruce, P. C., & Patel, N. R. (2019). Data mining for business analytics: Concepts, techniques, and applications in R. John Wiley & Sons.
- Witten, I. H., Frank, E., Hall, M. A., & Pal, C. J. (2016). Data mining: Practical machine learning tools and techniques. Morgan Kaufmann.
- Kelleher, J. D., Mac Namee, B., & D'Arcy, A. (2015). Fundamentals of machine learning for predictive data analytics: Algorithms, worked examples, and case studies. MIT Press.
- Few, S. (2019). Show me the numbers: Designing tables and graphs to enlighten. Analytics Press.
- Cairo, A. (2019). The truthful art: Data, charts, and maps for communication. New Riders.

Course Code: MA-B-13

Course Name: Insurance Economics

Course Outcome:

- The Course will enable the students:
- To know the conceptual inputs related to Insurance Environment in India (Module I)
- To understand implications of insurance legislation in India (Module II)
- To have insurance product knowledge – both life and non life for all classes of business so as to succeed in techno marketing assignment (Module III)
- To apply principles of economics and related mathematics to insurance (Module IV & V)
- To get knowledge of underwriting acceptances and risks measurement including pricing (Module VI)
- To have awareness of new techniques, products and processes of Insurance which will be covered for remaining updated in the industry (Module VII)

Module 1:

Introductory Inputs (7 Hrs.)

- Insurance concepts like, History and Advantages of insurance, Insurance Environment, Contribution to economy, Latest Trends.
- Insurance value chain PESTLE Analysis, H'ubiverse's Theory of Human Life Value.
- Principles Of Insurance like Indemnity, Utmost good faith, Insurable interest and proximate cause.
- Basic terms like Risk, Perils, Hazard, Spread of Risk, Co insurance, Reinsurance etc.

Module 2:

Insurance Legislation (7 Hrs.)

- Like Insurance Act, Indian Contracts Act, IRDAI Act.
- Latest IRDAI Regulations, Investment Norms for insurers, Organizational Structure of insurance companies.

Module 3:

Types of Insurance Products (9 Hrs.)

- Life Insurance policies like ULIPs, Double Endowment, Term Assurance, Survival benefits, death cover, Group Insurance Policies.
- Key man Insurance, Whole life policies, types of Annuities, Life & Death Annuities, Immediate & Deferred Annuities.
- Various types of Health Insurance policies including Mediclaim & OMP, Group Health
- Insurance Policies for Corporates etc. critical illness, OPD covers, corona kavach etc.
- Various types of Nonlife Policies like Fire, Motor, Marine, Liability, PA, Engineering etc.

Module 4:**Principles of Economics (6 Hrs.)**

- Approach of Mathematics and basic actuarial concepts like theory of probability, law of
- large numbers.
- Mortality, Morbidity, Risk Based underwriting, Maximum & Minimum probable loss.
- Control of expenses, aiming at profitability, claim minimization measures, contingency risks
- v/s investment risks, sharing & Spreading risks.

Module 5:**Mathematics Of Insurance (9 Hrs.)**

- Special features of Insurance accounting, Investment function in insurance companies,
- present value methods, compounding effect, perpetuities.
- Discounted cash flow, sinking fund, life fund, yield, profitability, stationary population,
- select mortality tables, survival rates, morbidity concept, BMI, Valuation of surplus, Assets
- & Liability.
- Types of Financial Reserves in Insurance Companies Balance Sheets, Premium Loadings,
- Pricing of insurance products etc. Bonus/Malus concepts, “Fair Value” of assets/liabilities,
- life office valuations.
- Concepts of Estate & Trading Profits, distribution of surplus, payment of dividends/bonus,
- profit centers, management expenses, fresh/renewal expenses, solvency margins etc.

Module 6:**Underwriting (7 Hrs.)**

- Definition, importance, profits generation , underwriting process , physical & moral
- hazards.
- Extras & discounts in rating structure, deductibles, underwriting factors in Life Insurance
- & General Insurance.
- Risk inspection, risk minimization, adverse selection, Use of riders, Loss sensitive pricing,
- Embedded devices, comparison between Indian & Global underwriting practices and need
- for contract certainty, proposal form.

Module 7:**Basic Concepts (5 Hrs.)**

- This module is for creating awareness for advanced course in insurance.
- Reinsurance, claims settlement, coinsurance.
- Risk Management, Insurance Marketing and Intermediaries, Futuristic Insurance Products
- , “Insure Tech”.

References

Text Books

Understanding General Insurance - PC James PCJ Value Media , Bengaluru
Insurance Institute of India Books on various aspects of general insurance IC 51 to IC 54 , IC 71 to IC 74, IC 77.
Black, Kenneth Jr, Skipper, Harold D Jr, Life & Health Insurance Latest Edition, Prentice Hall. Rejda George E (2010)
Principles of Risk Management and Insurance Prentice Hall (11 th Edition)
Zartman, Lester W (2003), Yale Readings in Insurance , Life Insurance, William S Hein &
Company Bates, Ian and Atkins, Derek (2009) Management of Insurance Operations, Global, Professional,

Publications.

Research Papers

Underwriting Prudence – Winning Strategy, MD Garde, BIMAQUEST, Volume 17, January 2017.
KPMG Report titled “The Connected Ecosystem a New Business Model for Insurance.
“BIMAQUEST” & “Pravartak” Publications of National Insurance Academy, Pune.
Asian Insurance Review, Publication from Singapore.
The Journal, Insurance Institute of India.
Webliography References :
<https://www.insuranceinstituteofindia.com>
<https://www.licindia.in>
<https://www.agriinsurance.gov.in/pmfby.aspx>

Course Code: MA-B-14

Course Name: Insurance Economics (Advanced Practices)

Course Outcome

The Course will enable the students

- To know the marketing principles applied to insurance (Module I)
- To deal with claim matters as after sales service (Module II)
- To get knowledge of innovative insurance products (Module III)
- To learn the importance of reinsurance and its methods (Module IV)
- To understand applications of risk management to insurance issues (Module V)
- To learn the best practices followed globally including India (Module VI)

Module 1:

Insurance Marketing (10 Hrs.)

- Fixing premium goals annually, need for marketing strategy, front desk skills, insurance intermediaries like agents, brokers etc.
- Bancassurance tie ups as a win – win mechanism, direct/tied clients servicing, Market funneling, segmentation.
- New products development, PR & Publicity, Customer Service Pre – Sale , POS &
- Aftersales, Lead generation thro referrals, Broker development programs.
- Customer focus at all levels, grievances resolution etc.

Module 2:

Insurance Claims (8 Hrs.)

- Use of claim form, need for Claims Investigations, Importance of claims as a service parameter, types of claims for each class of insurance business.
- Stages involved in the claims process, control over claims ratio , typical claim disputes, out
- sourcing of claims function, arbitration process.
- Compliance of section 64 VB, salvage disposal, reinstatement and loss of profits claims
- fraudulent claims handling etc.

Module 3:

Innovative Insurance Products (8 Hrs.)

- Innovative policies in Health Insurance. The process of product innovation as a 24×7 activity, Customer Focused & Tailor Made Products.
- New Global Products Like Autonomous Car Insurance, PAYD, Genetic Defects Coverage,
- Aerospace Related Products, Cyber Liability, Robot Surgeons Cover , Political risk.
- Demat Policies , Drone Insurance , Sports events , Retirement Products, Managed Care
- Retroactive Liability ,Gaming & Entertainment Covers.

Module 4:

Reinsurance (7 Hrs.)

- Types of risks covered in reinsurance, Definition , Importance and the process involved,
- various methods of reinsurance like Reciprocal , surplus Treaties etc. concept of lines,

- layers, avoidance of “Spiral” effect.
- Advantages of Reinsurance, reinsurance brokers , consortiums in reinsurance, Increasing retention capacities.
- Big Reinsurance Companies & Reinsurance Brokers.

Module 5:

Risk Management (9 Hrs.)

- Definition and process, its importance, various methods, advantages, covering maximum
- risk at minimum premium, Risk identification, transfer, evaluation, finance & controlling,
- Risk inspection reports, Types of risks covered, Global risk report, Insurance and reinsurance as risk transfer mechanisms.
- Need for Enterprise Risk Management (ERM)

Module 6:

Global Insurance Best Practice (8 Hrs.)

- Underwriting desk bench, formation of KPO’s, LPO’s BPO’s, Demat policies.
- Online claims & underwriting, implementation of Insure Tech, Telematics, Telemedicine,
- Embedded Devices.
- CRM solutions, Artificial Intelligence tools in insurance underwriting & claims, fraud investigations.
- Better practices of Pvt. Insurance Companies in India Project Insurance.

References

Text Books

Insurance Institute of India IC 22 to IC 26, IC 81 & 85

Gastel, Ruth (Ed) (2004) Reinsurance: Fundamentals and New Challenges, Insurance Information Institute Latest Edition.

Fundamentals of Risk Management by Paul Hopkin (irm) (Kogan Page Publications, London).

Cummins, J David and Doherty, Neil A (2005) The Economics of Insurance Intermediaries, Wharton School, University of Pennsylvania.

Research Papers:

Case Study, Motor Claims Management, M D Garde and Gautam Prasad, BIMAQUEST, Volume

17, January 2017.

Enterprise Risk Management – A Strategy to build a resilient organization & be a Business Partner - by Delzad D Jivasha – Legal Era Magazine – October 2017 issue.

Webliography References :

<https://www.irdai.gov.in>

<https://www.policyholder.gov.in>

<https://www.insurancethebox.com/telematics>

<https://www.ibm.com/blogs/insights-onbusiness/insurance/customerengagement-services-excellencein-insurance>

Course Code: MA-B-15

Course Name: Urban Economics

Course Outcomes:

- To understand the fundamentals of urban economics with the help of case studies. (Module 1)
- To get familiar with the conditions of urban cities. (Module 2 and 3)
- To understand the role of urban infrastructure. (Module 4, 5, and 6)
- To synthesize the approaches and limitations associated with urban infrastructure. (Module 4, 5 and 6)
- To analyze the situation of land and rent. (Module 3)
- To critically evaluate the role of local government for urban development. (Module 6)

Module 1:

Introduction

Urban Economics, Existence and importance of cities, 5 axioms of urban economics, Case Studies and Reports related to important Indian cities.

Module 2:

The Development of Cities

Clusters & Agglomeration; City Size and Urban Growth Development of a factory town, firm clustering, labor pooling, localization and urbanization economies, differences in city sizes Urban employment growth and the multiplier, the effects of taxes and subsidies on location choices

Module 3:

Land Rent &

Markets and Land use pattern

Land rent and urban structure, Residential Land Market, Urban Land Markets with Factor Substitution

The Spatial Distribution of Employment and Population, The Monocentric City- Rise and Demise, Urban Sprawl, Neighborhood Choice, Zoning and Growth controls

Case study of Mumbai and Pune

Module 4:

Urban Transportation

Congestion Externalities, Congestion Tax and Alternatives, Autos and Air Pollution, Automobiles and Poverty.

Commuting and transit Ridership- the Cost of Travel and Modal Choice, Efficient Volume of Ridership, Designing a Transit System

Module 5:

Urban Infrastructure

Spending and Educational Achievement- Education Production Function, Spending Inequalities and Public Policy

Crime Facts, the Rational Criminals, the Equilibrium Quantity of Crime, Legal Opportunities and Education

Water supply and sanitation, Access to basic urban amenities

Module 6:**Housing**

Importance of Housing- Durability, Detritions and Maintenance, the Filtering Model of Housing, Market

Housing Policy- Public Housing, Housing Vouchers, Rent Control and Rent Regulation

Model 7:**Local Government**

The Role of Local Government, Local Government Revenue and Expenditure, The Tiebout Model and Property tax

Financial Instruments (municipal Bonds)

*Students would be encouraged to go through the case studies on Indian Cities related to above mentioned topics.

Text Books

Arthur O'Sullivan, *Urban Economics* (7th edition), McGraw Hill Irwin, 2008.

Jan K Brueckner, *Lectures on Urban Economics*, the MIT Press, 2011

Reference Books

Edward L. Glaeser, *Cities, Agglomeration, and Spatial Equilibrium: the Lindahl Lectures*, New York, Oxford University Press, 2008 (ISBN-13: 9780199290444)

(Focus on Mathematical Modeling)

Klein, Daniel B., Moore, Adrian T., and Reja, Binyam. *Curb Rights: A Foundation for Free Enterprise in Urban Transit*. (New York: Brookings Institution, 1997 (ISBN: 978-0815749394)

William Cronon. *Nature's Metropolis: Chicago and the Great West*. W.W. Norton, 1991.

James Howard Kunstler. *The Geography of Nowhere*. Free Press, 1994

William Julius Wilson. *The Truly Disadvantaged: The Inner City, the Underclass and Public Policy*. University of Chicago Press, 1987.

Brueckner, Jan (1987) "Structure of Urban Equilibria: A Unified Treatment of the Muth-Mills Model," *Handbook of Regional and Urban Economics*, Volume II, Edwin W. Mills Ed., 821-845. Arzaghi & Henderson (2008) "Networking off Madison Avenue" *Review of Economic Studies* (2008) 75, 1011–1038

Edward Glaeser (1998) "Are Cities Dying?" *Journal of Economic Perspectives* 12(2): 127-138.

Adam Jaffe et al. (1993) "Geographic Localization of Knowledge Spillovers as Evidenced by Patent Citations." *Quarterly Journal of Economics* 108(3): 577-598

Quigley (1998) "Urban Diversity and Economic Growth" *Journal of Economic Perspectives*—Volume 12, Number 2—Spring 1998—Pages 127–138

Roger G. Noll and Andrew Zimbalist (1997) "Sports, Jobs, and Taxes: Are New Stadiums Worth the Cost?" *The Brookings Review* 15: 35-39.

Kerr & Kominers (2010) "Agglomerative Forces and Cluster Shapes", NBER working paper, 16639 18(4): 177-200.

Glaeser, Edward L., Matthew Kahn, and Jordan Rappaport (2007) "Why do the poor live in cities?" *Journal of Urban Economics*.

Book_ Newman, P. and Kenworthy, J. (1999) "Sustainability and Cities. Overcoming automobile dependence". Washington D.C.: Island Press ISBN-13: 978-1559636605, ISBN-10: 1559636602

Glenn Blomquist, Mark Berger, and John Hoehn (1988) "New estimates of the quality of life in urban areas." *The American Economic Review* 78(1): 89-107.

Glaeser, Edward L., Matthew Kahn, and Jordan Rappaport (2007) "Why do the poor live in cities?" *Journal of Urban Economics*.

Glenn Blomquist, Mark Berger, and John Hoehn (1988) "New estimates of the quality of life in urban areas." *The American Economic Review* 78(1): 89-107.

Caitlin Knowles Myers (2004) "Discrimination and neighborhood effects: Understanding racial differentials in US housing prices." *Journal of Urban Economics* 56(2): 279-302.

Michael Greenstone Enrico Moretti (2004) "Bidding for Industrial Plants: Does Winning a "Million Dollar Plant" Increase Welfare?" Working Paper Series, MIT (0-39)

Course Code: MA-B-16

Course Nam: Advanced Microeconomics

Learning Outcome:

- To acquaint the students with General Equilibrium Theory. (Module I)
- To familiarize the students with the concept of incomplete information game and the resulting Bayesian Nash Equilibrium
- To enumerate the concept of intertemporal choice of consumption and savings, arbitrage theory. (Module III)
- To develop an understanding of the basic principles and applications of Microeconomics. Various applications of microeconomics have taken place during the last forty years. This module will be taught based on presentation and discussions basically by students. References are attached separately as articles particularly for this module. It intends to improve students' analytical skills and ability to solve problems, which will be useful in several other areas of economics. (Module IV)

Module 1:

Theory of General Equilibriums

- Consumer Theory: Preference relation; Utility function; Indirect utility function;
- Expenditure function; Consumer welfare, Revealed preferences
- Producer Theory: Production function; Cost function; Profit function
- Introduction–Partial Equilibrium Vis-à-vis General Equilibrium Approach.
- Exposition of Basic Concepts.
- An Elementary General Equilibrium model – the Robinson Crusoe Economy.
Pure Exchange Economy – the Edgeworth Boxes, Pareto Optimality, Contract Curve, Core, Walras Law, Walras Equilibrium. First and Second Fundamental Theorem of Welfare Economics
- Second Level: Refreshment of Analytic and Scarcity Properties of Preference Relation. A More Elaborate exposition of the Exchange Economy: Commodities, Agents, Preferences, Utility Functions, Prices, Demand and Excess Demand Functions and their Properties.
 - Formal Definition of Allocation, Pareto Optimal Allocation, Individually Rational Pareto Optimal Allocation, Coalition, and Core.
 - Walras Equilibrium, its Relation with Core.
 - Formal Proof of First Fundamental Theorem.
 - Gross Substitutability.
 - Price Adjustment Process.
 - Brower's Fixed Point Theorem. Existence of Walras Equilibrium and Uzawa Equivalence Theorem.
 - Social Welfare Maximization and its relation with Pareto Optimality.
 - General Conditions for Uniqueness, and Discussion of Stability – Tatonnement Process.
 - General Equilibrium over Time – Arrow Debreu Scarcity (introduction only). Re-switching and Reverse Capital Deepening.

Module 2:

Games of Incomplete Information

- Static and dynamic games of incomplete information; mechanism design; screening and signalling
- Introduction to Sub-Game Perfection
- Static Bayesian Games and Bayesian Equilibrium–Theory and Examples.

Module 3:

Consumption and Saving

- Revision of Uncertainty and expected utility theory
- Time Separability
- Exponential Discounting
- The Demand for Saving, Precautionary Saving with an Endogenous Risk
- Arbitrage Theory, Definition of Arbitrage, Asset Pricing through Replicating Portfolio
- Asset Pricing
- Fundamental Theorem of Asset Pricing
- Introduction to Interest Rate Risk
- Introduction to Credit Risk.

Module 4:

Applications of Microeconomic Principles

The principal-agent model and incentive contracting

- Economics of Innovation
- Bargaining, Measurement of Productivity and Efficiency
- Search Theory
- Health Economics
- Hedonics and Non-market evaluation
- Brief Exposure to Mechanism Design and Revelation Principle

Suggested Readings:

Books:

- Broadway, R.W. and Bruce, N. (1984), *Welfare Economics*, Basil Blackwell, London.
- Debreu, G. (1977), *Theory of Value, An Axiomatic Analysis of Economic Equilibrium*, Yale University Press.
- Ellickson, Bryan (1993) *Competitive Equilibrium; Theory and Applications*, Cambridge University Press.
- Kreps, D, “A Course in Microeconomic Theory”, Princeton University Press, 1990
- Kreps, David (1988), *Notes on theory of choice*, West view Press.
- Mas-Colell, Andrew Michael., Whinston, D. And Green, Jerry R. (1995), *Microeconomic Theory*, Oxford University Press.
- Osborne, MartinJ and Rubinstein, Ariel (1994), *A course in Game Theory*, MIT Press.
- Perloff.J. 2019, *Microeconomics*, 7th Edition, Pearson Education.
- Varian, Hal R. (1992), *Microeconomic Analysis*, 3rd.Edition, International Student Edition, W. W. Norton and Company.

Articles

- Antonelli, C. (2009). The economics of innovation: from the classical legacies to the economics of complexity. *Economics of Innovation and New Technology*, Vol 18(7), pp. 611–646.
- Heshmati, A. (2003). Productivity Growth, Efficiency, and Outsourcing in Manufacturing and Service Industries. *Journal of Economic Surveys*, Vol 17(1), pp. 79–112.
- Latruffe, L. (2010). Competitiveness, Productivity, and Efficiency in the Agricultural and Agri-Food Sectors. *OECD Food, Agriculture and Fisheries Papers*.
- Lowe, J. G. (1987). The measurement of productivity in the construction industry. *Construction Management and Economics*, Vol 5(2), pp. 101–113.
- Part 1: Lippman, S. A., & McCall, J. J. (1976). The Economics of Job Search: A Survey. *Economic Inquiry*, Vol 14(2), pp. 155–189.
- Part 2: Lippman, S. A., & McCall, J. J. (1976). The Economics of Job Search: A Survey. *Economic Inquiry*, Vol 14(3), pp. 347-388.
