## Syllabus for B.A.

### Core and Discipline Specific Elective (DSE) Courses in Economics

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Core Economics I: Principles of Microeconomics–I

Course Description

This course intends to expose the student to the basic principles in Microeconomic Theory and illustrate with applications.

Course Outline

1. Introduction
   a. Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems.
   b. Demand and supply: law of demand, determinants of demand, shifts of demand versus movements along a demand curve, market demand, law of supply, determinants of supply, shifts of supply versus movements along a supply curve, market supply, market equilibrium.
   c. Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.
   d. Elasticity: price elasticity of demand, calculating elasticity, determinants of price elasticity, other elasticities.

2. Consumer Theory
   Budget constraint, concept of utility, diminishing marginal utility, Diamond-water paradox, income and substitution effects; consumer choice: indifference curves, derivation of demand curve from indifference curve and budget constraint.

3. Production and Costs
   a. Production: behaviour of profit maximizing firms, production process, production functions, law of variable proportions, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition.
   b. Costs: costs in the short run, costs in the long run, revenue and profit maximizations, minimizing losses, short run industry supply curve, economies and diseconomies of scale, long run adjustments.

4. Perfect Competition
   a. Assumptions: theory of a firm under perfect competition, demand and revenue; equilibrium of the firm in the short run and long run; long run industry supply curve: increasing, decreasing and constant cost industries.
   b. Welfare: allocative efficiency under perfect competition.

Readings:

Core Economics II: Principles of Microeconomics–II

Course Description

This is a sequel to Principles of Microeconomics–I covered in the first semester. The objective of the course is the same as in Principles of Microeconomics I.

Course Outline

1. Market Structures
   a. Theory of a Monopoly Firm
      Concept of imperfect competition; short run and long run price and output decisions of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.
   b. Imperfect Competition
      Monopolistic competition: Assumptions, SR & LR price and output determinations under monopolistic competition, economic efficiency and resource allocation; oligopoly: assumptions, oligopoly models, game theory, contestable markets, role of government.

2. Consumer and Producer Theory
   a. Consumer and Producer Theory in Action
      Externalities, marginal cost pricing, internalising externalities, public goods; imperfect information: adverse selection, moral hazard, social choice, government inefficiency.
   b. Markets and Market Failure
      Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets, public goods, externalities, imperfect information; evaluating the market mechanism.

3. Income Distribution and Factor pricing
   Input markets: demand for inputs; labour markets, land markets, profit maximisation condition in input markets, input demand curves, distribution of Income.

4. International Trade
   Absolute advantage, comparative advantage, terms of trade, sources of comparative advantage, trade barriers, free trade/protectionism.

Readings:

Core Economics III: Principles of Macroeconomics–I

Course Description

This course introduces students to the basic concepts in Macroeconomics. Macroeconomics deals with the aggregate economy. In this course the students are introduced to the definition, measurement of the macroeconomic variables like GDP, consumption, savings, investment and balance of payments. The course also discusses various theories of determining GDP in the short run.

Course Outline

1. **Introduction**
   What is macroeconomics? Macroeconomic issues in an economy.

2. **National Income Accounting**
   Concepts of GDP and National Income; measurement of national income and related aggregates; nominal and real income; limitations of the GDP concept.

3. **Determination of GDP**
   Actual and potential GDP; aggregate expenditure; consumption function; investment function; equilibrium GDP; concepts of MPS, APS, MPC, APC; autonomous expenditure; Concept of multiplier.

4. **National Income Determination in an Open Economy with Government**
   Fiscal Policy: impact of changes in government expenditure and taxes; net exports function; net exports and equilibrium national income.

5. **Money in a Modern Economy**
   Concept of money in a modern economy; monetary aggregates; demand for money; quantity theory of money; liquidity preference and rate of interest; money supply and credit creation; monetary policy.

Readings:

Core Economics IV: Principles of Macroeconomics–II

Course Description

This is a sequel to Principles of Macroeconomics–I. It analyses various theories of determination of National Income in greater detail. It also introduces students to concept of inflation, its relationship with unemployment and some basic concepts in an open economy.

Course Outline

1. IS-LM Analysis
   Derivations of the IS and LM functions; IS-LM and aggregate demand; shifts in the AD curve.

2. GDP and Price Level in Short Run and Long Run
   Aggregate demand and aggregate supply; multiplier Analysis with AD curve and changes in price levels; aggregate supply in the SR and LR.

3. Inflation and Unemployment
   Concept of inflation; determinants of inflation; relationship between inflation and unemployment: Phillips Curve in short run and long run.

4. Balance of Payments and Exchange Rate
   Balance of payments: current account and capital account; market for foreign exchange; determination of exchange rate.

Readings:

Discipline Specific Elective I

One of the following:

i. DSE 1: Economic Development and Policy in India–I

Course Description

This course reviews major trends in aggregate economic indicators in India and places these against the backdrop of major policy debates in India in the post-Independence period.

Course Outline

1. Issues in Growth, Development and Sustainability

2. Factors in Development
   Capital formation (Physical and Human); technology; institutions.

3. Population and Economic Development
   Demographic trends; urbanisation.

4. Employment
   Occupational structure in the organised and the unorganised sectors; open-, under- and disguised unemployment (rural and urban); employment schemes and their impact.

5. Indian Development Experience
   Critical evaluation of growth, inequality, poverty and competitiveness, pre and post reforms era; savings and investment; mobilisation of internal and external finance; monetary and fiscal policies; centre-state financial relations.

