**Department of Economics**  
**Course:** M.A. ECONOMICS  
**Semester-Wise Paper and Credits**

*(REVISED COURSE STRUCTURE w.e.f. 2016-17)*

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MES-C-102: Macro Economics  
MES-C-103: Mathematics  
MES-C-104: Statistics  
MES-CB-101: Rural Economics  
MES-CB-102: Economics of Population & Demographic Analysis | MES-C-201: Open Economy Macro Economics  
MES-C-202: General Equilibrium & Welfare Economics  
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MES-C-402: Development Economics  
MES-OP-401: International Finance  
MES-OP-402: Monetary Economics  
MES-CB-401: Agricultural Economics  
MES-CB-402: Games and Information  
MES-SE-401: Computer Applications in Economics |

*Each paper carries 100 marks/4 credits.*
M.A. Economics Syllabus

Semester I

MES-C-101: MICRO ECONOMICS

Unit 1: Theory of Consumer Behavior
- Demand Theory: Preference Based Approach under Choice under Certainty
- Revealed Preference Theory
- Welfare Analysis and Aggregate Demand
- Consumer Demand Theory: Choice Under Uncertainty

Unit 2: Theory of Firm Production and Cost
- Theory of Production
- Theory of Cost
- Profit Function
- Homogeneous, Homothetic, CES, Cobb Douglas, Translog Production Function

Unit 3: Market Structure
- Monopoly
- Monopolistic Competition
- Oligopoly – Price Competition
- Oligopoly – Quantity Competition

Reading List:
2. Jehle & Renne, Advanced Microeconomic Theory, Pearson Education, India

MES-C-102: MACRO ECONOMICS

Unit 1: Classical Approach, Keynesian Approach and Monetarism
- Determination of Price, Output and Employment
- IS-LM Analysis-Aggregate Demand and Supply
- The Short Run and Long Run Phillips Curve
- Expectation, Interest Rates and Inflation
- The Trade-off Between Inflation and Unemployment
- The Natural Rate of Unemployment (NRU) and Full Employment
- Macroeconomic Policy.
Unit 2: New Classical Macroeconomics and New Keynesianism:
- Main Features of the New Classical Macroeconomics
- Efficient Market Hypothesis
- Rational Expectation Model
- Lucas Supply Function
- Critique of Rational Expectation Hypotheses
- Keynesian Reappraisal School (Clower, Leijonhufvud and Malinvaud)

Unit 3: Imperfect Completion Approach
- Inflation and Employment- Non Accelerating Inflation Rate of Unemployment (NAIRU) and Natural Rate of Unemployment,
- Policy to Shift the Equilibrium Rate of Unemployment;
- Supply Side Fiscal and Income Policies,
- The Effect of Policy on Actual Employment,
- Crowding out Effect

Reading List:

MES-C-103: MATHEMATICS

Unit 1: Functions and Calculus
- Types of Function; Differentiability; Rules of Differentiation; Derivative Versus Differential, Interpretation of Revenue, Cost, Demand, Supply Functions; Elasticities and Their Types; Higher-order Derivatives. Convex and Concave Functions. Multivariable Functions; Types of Production Functions, Homogeneous and Homothetic Functions.
- Partial Differentiation - Interpretation; Problems of Maxima and Minima in Single and Multivariable Functions; Unconstrained and Constrained Optimization; Simple Problems in Market Equilibrium; the Implicit Function Theorem; the Envelope Theorem (Unconstrained Case).
- Integration; Rules of Integration; Taylor Series Formula, Application to Consumer's Surplus and Producer's Surplus; Growth Rates and Simple Properties of Time Path of Continuous Variables.

Unit 2: Matrix, Determinant and Differential Equations
Vectors, Matrices, Determinants – Types and Properties. Solution of Simultaneous Equations Through inversion and Cramer's Rule
Concept of Quadratic Forms – Eigen Roots and Eigen Vectors;
Difference Equations – Solution of First order and Second order Difference Equations; Applications in Trade Cycle Models; Growth Models and Lagged Market Equilibrium Models.

Unit 3: Linear Programming, Game Theory and Input-Output Analysis

- Linear Programming – Formulation of a Linear Programming Problem, Solution of Linear Programming Through Graphical and Simplex Methods;
- Formulation of The Dual of a Linear Programme and its Interpretation; Shadow Prices and Their uses; Concept of Duality and Statement of Duality Theorems;
- Concept of A Game; Strategies – Simple and Mixed; Value of a Game; Saddle Point Solution; Simple Applications.
- Introduction to input-Output Analysis

Reading List:

**MES-C-104: STATISTICS**

**Unit 1: Probability and Probability Distributions**
- Introduction O Probability–Classical, Empirical and Axiomatic Definitions; Random Experiments – Sample Space, Sigma Field and Probability Measure; Methods of 3
- Random Variable – Discrete and Continuous; Probability Distribution - Pdf, Pmf and Cdf; Mathematical Expectation of Random Variables and Their Functions; Mean and Variance, Moment Generating Function and Characteristic Function; Numerical Examples.
- Discrete Distributions – Uniform, Bernoulli, Binomial, Poisson, Negative Binomial, Geometric; Hypergeometric, Multinomial; Use of Tables and Numerical Examples.
- Continuous Distributions – Uniform, Exponential, Normal, Lognormal, Gamma, Beta; Use of Tables and Numerical Examples.
- Multivariate Distributions – Bivariate Pdf and Cdf, Covariance, Marginal Distributions, Correlation, Partial and Multiple Correlation, Normal Bivariate, Multivariate Hypergeometric, Numerical Examples.

**Unit 2: Sampling and Sampling Distributions**
- Population Versus Sample, Iid Random Variables, Sampling Errors; Non-Random or Judgement Sampling, Methods of Random Sampling – Simple Random, Cluster, Stratified, Systematic; Sample Statistic – Sample Mean and Sample Variance; Standard Error.
- Z Chi-Square, T and F Distributions.
- Chebyshev’s Inequality, Law of Large Numbers, Central Limit Theorem, Sampling Distribution of Sample Mean, Sampling Distribution of Sample Variance.
- Sampling from Finite and Infinite Population, Finite Population Correction Factor, Sampling from Normal Population.

**Unit 3: Methods of Statistical inference**
Introduction To Linear and Non-Linear Regression.
Introduction To Nonparametric Methods, Principal Components and Factor Analysis, Analysis of Variance – One Way.

Reading List:

15. S. Ross (1976), A First Course in Probability, Macmillan.

MES-CB-101: RURAL ECONOMICS

UNIT –1 RURAL DEVELOPMENT AND INTRODUCTORY ASPECTS

- Concept of Rural Development - Scope and importance of Rural Development - Objectives of Rural Development - Typology and strategies of Rural Development
- Approaches to Rural Development strategies - Different approaches to Rural Development - Contemporary Populism, Unimodal and Bimodal Strategies of Agrarian Change, Lipton’s argument of Why Poor People Stay Poor, Agrarian Transition and Agrarian Question, Appraisal of Terry Byres
- Rural Development - Indian Perspective – Alternative strategies for Rural Development in India, Planning strategies for Rural Development in India

UNIT –II DIMENSIONS OF RURAL DEVELOPMENT IN INDIA
Rural Development – Agrarian Issues-Land Reforms, Green Revolution, Agriculture Extension on Services- Land Markets, Land ownership and tenancy, rental contracts-
Rural Entrepreneurship- Entrepreneurship- Rural and urban entrepreneurship, Rural Industry concept and definition, Role of SSI/MSME sector in India, Handloom, Agro-based Industries, Rural Artisans, Handicrafts and Sericulture.Rural Industrialisation Policy- Field Level Organizations - District Industries Centre (DIC), National Institute for Small Industries Extension and Training (NISIET) – Small Industry Development Organization (SIDO) Small Industries Service Institutes,
Rural credit and Banking- Role of Rural credit -Credit Sources- All India Rural Credit Survey- Institutional sources- NABARD, RRBs, Cooperative Credit Societies, Alternative rural credit markets- SHGs etc.

Unit – III PROGRAMMES/STRATEGIES OF RURAL DEVELOPMENT

- Income and Employment Generation Programmes - Integrated Rural Development Programme (IRDP), Development of Women and Children in Rural Areas( DWCRA), Training of Rural Youth for Self Employment ( TRYSEM)- Supply of Improved Toolkits to Rural Artisans ( SITRA) , Mahatma Gandhi National Rural Employment Guarantee Act ( MNREGA)
- Infrastructure development Programmes- Food for Work Programme (FWP), National Rural Employment Programme( NREP), Rural Landless Employment Guarantee Programme (RLEGP)- Jawahar Rojgar Yojana (JRY)Indira Awas Yojana (IAY), Million Wells Scheme(MWS)
- Area Development programmes – Drought Prone Area Programme (DPAP), Desert Development Programme(DDP)- Tribal and Hill Area Development Programme (THADP)- Intensive Agriculture District Programme (IADP)- Intensive Agriculture Area Programme (IAAP)- High Yielding Variety Programme (HYVP)

References:
1. Ray Deb Raj, Development Economics, (Chapters 11,12,13 and 14) Oxford University Press
2. Dantwala, Indian Agriculture since Independence
3. Mamoria & Tripathi, Agricultural problems of India
4. Sarap Kailas, Inter Linked Agrarian Markets in Rural India
5. Belshaw, H Agricultural Credit in Economically Underdeveloped Countries
6. Ray Deb Raj, Development Economics, (Chapters 11,12,13 and 14) Oxford University Press
7. Khusro, AM Agricultural Credit Review Committee Report
8. Battacharya S.N., Rural Industrialization in India
9. Rao R.V., Rural Industrialization in India
10. Belshaw, H Agricultural Credit in Economically Underdeveloped Countries
11. Vasant Desai., Organization and Management of Small Scale Industries
12. Sundaram J.B., Rural Industrial Development
13. Vasant Desai, Problems and Prospects of Small Scale Industries in India
15. David A.M. Lea and D.P. Chaudhri (Ed), Rural Development and the State
17. Chambers Robert (1985), Rural Development putting the last first, Longman
MES-CB-102: ECONOMICS OF POPULATION & DEMOGRAPHIC ANALYSIS

Unit-I:
Development of the discipline, Population Studies and Demography, Population studies in India subject matter, Importance & scope, Sources of demographic data, Population Census, Definition, Features, Procedures, census operation in India, vital events registration system, sample surveys, sample registration system in India.

Unit-II:

Unit-III:
Fertility, basic concepts, measures of fertility, reproduction rate, fertility transition, reasons for high fertility in developing countries, economic theories of fertility, mortality, concepts,
measures of mortality, life expectancy, sex and age pattern of mortality, mortality in India, life table, age sex, structure, sex ratio, factors, affecting sex ratio, age structure, aging of population factors determine, age structure, population growth and population policy in India.

**Suggested Readings:**

7. John C. Caldwell, Toward a Restatement of Demographic transition theory, Population and Development Review vol. 2 No. 3.. 4 September and December 1976
10. Srinivasan, K Basic Demographic techniques and application, Sage New Delhi 1968
Unit 1: Open Economy in the Short-Run
- Opening the Goods Market: IS-LM Analysis in Open Economy, Price Setting in Open Economy, Marshall-Lerner Condition
- Opening Financial Market: Uncovered interest parity condition
- Exchange Rate Regime: Fixed vs Flexible
- Trade Balance and Balance of Payments: Macro implications
- Mundell-Fleming Model for the Short run: Monetary vs Fiscal policy
- Short-run implication of imperfect capital mobility, large size of an open economy and imperfect asset substitutability.

Unit 2: Inflation and Unemployment in the Open Economy
- Inflation and Unemployment in the open Economy
- Supply side in the open economy: Wage and Price setting; ERU curve
- Demand Side and Trade Balance
- Open Economy Model: Short run, Medium run and Long-run equilibrium
- Fiscal, Monetary, exchange rate and supply side policies
- External and Domestic Shocks: Aggregate Demand Shocks, Domestic Supply Shocks, External Trade vs Supply shocks

Unit 3: Interdependent Economies
- 2-Block Model: Spillover and the case for policy coordination; interdependence in the short-run; implication of income feedback effect
- International Spillovers in the medium run: Medium run analysis in 2-block model
- Policy Interdependence and The World Equilibrium Rate of Unemployment
- Interdependence in the short and medium run: Monetary expansion under fixed vs flexible exchange rates; Fiscal expansion under fixed vs flexible exchange rates;

Reading List:
6. Bridge, Ma: Mit Press.
Unit 1: Partial Equilibrium and General Equilibrium Analysis
- Introduction - Partial Equilibrium Vs General Equilibrium
- The Fundamental Theorems of Welfare Economics
- Pure Exchange (Edgeworth Box) Economy and Competitive (Walrasian) Equilibrium
- One Consumer - One Producer (Robinson Crusoe) Economy
- 2x2 Production Model
- Partial Equilibrium Competitive Analysis
- Pareto Optimality, Core and Competitive Equilibrium

Unit 2: Social Choice and Welfare
- The Nature of the Problem
- Social Preference Relation and Social Choice Function
- Social Welfare Function – Measurability and Comparability Conditions
- Social Choice and Arrows Impossibility Theorem
- Utilitarian Social Welfare Function
- Rawlsian Social Welfare Function
- Critical Analysis of Social Welfare Functions

Unit 3: Public Goods and Market Failure
- Public Goods – Discrete and Continuous
- Externalities and Free Rider Problems
- Provisioning of Public Goods – Efficient, Private and Voting
- Demand Revealing Mechanism of Public Goods
- Externalities Problem and Pigovian Tax
- Property Rights and Coase Theorem
- Private Information and Second Best Solutions

Reading List

Text Books

Journal Articles

MES-C-203: Environmental Economics

Unit-I: Introduction
- Meaning, scope, importance, environment relation with economics growth of environmental economics, environment, market and state environment balance, environment debate, ecology, environment and economy, perspectives current state of environment, sustainable development, concept, definition, approaches, different perspectives on development and growth, thermo dynamics school, Simon Julian’s thesis of “Ultimate Resource”.

Unit-II: Eco-System and collective choices
- “Eco-system its function, net productivity of eco-system, energy flow, food chains, food webs, various eco-systems, human activities its impact on environment, environmental accounting collective choice, basic concepts, tragedy of commons, Olson’s Theory of collective action, natural resource, scarcity, classification of natural resources, economics of natural resources, natural resources exploitation, non-renewable and renewable natural resource.

Unit-III: Environmental Evaluation and Regulation
- Externality, market failure and missing market, methods of environmental evaluation, meaning and types of environmental valuation, measures of economic values, market valuation, net price method, contingent valuation method (cvm), travel cost method, hedonic pricing technique, regulation and instrument of regulation environmental policy, vision, goal and objectives

Basic Readings:

MES-C-204: ECONOMETRICS

Unit 1: Classical Linear Regression Analysis
- Simple and General Linear Regression Model-Summary
- K-Variable Classical Linear Regression Model, Hypothesis Testing.
- Violation of CLRM assumption-Heteroscedasticity; Multicollinearity and Auto-correlation;
- Maximum Likelihood Method

Unit 2: Regression with Qualitative and Lagged Variables
- Introduction to Dummy Variable, Regression with Dummy independent Variables, Dummy Variable Trap.
- Regression with Dummy Dependent Variables; the LPM and Logit and Probit Models.
- Autoregressive and Distributed Lag Models- Koyck Model and Almon Approach.

Unit 3: Simultaneous Equation Models
- Introduction to Simultaneous equation Models
- The Simultaneous Equation Bias and Inconsistency of OLS Estimators with proofs
- The Identification Problem; Rules of Identification-order and Rank Condition
- Structural and Reduced form of Model
- Method of Estimating Simultaneous Equation System and their limitations

Reading List:
5. J. Johnston, Econometrics Methods, Mcgraw Hill (Fourth Edition)
6.

MES-CB-201. FINANCIAL ECONOMICS

Unit 1: Financial Markets
- Financial Markets and Financial Instruments
- Real Assets and Financial Assets
- Stocks, Rate of Interest, Exchange Rates
- Indian Financial Markets, Regulations and SEBI

Unit 2: Modern investment Theory
- Securities Markets, Operational Efficiency and Efficient Market Hypothesis (EMH)
Modern View of Security Analysis
Performance of Securities Market, Price / Earning Ratios
The Determinants of Equity Prices, Estimating Fair Value
Capital Asset Pricing Models (CAPM), Multifactor Models

Unit 3: Financial Derivatives
- Derivatives Forward Markets and Future Markets.
- Mechanics of Futures Markets and Price Determination
- Hedgers, Speculators, Hedging Strategies
- Options and Option Pricing, Options Payoffs, Put-Call Ratio and Parity
- Mechanics and Properties of Stock Options

Reading List:
6. Z. Bodie, Robert Merton and David Cleton (2009), Financial Economics, Pearson

MES-CB-202: Labour Economics

Unit-I: Introduction
- Concept, nature and scope of labour economics, Supply and Demand for labour, Investment and Technology and demand for labour, function of labour market, labour market reform.

Unit-II: Employment and Wage Determination:
- Employment , unemployment, concept, measures counts of unemployment, unemployment in India Theories of wage determination variation, Concept of wages, Minimum wages, wages and inflation labour productivity and wage relationship.

Unit-III: Trade Union and Collective Bargaining:
- Emergence and role of union collective bargaining, social security and labour welfare, discrimination and gender bias in treatment of labour globalisation and labour market, International labour organisation.

References:

MES-C-301: INDIAN ECONOMIC POLICY

Unit 1: Development Concept and Issues in Governance
- Development Concept, State and Market, Institutions,
- Panchayati Raj Institutions – (PRIs) Non Government Organizations (NGOs),
- Sustainable Development,
- Governance
- Economic Reforms, Plans After Reforms

Unit 2: Sectoral Development and Policy Reforms
- Financing of Infrastructure Development, Education Sector,
- Migration,
- Poverty, Inequality and Growth
- Current Status of Agriculture Input Pricing, Subsidies and Land Reforms
- Industrial Policy and Development after 1991, Public Sector Under-Takings (PSUs), Privatization and Disinvestment,

Unit- 3 Policy Approaches in Fiscal, Financial and External Sector.
- Fiscal and Monetary Policy Approaches, Fiscal Federalism,
- Tax Reforms, Central Government Finances
- Foreign Trade Liberalization, Balance of Payments, Exchange Rate Policy,
- World Trade organization (WTO) and Indian Competition Policy.

Readings List:
MES-C-302: INTERNATIONAL TRADE

Unit 1: Trade Theories 1 (Classical and Neo-Classical)
- Notion of Comparative Advantage (Static Versus Dynamic, Natural Versus Acquired, Theoretical Versus Empirical, Etc); Sources of Comparative Advantage (Technology, Resource Endowments, Demand Patterns, Economies of Scale, Government Policies Etc).
- Classical Model (Smith, Ricardo, and Haberler): Assumptions, Implications and Limitations; Extension of Ricardian Model: The Specific Factor Model.
- Standard Model: Analysis of Gains from Free Trade.
- Neo-Classical Model: Assumptions and Their Implications, Factor Substitution, One-to-One Relationship Between Factor-Prices, Commodity-Prices and Factor-Intensities; Heckscher-Ohlin, Stolper-Samuelson, Rybczynski and Factor Price Equalization Theorems; Empirical Evidence - the Leontief Paradox.

Unit 2: Trade Theories 2 (Modern Theories and Trade Policy)
- Intra-Industry Trade - Trade Under The Assumptions of Imperfect Competition and Economies of Scale, Linde's Hypothesis; Dynamic Explanations (Change of Technologies) - Product-Cycle and Technology-Gap Models; Strategic Trade Policy (Management) - The Diamond Model (Michael Porter).
- Free Trade Versus Protection - Need For Protection, Tariff and Non-Tariff instruments of Trade Policy, Comparison of Tariff and Quota, Learner's Symmetry, Aggregate Measures of Protection, Nominal and Effective Rate of Protection.
- Effects of Tariff for Small and Large Countries (Partial Equilibrium Analysis), Effects of Tariff on Distribution of Gains from Trade (General Equilibrium Analysis), the Optimum Tariff, Metzler’s Paradox, Domestic Distortions, Trade Distorting Tariffs.

Unit 3: India and the World Economy
- Patterns (Structure) of India's Foreign Trade - Volume, Trends, Composition, Direction, etc., Export Performance and Export Competitiveness.
- India's Trade Policy: Review of Pre- and Post-Liberalization - Exim Policies, Export Promotion Policies, SEZs; Tariff Structure, RTAs and FTAs.
- India and WTO: Uruguay Round, Highlights of Ministerial Meetings: Singapore to Hong Kong, Concerns of Advanced Countries (Ac's) and Developing Countries (Dc's), the Doha Development Agenda (DDA) and Concerns of India.
- Effects of Trade (Liberalization and Globalization) on Poverty, Inequality, Environment, Gender, Labour Standards, Technological Transfers Etc.

Readings List:

6. Additional Readings:

Articles:

MES-OP-301. TIME SERIES ANALYSIS

Unit 1: Introduction of Time Series
- Characteristics of Time Series Data, Lag Operator
- Stationary and Non-Stationary Random Variables
Characteristics of stochastic processes (means, covariance, autocovariance and autocorrelation functions).

Variance Decomposition

Non-stationary univariate time series model: Pure Random Walk, Near Random Walk with and without drift, Difference stationary and trend stationary process

Testing for unit roots

Unit 2: Time Series Models

- **Univariate Models**: Autoregressive models AR(p), Moving average models MA(q), Invertibility between AR and MA process, Autoregressive-moving average models ARMA (p,q), Autoregressive-integrated moving average models ARIMA (p,d, q), Forecasting in the framework of Box-Jenkins model.

- **Time series volatility Models**: Characteristics of Financial Time Series Data, ARCH Model, GARCH Models: M-GARCH, E-GARCH and T-GARCH

Unit 3: Multivariate Time Series Models and Co-integration

- Introduction to VAR Analysis
- Causality in Time Series: Granger Causality Test and Toda and Yamamoto Causality Tests
- Co-Integration and Error Correction Model
- Testing for Co-Integration – Engle – Granger Methodology – Johansen Methodology
- Time Series Forecasting using VAR/VECM

Reading List:


**MES-OP-302: QUANTITATIVE FINANCE**

Unit 1: Time Value of Money in Finance

- Time Value of Money – Present Value & Future Value, Annuity & Perpetuity
- Power of Compounding and Loan Amortization
- Types of Bonds and Valuation of Bond
- Bond Price and Interest Rates, Term Structure of Interest Rate, Maturity and Interest Rate Sensitivity
- Net Present Value (NPV) and Optimum Investment Decisions
- Internal Rate of Return (IRR) and Optimum Investment Decisions
- NPV Vs IRR as Optimum Investment Rule
Unit 2: Modern Portfolio Theory and Investment

- Review of Mathematics
- Concept Market Efficiency
- Returns and Risks – Concepts
- Efficient Market Model and Testing for Market Efficiency- Random Walk Model
- Portfolio Analysis – Portfolio Selection Problem and Diversification
- Mean Variance Model and Optimum Portfolio Analysis
- Euler’s Theorem, Risk Decomposition, and Portfolio Risk Budgeting

Unit 3: Capital Market Theory and Estimation

- Review of Time Series Concepts
- Valuation of Stocks
- Models of Equilibrium of the Capital Markets
- Standard Capital Asset Pricing Model (CAPM)
- Empirical Tests of Forms of CAPM
- Asset Pricing Model – Estimation and Empirical Relevance
- Factor Models – One Factor Model and Multi-Factor Model
- Estimation of Factor Models and Implications

Reading List:

MES-CB-301. ECONOMICS OF EDUCATION

Unit 1: Economics of Education, Human Development and Economic Development

- Education and Human Development and Human Capital Accumulation.
- Aspects, Indicators and Measures of Economic Development.

Unit 2: Cost Benefit Analysis and Financing of Education

- Production and Cost Functions of Education.
Theories of Public Expenditure on Education, Models and Methodologies.
Linkages between Education, Skills and Jobs.
Wastages in Education. Non-participation, Dropouts and Brain Drain.

Unit 3: Problems and Prospects of Education in India:
Indian Perspective to Education,
Literacy and Education Programmes of Government of India,
Education planning, need based and Value based education planning in India.
Public Expenditure on Education in India.
Need and Scope for External Participation in Education in India.

Reading List:
2. GovInda R (Ed) (2000). India Education Report. a Profile of Basic Education National institute of Educational Planning and Administration, Oxford University Press. New Delhi

Additional Readings:

Journal:
4. Human Development Reports, Undp.

**MES-CB-302: PUBLIC ECONOMICS**

**Unit 1: Public Economics - Concept, Scope, Provisions of Public Goods**
- Information Asymmetry, Externalities,
- Public Goods, Nonrival Consumption and Non Excludability,
- Demand and Supply of Public Goods,
- Local Public Goods and Decentralization Theorem,
- Problems of Preference Revelation, Voting Rule, Characteristic of Majority Voting Rule, Rent Seeking

**Unit 2: Taxes, Public Expenditure, Debt and Budgeting**
- Public Expenditure, Structure and Growth, Wagner’s Law,
- Peacock– Hypothesis,
- Cost Benefit Analysis, Shadow Pricing, Discount Rate,
- Budgeting, Public Borrowing Public Debt, Budgeting and Zero Based
- Benefits and Ability to Pay Approaches to Taxes Allocative and Equity Aspects of Taxes,
- Deadweight Losses, Excess Burden, Trade off Between Equity and Efficiency.

**Unit 3: Fiscal Federalism and Fiscal Reforms in India**
- Fiscal Federalism. Assignment of Function, Constitutional
- Provisions, and Sources of Revenue,
- Resource Transfer from Centre to State
- Principles of Multi Unit Finance
- Direct and Indirect Taxes,
- Budget Deficit and Its Implications.

**Reading List:**
MES-AE301: Statistical Data Analysis & Softwares

Unit 1: Statistical and Econometric Analysis using Eviews Software
- Introduction to Eviews
- Data Handling and Generating New Variables
- Graphical Analysis and Descriptive Statistics
- Correlation and Regression
- Heteroscedasticity, Auto correlation and Multi collinearity
- Simple Forecasting

Unit 2: Statistical and Econometric Analysis using SPSS Software
- Introduction to SPSS
- Advance Data Handling in SPSS- Recoding Variables, Merging Data Set, Sorting Cases etc.
- Descriptive Statistics
- PP Plots and QQ Plots
- T tests- One Sample T Test, Independent Sample T Test and Paired Sample T Test
- Non Parametric Tests of Group Differences
- Reliability Analysis
- Cluster Analysis
- Discriminant Analysis

Unit 3: Statistical and Econometric Analysis using R Software
- Introduction to R Econometric Software
- Data Handling in R and Generating New Variables
- Graphical Analysis and Descriptive Statistics
- Correlation and Regression
- Hypothesis testing
- Forecasting

Readings
1. Eviews – Manual
3. SPSS- Manual
7. Krishna K.L (Ed), 1987 Econometrics Applications in India
MES-C-401: Growth Economics

UNIT I: Concepts and Issues in Economic Growth

- Economic growth; Measurement of Growth; Growth v/s development.
- Historical Growth Experiences
- Factors affecting Growth— Capital, Labour, and Technology.
- Characteristics of Modern Economic Growth.
- Overview of Classical Growth theory-Adam Smith, Ricardo, Malthus.

Unit 1: Basic Growth Models

- Growth models — Harrod and Domar Model, Instability Analysis
- Neoclassical Growth Model: Steady State, Transitional Dynamics; Solow Growth Accounting: measuring the impact of technology; Technological Progress, Economic Convergence, Speed of Convergence.
- Cambridge Models of Growth- Kaldor, Johan Robinson
- Differences between neoclassical and Cambridge Models of Growth

Unit 3: Endogenous Growth Theory

- Endogenous growth; Intellectual capital: role of learning, education and research;
- AK model — Explanations of cross country differentials in economic growth;
- Solow-Swan Model versus AK Approach;
- Schumpeterian Growth Models
- Endogenous Growth and Sustainable Development
- Optimal Growth in AK and Schumpeterian Growth Framework

Resources:

MES-C-402: Development Economics

Unit-I: Development, Concept and Theoretical issues:
- Development, Concept measurement issues, development indicators - State vs Market
  - Institutions, governance and Economic Development, Growth and Development.
  - Economic Welfare Indicators and measures, Theories of under development,
    - Hirchman, Rostow, Lewis, Gunder Frank, Myrdal, Harris Todoro, vicious circle of poverty, Gradual and Big push theory to economic development

Unit-II: Development, Population Growth, Poverty and Income inequality
- Population and economic development, poverty concept, poverty measurement to
  - poor and access to credit, nutrition inequality of income, inequality and welfare,
    - Lorenz curve, giniin coefficient, functional distribution, Kuzenet invertedness hypothesis, Low level equilibrium trap theory of Social and technological dualism.

Unit-III: Development Theories and Development Strategies:
- Theories of economic development, Adam Smith’s Theory, Ricardian theory,
  - Malthusion Theory, J.S. Mill’s Theory of development, Marxian Theory, Schmpter’s Capitalistic development through innovations, choice of techniques various approaches, planning meaning and needs, centralised, decentralised indicative planning. Micro-level planning, Trade and Development, Dual gap analysis, Globalisation and developing countries.

Basic Readings -

5. Burdhan, Pranab, Scarcity, Conflict and cooperation, Essays in the Political and
8. Dobb, Maurice, Theories of valvue and Distribution since Adam Smith, Indian Reprint, Kinz New Delhi, 1982.
10. Rostow, inw, Theories of Economic Growth from David Hume to Present Day,
    - (Fifth Edition), Allen and unwin, London.

MES-OP-401: INTERNATIONAL FINANCE

Unit I: The Foreign Exchange Market
- Foreign Exchange Market – Structure and Functions
Organization of the Foreign Exchange Market - Spot and Future Market
Trading Mechanism in Foreign Exchange Market
Efficiency of Foreign Exchange Market
Foreign Exchange Market in India

**Unit 2: Balance of Payment and Exchange Rate Determination**
- Balance of Trade and Balance of Payment
- Exchange Rate Systems
- Theories of Balance of Payment and Exchange Determination - PPP, Monetary Approach, Portfolio Balance Approach
- Mundell- Fleming Model, Perfect Capital Mobility and Flexible Exchange Rates
- Policy Conflicts and Adjustment under Fixed Exchange Rates
- Exchange Rate Changes and Trade Adjustment: Empirical Issues

**Unit 3: International Financing System**
- Changing Role of Monetary System
- New International Financial Architecture
- European Monetary Union and Financial System
- Single Currency and Optimum Currency Area
- The Euro-Currency Market
- Currency Crisis and Role of FEMA
- Exchange Rate Stability and Role of IMF

**Reading List:**
1. Brain Tew. the Evolution of International Monetary’ System, Hutchinson, 1985
13. Pecchioli, R.M., the Internationalization of Banking, Oecd, Paris; 1983
15. Moris Goldstein, the Asian Financial Crises; Causes, Cures and Systemic Implication Washington Dc, June 1998.
16. Batiz and Batiz, Chapter17

MES-OP-402: MONETARY ECONOMICS

Unit 1: Demand for Money
- Overview of Development of Monetary Theory and Major Issues
- Friedman, New Monetarism and its Critique.

Unit 2: Supply of Money
- Monetary Aggregates, Liquidity Aggregates and Divisia Index
- H-Theory of Money Supply
- Money Multiplier Process and Factors Affecting H
- Exogeneity of Money Supply
- Money Supply in India: its Components and Trends

Unit 3: Monetary Management and Monetary Policy
- Monetary Management – Rules vs. Discretion
- Price Targeting vs inflation Targeting vs Exchange Rate Targeting
- Monetary Policy – Challenges before Reserve Bank of India.
- Difficulties of Controlling Money Supply in an open Economy
- Further Issues of Monetary Policy and Monetary Management in India

Reading List:
2. Jadhav N., Monetary Economics for India, Macmillan India Ltd., 1994

MES-CB-401: AGRICULTURAL ECONOMICS
Unit 1: Agriculture and Economic Development
- Nature and Scope of Agricultural Economics
- Peculiar Characteristics of Agriculture
- Transformation of Traditional Agriculture—Schultz and Mellor's Analysis
- Agriculture and Dual Models: Fei-Ranis and Arthur Lewis
- Agriculture and Its Contribution - Kuznets's Formulations

Unit 2: Economics of Agricultural Production
- Production Function in Agriculture and Forms of Production Functions
- Factor Factor Relationship in Agriculture
- Rational and Irrational Stages of Production
- Risk and Uncertainty in Agriculture
- Crop Insurance
- Terms of Trade between Agriculture and Industry

Unit 3: Issues in India's Agricultural Development
- Land Reforms in India and Their Impact on Agrarian Structure
- The New Agricultural Strategy (Green Revolution)
- Recent Trends in Agricultural Growth in India
- WTO and Its Implication for Indian Agriculture
- Agricultural Price Policy in India
- Sustainable Agriculture- indigenous practices, Bio-technological practices and growth potential

Reading List:
4. in India, Heritage Publishers
6. New Delhi
10. Heady E.O. (1964) Economics of Agricultural Production and Recourse Use". Prentice Hall India Ltd,
11. New Delhi.
22. MS Swaminathan (2012), Agriculture Cannot Wait- New Horizons in Indian Agriculture, Academic Foundation, New Delhi
26. R.K Sampanth (1980), Economic Efficiency in Indian Agriculture
27. Reins G and John Ch Fei (1961), Theory of Economic Development
31. Cornell University, London
33. DELHI
38. Cornell University, London

MES-CB-402: GAMES AND INFORMATION

Unit 1: Game Theory under Complete Information

- Static Game of Complete Information.
- Dynamic Games of Complete Information
- Dynamic Games of Complete but Imperfect Information
- Economic Applications
Unit 2. Game Theory under Incomplete Information

- Static Games of Incomplete Information - Bayesian Nash Equilibrium.
- Dynamic Game of Incomplete Information - Perfect Bayesian Equilibrium, Trembling Hand Perfection.

Unit 3. Economics of Information

- Types of Asymmetric Information - Moral Hazards, Adverse Selection, Signaling, Market for Lemons,
- Principal Agent Problem,
- Efficiency of Market Outcomes under Asymmetric Information

Reading List:

5. Jehle & Renne, Advanced Microeconomic Theory, Pearson Education, India
6. Mas-Colell, Andreu, Michael D.Whinston and Jerry R.

MES-SE 401: COMPUTER APPLICATIONS IN ECONOMICS

Unit 1: Data Analysis and Regression Models with Statistical/Econometric Software

- Types of Data and Data Mining
- Analysis of Data – Descriptive Statistics and Stationarity Test
- Correlation and Correlograms
- Simple and Multiple Regression
- Binary and Logistic Regression
- Analysis of Variance
- Factor Analysis – Principal Component Analysis

Unit 2: Application to Micro Economics Models with Statistical/Econometric Software

- Consumption Functions and Empirical Issues
- Estimation and Analysis of Consumption Functions, Demand Functions and Related Measures
- Production Functions and Empirical Issues
Estimation and Analysis of Production Functions and Related Measures
Production Efficiency and Total Factor Productivity – Empirical Analysis
Cost Functions and Estimation

Unit 3: Macro Econometric Models and Estimation with Statistical/Econometric Software
- Simultaneous Equation Systems in Economics
- Model Building in Economics: Specification, Identification and Estimation of Models
- Methods of Estimating Simultaneous Equation Models
- Examples of Macro-Econometric Models

Reading List:
6. Klein, L.R.: (A) Introduction to Econometrics, (B) Text Book of Econometrics.