Readings:

5. Government of India, *Five Year Plan* (latest)
ii. **DSE 2: Money and Banking:**

**Course Description**

This course exposes students to the theory and functioning of the monetary and financial sectors of the economy. It highlights the organization, structure and role of financial markets and institutions. It also discusses interest rates, monetary management and instruments of monetary control. Financial and banking sector reforms and monetary policy with special reference to India are also covered.

**Course Outline**

1. **Money**
   Concept, functions, measurement; theories of money supply determination.

2. **Financial Institutions, Markets, Instruments and Financial Innovations**
   a. Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises.
   
   b. Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.

3. **Interest Rates**
   Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

4. **Banking System**
   
   b. Indian banking system: Changing role and structure; banking sector reforms.

5. **Central Banking and Monetary Policy**
   Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.

**Readings**

iii. DSE 3: Environmental Economics:

Course Description

This course introduces students to concepts, methods and policy options in managing the environment using tools of economic analysis. This course should be accessible to anyone with an analytical mind and familiarity with basic concepts of economics. Since several environmental problems are caused by economic activity (for instance, carbon emissions, over-harvesting of renewable resources and air and water pollution as a by-product of industrial activity), this course examines different approaches to adjusting behaviour through economic institutions such as markets and incentives as well as through regulation, etc. It also addresses the economic implications of environmental policies through practical applications of methods for valuation of environmental goods and services and quantification of environmental damages. Conversely, the impact of economic growth on the environment is also addressed under the rubric of sustainable development. Environmental problems and issues from the Indian and international context (especially global warming) are used to illustrate the concepts and methods presented in the course. The course will be useful for students aiming towards careers in the government sector, policy analysis, business, journalism and international organisations.

Course Outline

1. Introduction
Key environmental issues and problems, economic way of thinking about these problems, basic concepts from economics; Pareto optimality and market failure in the presence of externalities; property rights and other approaches.

2. The Design and Implementation of Environmental Policy
Overview, Pigouvian taxes and effluent fees, tradable permits, implementation of environmental policies in India and international experience; transboundary environmental problems; economics of climate change.

3. Environmental Valuation Methods and Applications
Valuation of non-market goods and services--theory and practice; measurement methods; cost-benefit analysis of environmental policies and regulations.

4. Sustainable Development
Concepts; measurement; perspectives from Indian experience

Readings

1. Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, “Natural Resource and Environmental Economics”, Pearson Education/Addison
Discipline Specific Elective II

One of the following:

iv. DSE 4: Economic Development and Policy in India–II

Course Description


Course Outline

1. Agriculture: Policies and Performance
   Production and productivity; credit; labour; markets and pricing; land reforms; regional variations.

2. Industry: Policies and Performance
   Production trends; small scale industries; public sector; foreign investment.

3. Foreign Trade: Trends and Policies
   Balance of trade and balance of payments; India and the World Trade Organisation.

Readings:

v. **DSE 5: Economic History of India 1857-1947**

**Course Description**

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India’s economic development after independence in 1947.

**Course Outline**

1. **Introduction: Colonial India: Background and Introduction**
   Overview of colonial economy.

2. **Macro Trends**
   National Income; population; occupational structure.

3. **Agriculture**
   Agrarian structure and land relations; agricultural markets and institutions – credit, commerce and technology; trends in performance and productivity; famines.

4. **Railways and Industry**
   Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labor relations.

5. **Economy and State in the Imperial Context**
   The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

**Readings:**


15. Basudev Chatterjee, *Trade, Tariffs and Empire*, OUP 1992, Epilogue. Background reading for students:


vi. **DSE 6: Public Finance**

**Course Description**

This course is a non-technical overview of government finances with special reference to India. The course does not require any prior knowledge of economics. It will look into the efficiency and equity aspects of taxation of the centre, states and the local governments and the issues of fiscal federalism and decentralisation in India. The course will be useful for students aiming towards careers in the government sector, policy analysis, business and journalism.

**Course Outline**

**Part 1: Theory**

**Part 2: Issues from Indian Public Finance**
5. Current Issues of India’s Tax System.
6. Analysis of Budget and Deficits
7. Fiscal Federalism in India
8. State and Local Finances

**Readings**

Skill Enhancement Courses (SEC) offered by Economics Department

Skill Enhancement Course (SEC) I: FINANCIAL ECONOMICS

Course Description

This course introduces students to the economics of finance. The course does not require any prior knowledge of economics. This course should be accessible to anyone with an exposure to elementary mathematics. The course is designed to impart the essential aspects of financial asset valuation. The students will be introduced to numerical techniques in finance using spreadsheet programmes such as Microsoft Excel. The course will impart skills that will be useful in a variety of business settings including investment banks, asset management companies and in the field of financial and business journalism.

Course Outline

1. Deterministic cash-flow streams
   Basic theory of interest; discounting and present value; internal rate of return; evaluation criteria; fixed-income securities; bond prices and yields; interest rate sensitivity and duration; immunisation; the term structure of interest rates; yield curves; spot rates and forward rates.

2. Single-period random cash flows
   Random asset returns; portfolios of assets; portfolio mean and variance; feasible combinations of mean and variance; mean-variance portfolio analysis: the Markowitz model and the two-fund theorem; risk-free assets and the one-fund theorem.

3. Capital Asset Pricing Model (CAPM)
   The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

Readings

Skill Enhancement Course (SEC) II: DATA ANALYSIS

Course Description:

This course introduces the student to collection and presentation of data. It also discusses how data can be summarized and analysed for drawing statistical inferences. The students will be introduced to important data sources that are available and will also be trained in the use of free statistical software to analyse data.

Course Outline:

5. Estimation of population parameters from sample data. Unbiased estimators for population mean and variance.
6. Basics of index numbers: price and quantity index numbers.

Readings: