



Netaji Subhas Open University
CBCS CURRICULUM FOR SEMESTERIZED UNDER-GRADUATE
COURSE IN B.A. (HONOURS) IN ECONOMICS
WITH EFFECT FROM THE ACADEMIC SESSION 2019-20

Course Structure of HEC under CBCS

Semester	Course	Name of the Subject
Sem-1	CC1	Microeconomics-I
	CC2	Macroeconomics-I
	AECC1	Language (Bengali/English)
	GE-1	Mathematics-I
Sem-2	CC3	Mathematical Methods for Economics-I
	CC4	Elementary Statistical Methods for Economics
	AECC2	Environmental Studies
	GE2	Mathematics-II
Sem-3	CC5	Microeconomics-II
	CC6	Macroeconomics-II
	CC7	Mathematical Methods for Economics-II
	SEC1	Computer Applications in Business & Trade
	GE3	Principles of Political Economy
Sem-4	CC8	Microeconomics-III
	CC9	Macroeconomics-III
	CC10	Advanced Statistical Methods for Economics
	SEC2	E-Business
	GE4	India's Political Economy (1947-2018)
Sem-5	CC11	Indian Economy-I
	CC12	Development Economics –I
	DSE 1	Introductory Econometrics / Economic History of India (1857-1947)
	DSE 2	Money & Financial Markets / Indian Economy-II
Sem-6	CC 13	International Economics
	CC 14	Public Finance
	DSE 3	Development Economics –II / International Trade & Payments Institutions
	DSE 4	Environmental Economics /Applied Economics

Core Course (CC), General Elective (GE), Descriptive Specific Elective (DSE): 6 credit each (20 marks for Assignment & 30 marks for TEE); SEC & AECC: 2 credit each (60 marks TEE). Marks

Distributions for Examination:

10 questions to be answered out of 10, each of 2 marks	(Assignment)	10 × 2 = 20
04 questions to be answered out of 06, each of 5 marks	(TEE)	4 × 5 = 20
03 questions to be answered out of 5, each of 10 marks	(TEE)	3 × 10 = 30
Total		70

SEMESTER- 1

CC 1: MICROECONOMICS-1

Course objectives: After completion of the course the learners will be able to: Learn the basic idea of Microeconomics in particular and Economics in general.

Course outcome: This course is important as it will help learners to understand how to make decisions about using and distributing resources, which is a skill that can be applied to many areas of life.

Course Contents

Unit 1 EXPLORING THE SUBJECT MATTER OF ECONOMICS

Definition, scope and method of economics
The nature of economic problem: scarcity and choice
The question of what to produce, how to produce and how to distribute output
Economic systems

Unit 2 DEMAND AND SUPPLY: HOW MARKETS WORK

Demand

Determinants of individual demand
Law of demand
Demand schedule
Demand curve
Shifts in the demand curve
Derivation of market demand

Supply

Determinants of individual supply
Law of supply
Supply schedule
Supply curve
Derivation of market supply curve
Shifts in the supply curve

Equilibrium price determination in competitive market

Effects of shifts in demand and supply

Unit 3 The THEORY OF CONSUMER BEHAVIOUR

Marshallian utility approach (Cardinal Utility Theory)

Derivation of ordinary Demand curve

Consumer surplus

Indifference curve approach (Ordinal Utility Theory)

Assumptions

Properties

Exceptional indifference curves

Derivation of demand curve from indifference curve

The Budget line and its properties

Changes in price and shifts in budget line

Changes in income and shifts in budget line

Consumer optimal choice

Corner Solution

ICC

PCC

Engel Curve

Price effect, Substitution Effects and Income effect

Distinction between Hicks and Slutsky Compensation Methods

Choice between Income and Leisure

Classification of Goods: normal, inferior and Giffen goods.

Shape of the demand curve following Eugen Slutsky equation

Revealed Preference Approach

Strong and weak axioms of revealed preference

Properties of demand function

Unit 4 THE THEORY OF PRODUCTION

Production

Factors of production

Short-run production function and Long-run Production function

Production Function

Leontief Production function

General Concept of Homogeneous production Function and its properties

Cobb-Douglas as representative of Homogenous production function

Homothetic production function

The Law of variable Production: Law of production in the short run

Shape of Product Curves

Shape of total product curve

Shape of average product curve

Shape of marginal product curve

Relationships among total product curve, average product curve and marginal product curve and Economic Region of Production

Unit 5 FURTHER TOPICS IN THE THEORY OF PRODUCTION

Concept of Isoquants

Properties of Isoquants

Returns to Scale

Finding the optimal Employment of inputs by isoquant and iso-cost lines

Ridge lines and the Economic Region of Production

Output Expansion Path

Unit 6 THEORIES OF COST & REVENUE

Relation between short run cost and long run cost curves
Derivation of LRAC curve from SRAC curve
Economies of scale and Diseconomies of Scale

Revenue concepts under different market conditions- TR,AR,MR
Relationship among TR, AR, and MR
Relation of MR, Price and elasticity of demand
Revenue under different price situations (Fixed versus Variable)

Suggested Readings

1. Karl E. Case and Ray C. Fair, *Principles of Economics*, Pearson Education Inc., 8th Edition, 2007.
2. N. Gregory Mankiw, *Economics: Principles and Applications*, India edition by South Western, a Part of Cengage Learning, Cengage Learning India Private Limited, 4th edition, 2007.
3. Joseph E. Stiglitz and Carl E. Walsh, *Economics*, W.W. Norton & Company, Inc., New York, International Student Edition, 4th Edition, 2007.
4. Sebak K. Jana & Asim K. Karmakar *Microeconomics*, Dey Book Concern, Kolkata, 2018

CC 2: MACROECONOMICS- I

Course objectives: After the completion of the course the learner will be able to be equipped with the knowledge of basic functioning of a market economy at the macro level including understanding of national income accounting in both close and open economy.

Course outcome: this course will help learners understand how the economy works like changes in inflation, interest rates and economic output and how to improve it.

Course Contents

Unit 1 BASIC ISSUES IN MACROECONOMICS

What is macroeconomics?
Scope of macroeconomics
Subject matter of macroeconomics
Objectives of studying macroeconomics
Types of Macroeconomics:
Macro static,
Macro dynamics,
Comparative statics
Closed and open economy macroeconomics
Major tools of macroeconomic Policy
Stock and Flow variables
Equilibrium and Disequilibrium
Partial and General Equilibrium Analysis

Usefulness of Macroeconomics

Unit 2 NATIONAL INCOME ACCOUNTING

National income Measuring Economic performance
Concepts of GDP
Measuring GDP: Product Method, Income Method, Expenditure Method
Three Routes, One Destination
Some Important Identities
Gross National Product (GNP) and Net National Product(NNP)
National Income (NI)
Personal Income
Disposable income
Circular Flow of Income
Real and Nominal GDP
Implicit GDP Deflator
Measuring the Cost of Living: Consumer Price Index
Problems involved in National Income Accounting
Importance of National Income Accounting
GDP as an Index of Welfare or Nation's well-being
National Income Accounting for an Open Economy
Balance of Payments: Current Account, Capital Account, Official Reserve Account
Deficits in Balance of Payments

Unit 3 MONEY

Money:
What is Money?
Functions of Money
Money Supply and its Measures
High Powered Money
Money Supply Multiplier
Credit Multiplier and Credit Creation
The Quantity Theory of Money: Fisher and Cambridge Version

Unit 4 THE CLOSED ECONOMY IN THE SHORT-RUN

4A Simple Keynesian Model (SKM):

The Consumption Function
The Saving Function
Investment Function
Income Determination (Equilibrium),
Paradox of thrift
Adjustment process/ mechanism and stability (with economic interpretation of the stability condition) –
Income Determination with Government Sector
Expenditure multiplier, Tax multiplier and Balanced Budget Multiplier

4B IS-LM Model

Commodity market equilibrium and the IS curve

Money market equilibrium and the LM curve
Equilibrium in the IS-LM model
Effectiveness of monetary policy in increasing national income using IS-LM Model
Effectiveness of fiscal policy in increasing national income using IS-LM Model
Should demand management (monetary and fiscal) policy be active or passive?
Limitations of IS-LM model

Unit 5 AGGREGATE DEMAND AND AGGREGATE SUPPLY CURVES

Simple derivation of the Aggregate Demand Curve (ADC) using Quantity Theory of Money
Derivation of the Vertical Aggregate Supply curve(ASC) in the Long-run
Derivation of Horizontal Short- run Aggregate Supply Curve (SRASC)
Economy's Short-run Equilibrium through the interaction of the ADC and this SRASC
From the short run to the Long run Equilibrium
IS-LM Model and Theory of Aggregate Demand

UNIT 6 CLASSICAL AND KEYNESIAN THEORY OF OUTPUT AND EMPLOYMENT

Classical Macroeconomics:

Say's law and quantity theory
Friedman's restatement
Classical theory of output and employment
Classical dichotomy and neutrality of money
Keynesian theory of output and employment
Involuntary unemployment, Wage rigidity and Effective Demand
Comparison between the Simple Classical System and Complete Keynesian System

Suggested Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Richard T. Froyen, *Macroeconomics*, Pearson Education Asia, 2nd edition, 2005.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Paul R. Krugman, Maurice Obstfeld and Marc Melitz, *International Economics*, Pearson Education Asia, 9th edition, 2012.
8. Sebak K. Jana & Asim K. Karmakar *Macroeconomics*. Dey Book Concern, 2019.
9. Soumyen Sikdar, *Principles of Macroeconomics*, Oxford University Press, 2011.
10. Thomas R. Michl ((2019). *Macroeconomic Theory: A Short Course*. Routledge, London.

GE-1 Mathematics-I

semester1

Unit 1: PRELIMINARIES

Introduction

Sets and set operations.

Geometric properties of functions: quasi-convex functions, quasi-concave functions, their characterizations, properties and applications.

Limit and continuity-different limit theorems with proof-concept of first principle, Applications.

Conclusion.

Questions with Answer hints.

References

Unit 2: ONE DIMENSION FUNCTION OF REAL VARIABLE

Introduction

Continuous functions: Definitions, different types and their graphs- quadratic, polynomial, power, exponential, and logarithmic.

Concept of derivative: Definitions, L'Hopital's rule, graphical meaning of derivatives.

Derivatives of first and second order and their properties; convex, concave and linear function.

Conclusion.

Questions with Answer Hits

References

Unit 3: ONE VARIABLE OPTIMIZATION

Introduction

Local and global optima: Geometric characterizations, characterizations using calculus, significance of first and second order conditions, applications.

Interpretation of necessary and sufficient conditions with examples.

Applications- profit maximization and cost minimization.

Conclusion.

Questions with Answer Hints

References

Unit 4: INTEGRATION OF FUNCTIONS

Introduction

Integration of different types of functions with examples.

Methods of Substitution and integration by parts with examples.

Conclusion.

Questions with Answer Hints

References

Unit 5: DETERMINANTS

Introduction

Cofactor and minor, expansion of determinants, multiplication of determinants.

Solution of system of linear equations: Cramer's rule.

System of nonlinear equations: Jacobian determinant and existence of solution.

Conclusion.

Questions with Answer Hints.

References

UNIT 6: MATRIX ALGEBRA

Introduction

Matrix: its elementary operations; different types of matrix, rank of a matrix, inverse of a square matrix.

Eigen values and Eigen vectors.

Applications of Matrix Algebra.

Conclusion.

Questions. with Answer Hints

References

Semester 2

CC 3: MATHEMATICAL METHODS FOR ECONOMICS-I

Course objective: After completion of the course the learner will be able to know the preliminary mathematical techniques required for economic analysis.

Course outcome: This course will help learners to understand and use mathematical tools to describe economic phenomena and make predictions.

Course contents

Unit 1 PRELIMINARIES

Why Economists Use Mathematics?
Variables, Constants and Parameters
Equation and Identities
Real number systems
Logic and mathematical proofs
Sets and set operations
Relations and Functions

Unit 2 FUNCTIONS OF ONE REAL VARIABLE

Graphs
Elementary types of functions: quadratic, polynomial, power, exponential, logarithmic
Sequences and series: convergence, algebraic properties and applications;
Continuous functions: characterizations, properties with respect to various operations and applications

Unit 3 SINGLE-VARIABLE DIFFERENTIATION

Slopes of curves
The slope of the tangent and the derivative
Rates of change and their economic significance
Simple Rules for Differentiation
Differentiation of sums, products, and quotients
Second- and –higher order derivatives and their applications

Unit 4 SINGLE-VARIABLE OPTIMIZATION

Some basic definitions
A First-derivative test for extreme points
Maxima and Minima
Local maxima and minima
Convex and Concave functions and inflection points

Unit 5 INTEGRATION & ITS APPLICATIONS IN ECONOMICS

Definite integral
Properties
Definite integral as an area under a curve
Indefinite integral
Rules of integration
Application of integration in Economics:
Finding out total function from marginal functions
Demand function from elasticity of demand
Indifference curve from MRS function

Iso-quant from MRTS function
Measurement of consumer's surplus and producers surplus

Unit 6 DIFFERENCE EQUATIONS AS USED IN ECONOMICS

The Cobweb model
A market model with Inventory

Suggested Reading:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002.

Alpha C. Chiang and Kevin Wainwright, *Fundamental Methods of Mathematical Economics*, McGraw Hill Education, Fourth Edition, 2013.

CC 4: ELEMENTARY STATISTICAL METHODS FOR ECONOMICS

Course Objectives: After completion of the course the learner will be able to know the basic statistical applications necessary for economic data analysis.

Course outcome: This course will help learners understand various economic patterns, make informed decisions and predict future trends.

Course contents:

Unit 1: DESCRIPTIVE STATISTICS

Statistics and its meaning,
Presentation of data,

Frequency Distribution and its Graphical Presentation:

Histogram,
Frequency Polygon
Cumulative Frequency Polygon or Ogive

Univariate Frequency Distribution and their Graphical Representation

Unit 2: MEASURES OF CENTRAL TENDENCY WITH APPLICATIONS

Central Tendency:

Arithmetic Mean,
Median and Mode (for both grouped and ungrouped data) –
Comparison of Mean Median and Mode –

Geometric and Harmonic Mean
Composite Mean.

Unit 3: MEASURES OF DISPERSION

Range
Mean Deviation
Standard Deviation
Quartile Deviation
The coefficient of variation
Moments
Skewness
Kurtosis
Measurement of Economic Inequality:
Gini –coefficient
Lorenz curve

Unit 4: TIME SERIES ANALYSIS

Components,
Measurements of Trends and Seasonal Variation
The variance of a time series

Unit 5: INDEX NUMBERS AND THEIR APPLICATIONS

Price and Quantity Index Numbers:
Various Formulae
Tests for an index number,
Cost of living Index Number
Uses of index number

Unit 6 : ANALYSIS OF BIVARIATE DATA

Graphing Bivariate Data: The Scatter Diagram
Simple Correlation Analysis including rank correlation
Simple Regression Analysis

Select Readings:

1. Richard J. Larsen and Morris L. Marx: *An Introduction to Mathematical Statistics*.
2. Goon, Gupta and Dasgupta: *Basic Statistics*- The World Press Pvt. Ltd. Calcutta
4. Goon, Gupta and Dasgupta: *Fundamentals of Statistics*, Vol I and Vol II, The World Press Pvt. Ltd. Calcutta
5. Das, N.G. *Statistical Methods Part I Part II*
- 6 .A.L. Nagar and R. K. Das, *Basic Statistics*, OUP, Second Edition
7. Kenney and Keeping: *Mathematics of Statistics*, Volume-I, Chapters 1 and 2.
8. Bowen and Starr: *Basic Statistics for Business and Economics*: Chapter
9. Michael Barrow: *Statistics for Economics, Accounting and Business Studies*,2009 FT Prentice Hall,

Unit 1: FUNCTION OF SEVERAL VARIABLES

Introduction.

Continuous and differentiable functions of two variables: partial derivatives and Hessian matrix, Homogeneous and homothetic functions.

Euler's theorem, applications.

Implicit function theorem (without proof) and its applications.

Conclusion.

Questions. with Answer Hints

References

Unit 2: MULTI-VARIABLE OPTIMIZATION

Introduction

Optimization of nonlinear functions: Convex, concave, and quasi-concave functions; unconstrained optimization.

Constrained optimization with equality constraints: Lagrangian multiplier method; role of Hessian determinant.

Inequality constraints and Kuhn-Tucker Conditions, Applications.

Optimization of linear function: Linear programming; concept of slack and surplus variables (graphical solution only). Concept of convex set. The Duality Theorem.

Conclusion.

Questions. with Answer Hints

References

Unit 3: GAME THEORY

Introduction

Zero-sum games- maxmin and minmax solutions, Illustrative examples.

Dominant Strategy Equilibrium, Illustrative examples.

Nash equilibrium.

Conclusion.

Questions with Answer Hints.

References

Unit 4: DIFFERENCE EQUATIONS

Introduction

Finite difference: Equations of first and 2nd orders and their solutions.

Conclusion.
Questions with Answer Hints
References

Unit 5: DIFFERENTIAL EQUATIONS

Introduction
Solution of Differential equations of first order and second order of linear differential equations,
Illustrative examples.
Qualitative graphic solution to 2x2 linear simultaneous non-linear differential
Equation system-
Phase diagram, fixed point and stability.
Conclusion.
Questions with Answer Hints
References

Unit 6: DESCRIPTIVE STATISTICS

Introduction
Measures of central tendency: Arithmetic mean, geometric mean, harmonic mean, median and
mode, and their properties, Quartiles, Deciles and Percentiles, Illustrative examples.
Dispersion: Range, quartile deviation, mean deviation, standard deviation, coefficient of
variation, coefficient of mean deviation, coefficient of quartile deviation, Lorenz curve
and Gini coefficient, Illustrative examples.
Moments, Skewness and Kurtosis.
Correlation and Regression.
Conclusion.
Questions with Answer
References

SEMESTER - 3

CC 5: MICROECONOMICS –II

Course objectives: After completion of the course the learner will be able to understand typology of different market structures, and basics of game theory.

Course outcome: This course can help learners develop analytical tools and theoretical foundation to study economics at a higher level. It will also help to understand how markets work and how producers and consumers operate simultaneously.

Course Contents

Unit 1 THE FIRM AND ITS DECISION

Defining a firm

Profit maximization hypothesis

Product curves

Short –run cost functions and output decisions in the short-run

Long- run cost functions and output decision in the long run

Unit 2 PERFECT COMPETITION

Perfect Competition

Assumptions,

The perfectly competitive firm as a price taker

Short-run equilibrium under perfect competition

Break even point and Shut down point

Supply curve of the firm under perfect competition

Long run Equilibrium under industry in perfect competition

Unit 3 MONOPOLY

Sources of monopoly power

Lerner's Degree of monopoly power

Average Revenue and Marginal Revenue

Profit Maximization in the short- run

Social Cost of monopoly

Dead -Weight Loss Under Monopoly

Price Discrimination under Monopoly: different degrees

Peak Load Pricing

Two -part Tariff

Unit 4 MONOPOLISTIC COMPETITION

Elements of monopolistic competition

Monopolistic competition: short run Equilibrium

Monopolistic competition: long run Equilibrium

Excess capacity under monopolistic Competition

Unit 5 OLIGOPOLY

Collusive Oligopoly:

Cartels

Non-Collusive Oligopoly:

Kinked Demand Curve Model (Sweezy 1939)

Monopsony,

Bilateral monopoly

Unit 6 GAME THEORY

The need for a game

Definition of a game
Single move games (Two –Person, Zero-Sum Games)
Static games (Co-operative and Non-cooperative)
Move games
Cooperative games of perfect information
The Prisoner’s dilemma
Nash equilibrium and Nash Bargaining Solution
Cournot Equilibrium: An Applications of game theory in oligopolistic market

. Suggested Readings:

1. Hal R. Varian, *Intermediate Microeconomics, a Modern Approach*, 8th edition, W.W. Norton and Company/Affiliated East-West Press (India), 2010. The workbook by Varian and Bergstrom could be used for problems.
2. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning (India), 2010.
3. W. Nicholson, *Microeconomic Theory*, The Dryden Press, Japan, 1985.
4. D. Fudenberg and J. Tirole. *Game Theory*, The MIT Press, 1991.
5. R. Gibbons. *Game Theory for Applied Economists*, Princeton University Press.
6. Martin J. Osborne. *An Introduction to Game Theory*, the MIT Press, 2003
7. Timothy Fisher and Robert Waschik: *Managerial Economics*. Routledge, London, 2002.

CC 6: MACROECONOMICS – II

Course Objective: After the completion of the course the learner will be able to understand theories of consumption function, theories of investment demand, the idea why do people demands money, government’s major policies and the long run dynamic issues like growth and technological progress.

Course outcome: This course will help learners understand and evaluate the overall performance of the economy in terms of national income. Learners will get to have a clearer idea of the national level data that will help them in anticipating the level of fiscal activity and understand the distribution of income among different groups of people in the country.

Course Contents

Unit 1 THEORIES OF CONSUMPTION FUNCTION

Consumption Function with:

Keynesian Absolute Income Hypothesis
Fisher’s Theory of Optimal Intertemporal Choice
Duesenberry’s Relative Income hypothesis
Friedman’s Permanent Income Hypotheses;
Ando-Modigliani’s Life Cycle Hypothesis

Unit 2 THEORIES OF INVESTMENT DEMAND

Concepts of Investment Demand

Gross investment Versus net investment

Autonomous investment versus induced investment

Three types of Investment Spending and their determinants:

Business fixed investment,

Inventory Investment and

Residential Investment

Important theories of Investment demand

The Accelerator Theory of Investment

The Keynesian Theory of Investment

Tobin's q theory of Investment

Unit 3 DEMAND FOR MONEY

Segmenting the Demand for Money :

The Transaction Demand for Money with

Baumol's Transaction Demand for Cash

The Precautionary Demand for Money

The Speculative Demand for Money

Unit 4 MONETARY POLICY

Monetary Policy: Definition

Monetary policy objectives:

Price stability

Exchange- rate stability

Output stabilization

Financial stability

Three types of rules for interest rate setting:

Instrument rules (Taylor rule as an example)

Targeting rules (focusing more on discretion)

Money targeting rules

Inflation Targeting: specific implicit rule

(Amalgam of Rule-based policy and discretion)

Rules vs. discretion

Time-inconsistent policies

Unit 5 FISCAL POLICY

Fiscal policy: Definition

What is a budget?

Budget (or Fiscal) deficits

Deficit Financing

Public debt or government borrowing

Criteria for an "ideal" Fiscal Rule

Fiscal Policy in an open economy

Unit 6 ECONOMIC GROWTH

Harrod model
Domar model
Solow one sector growth model
Phelp's Golden rule of Accumulation
Technological progress

Suggested Readings:

1. Dornbusch, Fischer and Startz, *Macroeconomics*, McGraw Hill, 11th edition, 2010.
2. N. Gregory Mankiw. *Macroeconomics*, Worth Publishers, 7th edition, 2010.
3. Olivier Blanchard, *Macroeconomics*, Pearson Education, Inc., 5th edition, 2009.
4. Charles I. Jones, *Introduction to Economic Growth*, W.W. Norton & Company, 2nd edition, 2002.
5. Andrew B. Abel and Ben S. Bernanke, *Macroeconomics*, Pearson Education, Inc., 7th edition, 2011.
6. Errol. D'Souza, *Macroeconomics*, Pearson Education, 2009.
7. Robert J. Gordon, *Macroeconomics*, Prentice-Hall India Limited, 2011

CC 7 MATHEMATICAL METHODS IN ECONOMICS – II

Course objective: After completion of the course the learner will be able to make economic analysis using mathematics. This is a sequel to the course Mathematical Methods for Economics – I.

Course outcome: This course will help learners to understand how to use different mathematical tools to draw precise conclusions from different economic theories and assumptions.

Course contents:

Unit 1 DIFFERENTIAL EQUATIONS

First –order Linear Differential Equations with Constant
Coefficient and Constant term
Second- order Linear Differential Equations with Constant
Coefficient and Constant term
Interaction of Inflation and Unemployment

Unit 2 LINEAR ALGEBRA

Systems of linear equations
Vector and its Operation
Determinants and their basic properties
Application of Cramer's Rule

Unit 3 MORE ON LINEAR ALGEBRA

Matrix

Identity and Null Matrix
Transpose and Inverse Matrix
Conditions of Non-singularity of Matrix
The Rank of a matrix
Operations of Matrix
Input-output analysis

Unit 4 FUNCTIONS OF SEVERAL REAL VARIABLES

Functions of two or more variables
Partial derivatives and their uses in Economics
Quadratic forms in two variables

Unit 5 TOOLS FOR COMPARATIVE STATICS

The Chain Rules
Partial Elasticities
Homogeneous functions
Homothetic functions

Unit 6 MULTI-VARIABLE OPTIMIZATION

Convex functions:

Characterizations of convex functions,
Properties of convex functions
Applications of convex functions
Unconstrained optimization
Constrained optimization with equality and inequality Constraint: Linear Programming
Geometric characterizations
Lagrangean multiplier Method

Suggested Reading:

K. Sydsaeter and P. Hammond, *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi, 2002

A.Mukherji and S. Guha: *Mathematical Methods and Economic Theory*, Oxford University Press, 2011

Alpha C. Chiang and Kevin Wainwright, *Fundamental Methods of Mathematical Economics*, McGraw Hill Education, Fourth Edition, 2013.

Arup Mukherjee *Linear Programming and Numerical Analysis*, Shreetara Prakashani, Kolkata-6, 2004

SEC 1 COMPUTER APPLICATION IN BUSINESS AND TRADE

Course Objectives and Outcomes: Business Computer Applications focuses on integrating computer technology with decision-making and problem-solving skills. Areas of instruction include advanced applications in word processing, spreadsheets, presentation and database software that prepare students for industry standard certifications. After going through this course, the learners will be able to know the concept of Data Communication, Computer Networks, Word Processing, Spreadsheet and its Business Applications, Presentation Software, Various Modern Accounting Software, etc.

Unit 1: Basic Concepts: Characteristics of a Computer; Advantages of Computers; Limitation of Computers; Types of Computers; Applications of computers, Hardware, Firmware, Live ware; Software; Input-output devices etc.

Unit 2: Data communication and Computer networks: Transmission Modes - Simplex, Half- Duplex, Full Duplex. Analog and digital transmission. Synchronous and Asynchronous transmission. Multiplexing. Network Concept, Types - LAN, WAN, MAN, VAN, SAN. Various Topologies - Bus, Star, Ring, Mesh, Tree. Protocol Models - OSI, TCP/IP.

Unit 3: Word Processing: Introduction to word Processing; Word processing concepts, working with word document, opening an existing document/creating a new document; Saving, selecting text, editing text, Finding and replacing text, Formatting text, Bullets and numbering, Tabs, Paragraph Formatting, Page Setup.

Unit 4: Spreadsheet and its Business Applications: Spreadsheet concepts; Creating a work book, saving a work book, editing a work book, inserting, deleting work sheets, entering data in a cell, formula Copying, Moving data from selected cells, Handling operators in formulae: Inserting Charts- LINE, PIE, BAR, Mathematical ROUND ALL, SUM, SUMIF, COUNT, COUNTIF; Statistical – AVERAGE, MAX, MIN, STDEV, FREQUENCY, INTERCEPT, SLOPE.; Financial - PMT, PPMT, IPMT; Logical - IF, AND, OR.

Unit 5: Presentation Software: Microsoft Power Point, Open Office.org Impress, Apple's Keynote etc. Creating a presentation; Editing, Sorting, Layout, Set-up row, Rehears timing.

Unit 6: Various Modern Accounting Software: Features, advantages and disadvantages of some modern accounting software: Tally.ERP 9, Zoho Books, MARG ERP 9+Vyapar- Accounting & Invoicing, Book Keeper – Accounting & Invoicing etc.

Unit 7: Practical applications: Loan & Lease statement; Ratio Analysis, Graphical representation of data Payroll statements: Frequency distribution. Cumulative and calculation of Means, Mode and Median; Regression.

Unit 8: Multimedia essentials: Definition, building blocks of multimedia, multimedia system, multimedia application.

Suggested Readings:

- ❖ Sanjay Saxena, A First Course in Computers, Vikas Publishing House, New Delhi
- ❖ Pradeep K. Sinha and Preeti Sinha, Foundation of Computing, , BPB, Publication
- ❖ Deepak Bharihoka, Fundaments of Information Technology, Excel Book,New Delhi
- ❖ V. Rajaraman, Introduction to Information Technology, PHI. New Delhi
- ❖ R. Hunt, J. Shelley, Computers and Common sense, Prentice Hall of India New Delhi
- ❖ Leon, M. Leon, Fundamentals of Information Technology, Leon Vikas, (4) Software manuals
- ❖ ITLESL, Introduction to Computer Science, Pearson Education
- ❖ ITLESL, Introduction to Information Technology, Pearson Education
- ❖ Sinha & Sinha, Fundamentals of Computers, BPB Publication
- ❖ Rajaraman, Fundamentals of Computers, PHI

GE 3 PRINCIPLES OF POLITICAL ECONOMY

COURSE OBJECTIVES: After completion of the course the learner will be able to know the basic principles of political economy.

Course Contents

UNIT 1 NATURE OF POLITICAL SYSTEM

Feudalism
Capitalism
Socialism

UNIT 2 TRANSITION FROM FEUDALISM TO CAPITALISM

Marxian stage theory
Rostows Theory of Stage
Rostow vs Marx

UNIT 3 TRANSITION DEBATE

Dobb vs Sweezy

UNIT 4 TRANSITION FROM CAPITALISM TO SOCIALISM

Crisis in Capitalism:
Marxian Theory of Crises
Breakdown and Transition to Socialist State and beyond
Experiences in Russia and China

UNIT 5 INTERNATIONAL POLITICAL ECONOMY

Development of Underdevelopment
Theory of Unequal Exchange
Paul Baran
The role of Merchant capital in the World Economy

UNIT 6 ROLE OF STATE

Commanding Heights
State Vs. Market
Planning
Socialist Pricing
Supply of Social Goods

Suggested Reading:

- Heywood, Andrew (2015): *Key Concepts in Politics and International Relations*. 2nd edition palgrave macmillan,
- Heywood, Andrew (2014): *Global Politics*. 2nd edition palgrave macmillan,
- Hilary, John (2013). *The Poverty of Capitalism: Economic Meltdown and the Struggle for What Comes Next*. Pluto Press, London.
- McCann, Leo(2014). *International and Comparative Business: Foundations of Political Economies* Sage ,London.
- J.H. Mittelman and M.K. Pasha (2016): *Out from Underdevelopment Revisited: Changing Global Structures and the Remaking of the Third World*, Macmillan Press Ltd. London.
- Peet, Richard and Elaine Hartwick (2010). *Theories of Development: Contentions, Arguments, Alternatives*, Rawat Publications, Indian reprint New Delhi .
- Tribe, Michael, Frederick Nixon and Andy Summer (2010). *Economics and Development Studies*. Routledge, London.

Semester 4

Course objectives: After completion of the course the learner will be able to: Learn the fundamentals of general equilibrium and welfare economics along with different input markets.

Course outcome: This course will finally help learners to understand how to formulate economic policies, strategies and regulations. They will understand the standard of living and welfare of people and the factors that determine their welfare.

Course contents:

CC 8: MICROECONOMICS-III

Unit 1 GENERAL EQUILIBRIUM, EFFICIENCY AND WELFARE

Partial equilibrium vs. General Equilibrium techniques

Concept of General equilibrium

Definition of Efficient Allocation of Resources

Efficiency Concepts:

Efficiency in Exchange: Edgeworth Box Diagram

Efficiency in Production:

Optimal Choice of Inputs for a single firm &

Efficient Allocation of Resources among firms

Efficiency in production and exchange

Welfare economics:

The Welfare Theorems

The Positive Theory of General Equilibrium

Existence and Stability of Walrasian equilibrium

Unit 2 MARKET FAILURE

When the Competitive Price System Fails to Achieve Efficiency

Possible cases:

(a) Imperfect Competition

(b) Externalities,

(c) Public goods

Unit 3 INPUT MARKETS: 1

Land market:

Rent

Ricardo

Marshall

Modern theory of rent

Unit 4 INPUT MARKET-II

Labour markets

Labour demand curve

The firms demand curve for labour

Market demand curve for Labour

Backward bending individual supply curve for labour

Market supply curve for labour
Labour market equilibrium
Input demand curves
Shifts in input demand curves
Competitive labour markets
Labour markets and public policy

UNIT 5 INPUT MARKETS-III

Capital Market
Interest as a reward to capital
The Neo-Classical Theory of Interest

Unit 6: ALTERNATIVE THEORIES OF THE FIRM

Baumol's sales Maximisation model
Williamson's model of managerial discretion
Marris model of managerial enterprise

Suggested Readings:

1. Hal R. Varian, *Intermediate Microeconomics: A Modern Approach*, W.W. Norton and Company/Affiliated East-West Press (India), 8th edition, 2010. The workbook by Varian and Bergstrom may be used for problems.
2. C. Snyder and W. Nicholson, *Fundamentals of Microeconomics*, Cengage Learning (India), 2010.
3. B. Douglas Bernheim and Michael D. Whinston, *Microeconomics*, Tata McGraw- Hill (India), 2009.
4. Sebak K. Jana & Asim K. Karmakar *Microeconomics*, Dey Book Concern, Kolkata, 2018
5. Anindya Sen, *Microeconomics: Theory and Applications*, OUP

CC 9: MACROECONOMICS – III

Course Objectives: This course is a sequel to Macroeconomics II. In this course, the students are introduced to inflation and unemployment, along with recent expectation theories and open-economy macro models.

Course outcome: Through this course learners will understand how to make decisions that will promote economic growth, stability and prosperity. They will have a better understanding of the functioning of banks, businesses and the economy as a whole.

Course Contents

Unit 1 INFLATION

Inflation and its different types
Demand Pull Inflation and Policy Implications for it
Cost Push Inflation and Policy Implications for it.
Justification for making distinction between the two
Social Costs of Inflation
Inflation Controlling Measures: Fiscal, Monetary and Income Policies

Unit 2 INFLATION AND UNEMPLOYMENT

Aggregate supply and Phillips curve
Short- run trade –off between inflation and Unemployment
Shift in Phillips curve
Rational Expectations and Inflation
Expected –Augmented Phillips curve
Long-run Phillips curve

Unit 3 EXPECTATIONS THEORIES IN MACROECONOMICS

Adaptive Expectations
Rational Expectation
Hall's Explanation for Rational Expectation
Policy ineffectiveness debate

Unit 4 OPEN ECONOMY MACROECONOMICS—CONCEPTS AND APPLICATIONS

Exchange Rate system
Fixed Exchange Rate system
Flexible Exchange Rate system
Fixed vs. flexible exchange rate
Clean Floating versus dirty Floating
Hybrid Exchange Systems
Nominal, Effective and Real Exchange Rates
Spot and Forward Exchange Markets
Measures of Openness

Unit 5 BALANCE OF PAYMENTS (BoP) THEORY

The Elasticity Approach to BoP and the so-called Marshall- Lerner Condition
The Absorption Approach to BoP
The Monetary Approach to the BoP

Unit 6 OPEN ECONOMY MACRO MODELS

Perfect and Imperfect Capital Mobility
A Simple Keynesian Open Economy Model
Internal and external Balance
Mundell-Fleming model
Dornbusch's overshooting model
Impossible Trinity

Suggested Readings:

- Froyen, R.T.: *Macroeconomics Theories and Policies*, Pearson Education, 7 th edition.
- Heijdra, Ben J and Frederik van der Ploeg (2002): *The Foundations of Modern Macroeconomics*, Oxford University Press, Great Clarendon Street, Oxford.
- Jha, R. (1991), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Karmakar, Asim K.(2014) Contagious Financial Crises and Their Implications for India” In a book entitled *Analytical Issues in Trade, Development and Finance — Essays in Honour of Biswajit Chatterjee*, edited by Dr. Ambar Nath Ghosh and Dr. Asim K. Karmakar, ,(Chapter 30) pp. 499-534. Springer India.
- Kling, Arnold. (2013). The 1970s: the decade the Phillips curve died. In *Routledge Handbook of Major Events in Economic History* (pp. 266-274). Routledge.
- Levacic, R and A. Rebman (1986) *Macroeconomics*; (2 nd Ed, Macmillan).
- Mankiw ,N.G. (2000), *Macroeconomics*, Fourth Edition, Harvard University Press.
- Mankiw, N.G. and D. Romer (eds.) (1991). *New Keynesian Economics*; (MIT, Cambridge).
- Olsson,Ola (2012): *Essentials of Advanced Macroeconomic Theory*, Routledge, London and New York.
- Ott, David J.,Attiat F.Ott and Jang H. Yoo (1975), *Macroeconomic Theory*. McGraw-Hill Kogakusha,Ltd.
- Romer, D. (2005), *Advanced Macroeconomics*, Boston- Mc Graw-Hill.
- Shapiro, E. (1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
- Sheffrin, S.M.(1996), *Rational Expectations*, Cambridge University Press, Cambridge.
- Snowdon, Brian and Howard R. Vane (2005): *Modern Macroeconomics: Its Origins, Development and Current State*. Edward Elgar
- Surrey, M.J.C. (Ed.) (1976), *Macroeconomic Themes*, Oxford University Press, Oxford

CC 10: ADVANCED STATISTICAL METHODS FOR ECONOMICS

COURSE OBJECTIVES: After completion of the course the learner will be able to know the basic statistical applications necessary for economic data analysis.

Course outcome: Through this course learners will be able to generate models and establish economic theories. They will be able to understand various statistical tools that will help them identify patterns in data and predict future economic events.

Course Contents

Unit 1 THEORY OF PROBABILITY-I

Various concepts and the Elementary ideas of Set Theory
The definition of probability
Probability Theorems, assuming two events only
Applications to the Theorems

Unit 2 THEORY OF PROBABILITY-II

Random Variables and related elementary concepts
Discrete and
Continuous and Related concepts.
Expectation and Variance of Random Variables
Moment Generation Functions and Various Moments of a
Random variable (both discrete and continuous)

Unit 3 PROBABILITY DISTRIBUTIONS

Discrete: Binomial and Poisson

Continuous: Uniform or Rectangular and normal

Unit 4 STATISTICAL INFERENCE OR SAMPLE STATISTICS

Various types of sampling

Concepts
Applications,
Merits
Demerits

The Concept of a Statistic:

Statistic and Parameter
Sampling distribution of a statistic
Mean and proportion (Formulae only)

Unit 5: THEORY OF ESTIMATION

Point Estimation and interval Estimation:

Concepts, Properties and Applications

Unit 6 HYPOTHESIS TESTING

The Concepts of Hypothesis Testing: Various Concepts

Type I error
Type II error
z test
t test

Chi- square test
F test
Test for goodness of fit and
Tests for independence of attributes.

Suggested Readings:

1. V. K. Rohatgi and A. K. M. E. Saleh, An Introduction to Probability and Statistics, 2nd Edition, Wiley (2000).
2. Jay L. Devore, Probability and Statistics for Engineers, Cengage Learning, 2010.
3. Kenny and Keeping : Mathematical Statistics, Part I &Part II . Publisher, Van Nostrand, 1947.
4. Goon, Gupta and Dasgupta: *Fundamentals of Statistics*, Vol I, The World Press Pvt. Ltd. Calcutta
5. M.R. Spiegel (2003), *Theory and Problems of Probability and Statistics* (Schaum Series).

SEC 2: E- BUSINESS

Course Objectives and Outcomes: Even when your business is catering to the needs of the Indian consumers well, the presence of e-commerce and e-business helps you expand your market. Expanding the market through e-commerce helps in attracting consumers from more developed countries. It expands potential target market and gives global access. After going through this course, the learners will be able to know the concept of Business Models of E-Business, Technology Enabling E-Business, E-Marketing, E-CRM, E-Payment, E-Security, etc.

Unit 1: Introduction: Emergence of E-Business, Concept, Features and Importance, E-Business based activities, Advantages, Limitations, Techniques and barriers.

Unit 2: Business Models of E-Business: Key Elements of an E-Business Model, Electronic business models based on Relationship of Transaction Parties: B2B, B2C, C2C, C2B, Electronic business models based on Relationship of Transaction Types: Brokerage Model, Aggregator Model.

Unit 3: Technology Enabling E-Business: Networks and Internet-URL, TCP, Search Engine, The World Wide Web: Hypertext, Markup Languages, and Web Browser. Web Security Issues, Encryption Techniques: Symmetric and Asymmetric.

Unit 4: E-Marketing: Traditional Marketing, Web presence goals and meeting the needs of the web visitors, E-Marketing Value Chain, Website – vehicle for E-Marketing, Metrics

defining Internet Units of Measurement, The Browsing Behavior Model, Online Marketing, E-Advertising, E-Branding, E-Marketing Strategies.

Unit 5: E-CRM: Customer Relationship Management (CRM)-concept, features, goals, significance, benefits, functional components, business framework, Phases, Types, strategies.

Unit 6: E-Payment: Types of E-Payment: Electronic Card, Digital Cash, Digital Wallet, Online Stored value systems, E-Cheque, Electronic Billing presentation and payments, Online Banking, Case Study: Paytm and Free Charge.

Unit 7: E-Security: Importance, Dimensions, Types of Security Threats, Technological Solutions: Encryption and Decryption, Digital Envelope, Digital certificate, Digital Signature, SSL, S-HTTP, VPN, Firewalls, Antivirus Software.

Unit 8: Mobile Commerce: Wireless Environment, Definition of Mobile Commerce, Features, Advantages and Limitations, Technologies for Mobile Commerce - Wireless Spectrum, WAP, Generations of Wireless Technology-1G, 2G,3G,4G, M-Commerce Applications, Relevance of M-Commerce in India.

Suggested Readings

- ❖ Joseph, P.T. E-Commerce A Managerial Perspective. PHI
- ❖ Kenneth C. Laudon & Carol Guercio Traver, E-Commerce: Business, Technology, Society, Pearson.
- ❖ Agarwala, Kamlesh N., Amit Lal and Deeksha Agarwala, Business on the Net: An Introduction to the Whats and Hows of E -Commerce, Macmillan India Ltd.
- ❖ Bajaj, Deobyani Nag, E-Commerce, Tata McGraw Hill Company, New Delhi.
- ❖ Turban, E., et. al., Electronic commerce: A Managerial Perspective, Pearson Education Asia.

GE 4 INDIA'S POLITICAL ECONOMY (1947-2018)

COURSE OBJECTIVES: After completion of the course the learner will be able to know the continuity of political economy of India since Independence.

Course Contents

Unit 1 MULTIPLE GOALS OF ECONOMIC PLANNING

Ad hoc Economic Policies between 1947 and 1950.
Social Justice under the Constitution
The Draft Outline of the Plan
Various Programmes under the First Five Year Plan

**Unit 2 DYNAMIC INDUSTRIALIZATION AND STATIC AGRICULTURE:
A CONTRADICTION**

Economic Development Strategy under Nehru & Second Five Year Plan
Political Objectives of the Plan
Neglected Agricultural Sector
Wage Goods model came as a rescue but failed
Outcome from the Second Five Year Plan

Unit 3 ATTACKS ON SOCIALIST PRINCIPLES OF PLANNING

Emergence of different political Parties
The rise of private enterprise
Third Five Year Plan and its Failure
Retreat from the Social Goals of Planning
Attempt to Restructure the Agricultural Policy during Plan holiday (1966-69)
The Tussle between Industrial Objective and Agricultural Bourgeoisie
Emphasis on Equity, Social Justice and Self-reliance during 1969-74
Launching of Poverty Eradication programmes during Fifth Five Year Plan

Unit 4 EMERGENCY AND BEYOND

Emergency in 1975
Indira Gandhi and her Congress Party's Electoral Defeats in 1977
Indira Gandhi's Return to Power in 1980
Permit—license-quota Raj under her Government
A gradual move towards liberalization: Rajiv Gandhi's government (1984- 89)

Unit 5: MACROECONOMIC REFORMS, PRIVATISATION AND LIBERALIZATION

Economic Reforms after the 1991
The Political Rationale of Economic Reforms
A forward March by Private Enterprise

Unit 6 THE SECOND GENERATION OF REFORMS AND BEYOND

Various Governments and their Political Role
The Breakdown of the Planning Era and the Rise of NITI Aayog
NDA government's Politico-Economic Policy
What has been achieved: Reform since 1991

Suggested Reading:

- Gurucharan Das (2000). *India Unbound*, New York: Alfred A. Knopf.
Pranab Bardhan (2010). *Awakening Giants, Feet of Clay: Assessing the Economic Rise of China and India*, Princeton, NJ: Princeton University Press.
Francine R. Frankel (2005). *India's Political Economy (1947-2004)*, Oxford University Press New Delhi.

- Leo McCann (2014). *International and Comparative Business: Foundation of Political Economies*, Sage , London.
- Rob Jenkins (1999). *Democratic Politics and Economic Reforms in India*. Cambridge University Press, Cambridge
- Sanjay Ruparelia et al.(eds.),*Understanding India’s New Political Economy: A Great Transformation?*, Routledge, London & New York.
- Joyati Ghosh (1997): Development Strategy in India: Apolitical economy Perspective. Page 165-183. In Sugata Bose and Ayesha Jalal (eds), *Nationalism, Democracy and Development* , Oxford University Press.
- N.S.S. Narayana (ed.) (2007), *The Political Economy of Trade, Finance and Development: Selected Essays of T.N. Srinivason*, Oxford University Press

SEMESTER –5

CC 11: INDIAN ECONOMY -1

Course Objectives: After completion of the course the learner will be able to: Know the current issues and problems facing Indian economy with additional knowledge on paradigm shifts and turning points.

Course outcome: Through this course learners will get to know India’s demographic advantage, how the country has seen steady growth due to development initiatives undertaken by the government. Learners will get to understand how our country has seen steady growth due to development initiatives undertaken by the government.

Course Contents:

UNIT 1 DEVELOPMENT AND PLANNING

India’s Transition to a Developing Country Model

Two Phases of Development: Mixed Economy

Public Sector at Commanding Height (Phase I)

Increasing Role of Market (Phase II)

India’s Move to Development Planning

Features

Objectives

Goals

Evolution of Indian Planning

Achievements of Economic Planning

Failures of Economic Planning

Niti Aayog

Unit 2 STRUCTURAL CHANGES

Growth in National Income over time

The Period 1951-1980

The Period of 1980s Onwards

Trends in Occupational Structure

Features of Occupational Structure

Concerns in changes in Occupational Structure

Measures for Improving Occupational Structure

Sectoral Growth/Changes

Trends in Savings

Trends in Investment Behaviour

Employment

Regional Disparities

Magnitude and Causes of Regional Disparities

Unit 3 POPULATION AND HUMAN DEVELOPMENT

Demography: size and trends

Stages of Demographic Transition

Demographic Dividend in India

Performance in Education

Health and Nutrition in India: Facts and Interpretations

Human Development

Why Human Development?

Components of Human development

The HDI

India's progress in human development vis-à-vis peer countries

Unit 4 GROWTH AND DISTRIBUTION

POVERTY IN INDIA

Poverty Measures

Multidimensional Poverty Index

Poverty Line and its Concept

Causes of Persistence of Poverty

Poverty Estimation and Poverty Incidence

Poverty Incidence: From the Early 1950s to 2011-12

Government Efforts to Combat Poverty

Impact of Economic reforms on Poverty Reduction

INEQUALITIES IN INCOME DISTRIBUTION IN INDIA

Some Commonly Used Measures of Inequality:

- Gini coefficient of inequality
- Theil Index
- Decile Dispersion Ratio
- Share of income/consumption of the poorest x%

Inequality in Indian Economy (HDI Measurement)

Causes of Inequality

Effects of Economic Inequality

Policies regarding inequality Reduction

Impact of Reforms on Inequality Reduction

Unit 5 EMPLOYMENT AND UNEMPLOYMENT IN INDIA

Employment Trends

Nature and Estimates of Unemployment

Causes of Unemployment

Employment Policies

1950s to 2002

Post-2002

Informal Economy

**Unit 6 COMPARATIVE PROFILE OF GROWTH AND STRUCTURAL CHANGES:
WITH OTHER MAJOR ECONOMIES**

Inter-sectoral Transfer of Workforce: Theoretical Insights and Trends

Comparative Profile of Structural Changes:

India vs. Developed Countries

Comparative Profile of Structural Changes:

India Vs. Other Developing Asian Countries

Comparative Profile of Structural Changes:

India Vs. Developed and BRICS Economies

Suggested Readings:

1. Jean Dreze and Amartya Sen, Jean Dreze and Amartya Sen, 2013. *An Uncertain Glory: India and its Contradictions*, Princeton University Press.
2. Pulapre Balakrishnan, 2007, The Recovery of India: Economic Growth in the Nehru Era, *Economic and Political Weekly*, November.
3. Rakesh Mohan, 2008, Growth Record of Indian Economy: 1950-2008. A Story of Sustained Savings and Investment, *Economic and Political Weekly*, May.
4. S.L. Shetty, 2007, India's Savings Performance since the Advent of Planning, in K.L. Krishna and A. Vaidyanathan, editors, *Institutions and Markets in India's Development*.
5. Himanshu, 2010, Towards New Poverty Lines for India, *Economic and Political Weekly*, January.
6. Jean Dreze and Angus Deaton, 2009, Food and Nutrition in India: Facts and Interpretations, *Economic and Political Weekly*, February.
7. Himanshu. 2011, Employment Trends in India: A Re-examination, *Economic and Political Weekly*, September.
8. Rama Baru et al, 2010, Inequities in Access to Health Services in India: Caste, Class and Region, *Economic and Political Weekly*, September.
9. Geeta G. Kingdon, 2007, The Progress of School Education in India, *Oxford Review of Economic Policy*.
10. J.B.G. Tilak, 2007, Post Elementary Education, Poverty and Development in India, *International Journal of Educational Development*.
11. T. Dyson, 2008, India's Demographic Transition and its Consequences for Development in Uma

- Kapila, editor, *Indian Economy Since Independence*, 19th edition, Academic Foundation.
12. Kaushik Basu, 2009, —China and India: Idiosyncratic Paths to High Growth, *Economic and Political Weekly*, September.
 13. K. James, 2008, Glorifying Malthus: Current Debate on Demographic Dividend in India *Economic and Political Weekly*, June.
 14. Reetika Khera, 2011, India's Public Distribution System: Utilization and Impact *Journal of Development Studies*.
 15. Aniruddha Krishna and Devendra Bajpai, 2011, Lineal Spread and Radial Dissipation: Experiencing Growth in Rural India, 1992-2005, *Economic and Political Weekly*, September.
 16. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics*, Oxford University Press.
 17. UNDP *Human Development Reports and National Human Development Reports* (various issues).
 18. Jagdish Bhagwati and Arvind Panagarya (2014) *India's Tryst with Destiny*, Collins Business.

CC 12: DEVELOPMENT ECONOMICS-I

Course Objectives: After completion of the course the learner will be able to know the current theoretical and empirical issues and problems concerning economic development.

Course outcome: Through this course learners will get to understand the factors that help to improve the economic, social and fiscal conditions of developing countries.

Course Contents

Unit 1 BASIC CONCEPTS OF DEVELOPMENT

Approaches to Development:

Participatory Development

Inclusive Development

Sustainable Development

Human Development

Growth and Development

Broad Indicators of Economic Development:

Per capita Income

Human Development Index

Gender Development Index

Gender Empowerment Measure

Human Poverty Index

Unit 2 THEORIES OF DEVELOPMENT

Dependency school of development

Modernizations Theory

Theory of unequal exchange and development

Changing Approaches to Development:

The Washington Consensus
The Millennium Development Goals

Unit 3 PERSISTENCE OF UNDERDEVELOPMENT AND STRATEGIES OF DEVELOPMENT

Characteristics of underdevelopment
Obstacles to underdevelopment
Trap Models
The Idea of Vicious Circle of Poverty
Critical minimum effort thesis
Low level equilibrium trap
Process of cumulative causation
Big push argument
Balanced vs. unbalanced growth
Hirschman model
Choice of technique and investment criteria

Unit 4. CONCEPT OF SURPLUS LABOUR

Surplus labour as potential saving
Economic development with unlimited supplies of labour (Lewis Model).
Harris-Todaro model

Unit 5 INEQUALITY: DEFINITIONS, MEASURES AND MECHANISMS

Meaning of Inequality
Inequality measures
Lorenz Curve
Range
Coefficient of variation,
Gini-coefficient
How Inequality Affects the Economy? An Illustrative Framework
Connections between inequality and development

UNIT 6 POVERTY

Relative Poverty
Absolute Poverty
Poverty line
The Mechanism that generates Poverty Trap
Poverty Measures:
Head count ratio
Poverty gap ratio,
Income gap ratio,
Human Poverty Index,
Hunger Index

Tackling Poverty – The World Bank Approach

Suggested Readings

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009.
2. Partha Dasgupta, *Economics, A Very Short Introduction*, Oxford University Press, 2007.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee (eds.), *Understanding Poverty*, Oxford University Press, 2006
4. Kaushik Basu, *The Oxford Companion to Economics in India*, OUP, 2007.
5. Amartya Sen, *Development as Freedom*, OUP, 2000.
6. Daron Acemoglu and James Robinson, *Economic Origins of Dictatorship and Democracy*, Cambridge University Press, 2006.
7. Robert Putnam, *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton University Press, 1994
8. A.P.Thirlwall (2005): *Growth and Development*. Palgrave Macmillan.
9. G.M. Meier and J.E. Rauch. *Leading Issues in Economic Development*. Oxford University Press. (8th edition or latest)
10. K. Basu: *Analytical Development Economics*, OUP
11. Todaro and Smith: *Economic Development*, Pearson Education, 2009
12. Y. Hayami, *Development Economics* (Oxford University Press)
13. Hayami and Godo, *Development Economics*, OUP
14. Dani Rodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.
15. Soumyen Sikdar (2013) *Contemporary Issues in Globalization: An Introduction to Theory and Policy in India*, OUP
16. Meier and Rauch (ed.), *Leading Issues in Development Economics*, OUP.

DSE 1 INTRODUCTORY ECONOMETRICS

Ssem 5 3

COURSE OBJECTIVES: After completion of the course the learner will be able to know the basics of econometrics

Course outcome: Through this course learners will get to understand the study of economic data using mathematical and statistical methods. This course is important because it provides tools to help guide decision making in economics and finance.

Course contents

Unit1 DEFINITION, SCOPE AND GOALS OF ECONOMETRICS

What is Econometrics?
Relationship between Econometrics and Economic Theory
Econometrics and statistics
Branches of econometrics
Goals of econometrics
Methodology of Econometrics Research

Unit 2 THE CLASSICAL LINEAR REGRESSION MODEL (CLRM)--I

Introduction to Regression: the CLRM

The OLS method of Estimation

The assumptions of the CLRM

Properties of the OLS estimators

Linearity

Unbiasedness

Efficiency and BLUEness

Consistency

The overall goodness of fit

Problems associated with R^2

Unit 3 THE CLASSICAL LINEAR REGRESSION MODEL (CLRM)--II

Multiple Regression

Qualitative (dummy) independent variables— intercept dummy and slope dummy (only interpretation of model)

Forecasting— Ex-post forecast and Ex-ante forecast, forecast

Error (only for two variable model)

Unit 4 VIOLATING THE ASSUMPTIONS OF THE CLRM-I

Multicollinearity

Causes

Consequences

Types of Multicollinearity

Enhancement synergism

Change in sign

Tests and Remedies

Unit 5 VIOLATING THE ASSUMPTIONS OF THE CLRM -II

Heteroskedasticity

Causes

Consequences

Tests and Remedies

Unit 6 VIOLATING THE ASSUMPTIONS OF THE CLRM-III

Autocorrelation

Causes,

Consequences

Tests and Remedies

References

1. Christopher Dougherty :*Introduction to Econometrics*, Oxford University Press, 3rd edition, Indian edition, 2007.
2. G.S. Maddala, *Introduction to Econometrics*, 3rd edition, John Wiley & Sons Ltd .2005.
3. Jan Kmenta, *Elements of Econometrics*, Macmillan Publishing Company (1991).
4. D. Gujarati, *Basic Econometrics*, McGrawhill Higher Education (2003).
5. W.H. Greene: *Econometric Analysis*, 4th edition, Pearson Education (2000).
- 6 D.N. Gujarati and D.C. Porter: *Essentials for Econometrics*, Mc GrawHill, 4th Edition, International Edition, 2009.
7. R.L Thomas *Introductory Econometrics*, Second edition, Longman. 1993.
8. Asteriou Dimitrios, & Stephen G. Hall (2011): *Applied Econometrics*, palgrave Macmillan,New York.

Or

DSE 1: ECONOMIC HISTORY OF INDIA (1857-1947) Sem-5

Course Objectives: 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 outcome: Learners will understand the economic history of India and its place in the world. They will learn about the economy's development and contributions in different sectors.

Course Contents:

UNIT 1 INTRODUCTION: COLONIAL INDIA

Meaning of Colonialism
Three stages of British rule in India
Basic Features of Colonialism in India

Unit 2 MACRO TRENDS

The British Rule and the Exploitation of India
National income estimates
Nature and extent of poverty

Occupational Structure in British India (1881-1951)
Occupational Distribution of population
Population history in British India

Unit 3 AGRICULTURE

Agrarian structure immediately after 1858:

Landlord and Peasants
Agricultural labourers

Agricultural trends (1890-1947):

Trends in output, availability and productivity
Agricultural productivity in the 19th century
Agricultural production, 1890-1947

Agricultural markets:

Commercialization of Agriculture
Phases
Causes
Consequences

Land market

Tenancy or the market for User Rights

Labour market

Credit market

Effects of market expansion

Great Famines of the 19th Century

Unit 4 RAILWAY AND INDUSTRY

Growth of Railways and its Impact

Consequences of the British Rule in India:

De-industrialization
Decline of Handicrafts
Drain of Wealth

Nature of industrialization in the interwar period

Constraints to industrial breakthrough

Labour Relations

Unit 5 HISTORY OF INDIA'S FOREIGN TRADE: 1857-1947

Foreign trade

Volume of Trade
Composition of Trade

Capital flows and the colonial economy

Unit 6 ECONOMY AND STATE IN THE IMPERIAL CONTEXT

State Policies and Economic Underdevelopment

The Imperial priorities and the Indian economy
Hostile State policy to Indian interests

Government and Fiscal Policy

Suggested Readings:

1. *The economic history of India (1857-1947)* : Tirthankar Roy ; Oxford University Press, 3rd edition, 2011
2. *A people's history of India 28-Indian Economy 1858-1914*: Irfan Habib
3. *The Cambridge economic history of India* Vol.I c.1200-c.1750 edited by Tapan Raychaudhuri and Irfan Habib
4. *A concise economic history of India* Dhires Bhattacharya
5. *The Cambridge Economic History of India*, Vol.II c.1757- 1970 Dharma Kumar
6. *Colonialism and Indian Economy*, Amiya kumar Bagchi

7. *Development Planning: The Indian Experience* Sukhomay Chakraborty
8. *A New Economic History of Colonial India*. Edited by L. Chaudhury, B. Gupta, T.Roy and A.V.Swamy. An up-to-date critical survey and novel resource on Indian Economic History
9. *An economic history of India*. Deitmar Rothermund. London 1988
10. J. Krishnamurty, *Occupational Structure*, Dharma Kumar (editor), The Cambridge Economic History of India, Vol. II, 2005, Chapter 6.
11. Jean Dreze, *Famine Prevention in India in Dreze and Sen (eds.) Political Economy of Hunger*, WIDER Studies in Development Economics, 1990, pp.13-35.
12. *India and the British Empire, 1880-1935*, B.R. Tomlinson, 1975

DSE 2 MONEY AND FINANCIAL MARKETS Sem 5 4

Course Objectives: 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 outcome: Learners will get to know useful clues about how the financial system may change overtime and how these markets provide liquidity, capital and participation that are essential for economic growth and stability.

Course Contents

Unit 1 MONEY

Concept
 Functions
 Measurement
 Theories of money supply determination

Unit 2 FINANCIAL INSTITUTIONS, MARKETS

Role of financial markets
 Role of institutions
Problem of asymmetric information –
 Adverse selection and Moral hazard
Financial crises

Unit 3 MARKETS, INSTRUMENTS AND FINANCIAL INNOVATIONS

Money market

Structure of Money Market
 Functions of Money Market
 Instruments of Money market
 Money market reforms in India

Recent trends and Developments in the Indian Money market

Capital Market

Structure of Capital Markets

Importance of Capital markets

Functions of Capital Market

Instruments of Capital market

Capital Market Reforms in India

Recent trends and Developments in the Indian capital market

Role of financial derivatives and other innovations

Unit 4 INTEREST RATES

Interest Rate Determination

Sources of interest rate differentials

Theories of term structure of interest rates

Interest rates in India

Unit 5 BANKING SYSTEM

Balance sheet and portfolio management

Indian banking system

Changing role and structure

Banking sector reforms in India

Unit 6 CENTRAL BANKING AND MONETARY POLICY IN INDIA

Functions of Central Bank

Balance sheet

Goals

Targets

Instruments of monetary control

Monetary management in an open economy

Current monetary policy of India.

Suggested Readings:

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6th edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3rd edition, 2009.
3. M. R. Baye and D. W. Jansen, *Money, Banking and Financial Markets*, AITBS, 1996.
4. Rakesh Mohan, *Growth with Financial Stability- Central Banking in an Emerging Market*, Oxford University Press, 2011.
5. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5th edition, 2011.
6. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7th edition, 2011.
7. N. Jadhav, *Monetary Policy, Financial Stability and Central Banking in India*, Macmillan, 2006.
8. S. K. Jana & A. K. Karmakar, *Indian Financial System*, Dey Book Concern. Kolkata-73, 2018
9. Various latest issues of RBI Bulletins, Annual Reports, Reports on Currency and Finance and Reports of the Working Group

OR

DSE 2: INDIAN ECONOMY-II

Course Objectives: Building on the more aggregative analysis of trends in the Indian Economy, this course examines sector-specific trends in key indicators and their implications in the post-Independence period

Course outcome: Learners will have a clear notion about India's global importance, demographic advantages, employment generation and investment opportunities.

Course Contents

Unit 1 MACROECONOMIC POLICY- I

MONETARY POLICY

Objectives of Monetary Policy
Trends in India's Monetary Policy

Unit 2 MACROECONOMIC POLICY- II

FISCAL POLICY

Objectives of Fiscal Policy
The Fiscal Imbalance and Deficit Finance
Rationale for Deficit Financing
Consequences of Deficit Financing
The Fiscal Imbalance and the New Fiscal Approach
Fiscal imbalances Indicators and their Corrections
Fiscal Policy Reforms and New Fiscal Policy since 1991
Fiscal Responsibility in India: FRBM Act
Principles of Fiscal Federation
The Finance Commission

Unit 3 INDIAN AGRICULTURE: POLICIES AND PERFORMANCE

Land Reforms;
Objectives, Aspects and Performance
Green Revolution and its Impact
Policies on Agriculture
Agricultural Prices Policy
Policies on Food Security
Agricultural Trade Policy
WTO and Indian Agriculture

Performance in Agriculture
Growth Concerns

Unit 4 INDUSTRIAL POLICY AND GROWTH

Industrial Policies Before 1990s

Industrial Policy Resolution, 1948

Industrial Policy Resolution, 1956

Industrial Policy, 1977

Industrial Policy, 1980

Industrial Policy, 1985: A Move Towards Liberalization Measure

New Industrial Policy 1991

Trends in Industrial Production

Phase I: 1951-65

Phase II: 1966-80

Phase III: 1981-91

Phase IV: Post-1991

New Challenges

Technology Intensity

Competition Commission of India

Medium, Small and Micro Enterprises (MSME)

Importance, Role and Performance

UNIT 5 INDIA'S SERVICES REVOLUTION

Increasing Importance of the Service (or Tertiary) Sector

Trend in Services Sector

Composition within the Services Sector

Performance in Services Sector

Unit 6 OPEN ECONOMY MACROECONOMIC POLICY

Trade Policy

Import Substitution Policy

Export-led Growth

Trade Policy prior to 1991

Trade Policy: Post 1991

Impact Assessment

FDI Policy

A. First Phase (1950-80)

B. Second Phase (1980-91)

C. Third Phase—Post 1991

FII Policy- Post 1991

Impact of FDI and FII

Bilateralism

Regionalism

'Spaghetti bowl' problem

Multilateralism

Suggested Readings:

1. Shankar Acharya, 2010, —Macroeconomic Performance and Policies 2000-8, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.

2. Rakesh Mohan, 2010, —India's Financial Sector and Monetary Policy Reforms, in Shankar Acharya and Rakesh Mohan, editors, *India's Economy: Performances and Challenges: Development and Participation*, Oxford University Press.
3. Pulapre Balakrishnan, Ramesh Golait and Pankaj Kumar, 2008, —Agricultural Growth in India Since 1991, *RBI DEAP Study no. 27*.
4. B.N. Goldar and S.C. Aggarwal, 2005, —Trade Liberalisation and Price-Cost Margin in Indian Industries, *The Developing Economics*, September.
5. P. Goldberg, A. Khandelwal, N. Pavcnik and P. Topalova, 2009, —Trade Liberalisation and New Imported Inputs, *American Economic Review, Paper and Proceedings*, May.
6. Kunal Sen, 2010, —Trade, Foreign Direct Investment and Industrial Transformation in India, in Premachandra Athukorala, editor, *The Rise of Asia*, Routledge.
7. A. Ahsan, C. Pages and T. Roy, 2008, —Legislation, Enforcement and Adjudication in Indian Labour Markets: Origins, Consequences and the Way Forward, in D. Mazumdar and S. Sarkar, editors, *Globalization, Labour Markets and Inequality in India*, Routledge.20
8. Dipak Mazumdar and Sandeep Sarkar, 2009, —The Employment Problem in India and the Phenomenon of the Missing Middle, *Indian Journal of Labour Economics*.
9. J. Dennis Rajakumar, 2011, —Size and Growth of Private Corporate Sector in Indian Manufacturing, *Economic and Political Weekly*, April.
10. Ramesh Chand, 2010, —Understanding the Nature and Causes of Food Inflation, *Economic and Political Weekly*, February.
11. Mohan, R. (ed) *India Transformed: 25 years of economic reforms*. 2017, Penguin Random House India pvt.ltd.
12. Bishwanath Goldar, 2011, —Organised Manufacturing Employment: Continuing the Debate, *Economic and Political Weekly*, April.
13. Kaushik Basu and A. Maertens, eds, 2013, *The New Oxford Companion to Economics in India*, Oxford University Press.
14. Biswajit Chatterjee and Asim K. Karmakar (eds.), *Food Security in India*, Regal Pub, 2012.
15. Supriyo De ,2017 *India's Fiscal Policy: Prescriptions, Pragmatics and Practice*. Cambridge University Press.
16. Panagariya, A. and J. Bhagwati, 2014 *India's tryst with destiny*. 2014, HarperCollins.
17. Dreze, J. and A. Sen 2014 *An Uncertain Glory: India and its contradictions*. 2014, Penguin, UK.
18. Reddy, Y.V., N. Valluri and P. Ray *Financial and Fiscal policies: Crises and New Realities*. Oxford University Press, New Delhi.
19. Government of India, *Economic Survey* (various issues), Ministry of Finance.
20. India Development Report (various issues), Oxford University Press.
21. Swaminathan, M.S. 2010 *.From Green to Evergreen Revolution - Indian Agriculture: Performance and Challenges*, Academic Foundation, New Delhi.
22. Rangarajan, C. and D. Srivastava (2011): *Federalism and Fiscal Transfers in India*, Oxford University Press.
23. Biswajit Chatterjee and Asim K. Karmakar (2016): *India's Agricultural Growth since Liberalization*, Chapter 2, pp 19-40 In a book 'Indian Economy-A Visionary Perspective' edited by John Felix Raj, Samrat Roy and Koushik Kumar Hati, Regal Publications , New Delhi

Semester 6

CC-13 INTERNATIONAL ECONOMICS

Course Objectives: After completion of the course the learner will be able to have a glimpse of the fundamentals of international economic theories and some relevant empirical facts. In addition, they will also be exposed to real-world examples and case studies.

Course outcome: Through this course learners will get an idea about how the world's economies are connected and how events in other countries can impact our lives.

Course Contents

Unit 1 THEORIES OF INTERNATIONAL TRADE

Ricardian Theory of Trade in a two-country two-commodity Framework
Limitation of Ricardian Trade Theorem
Gains from Trade in Ricardian Models of Trade

Unit 2 FACTOR ENDOWMENT AND TRADE

Hecksher-Ohlin Theorem of Trade using Price and Physical definition-
Factor Price Equalization Theorem
Stolpher –Samuelson Theorem
Rybczynsky theorem
Factor Intensity Reversal and H-O Theorem
Leontief Paradox

Unit 3 NEOCLASSICAL THEORY OF TRADE

Trade Indifference curve
Offer curve
Elasticity of Offer curve
International Equilibrium
Stability of International Equilibrium
Marshall -Lerner Condition

Unit 4 GAINS FROM TRADE

Some Trade is better than no Trade
Restricted Trade:
Tariffs vs. Quota

Unit 5 TRADE POLICY

Instruments of trade policy
Tariffs and National welfare

Optimum tariff
Effects of Tariff on Domestic prices
Effects of Tariff on Terms of Trade
Metzler's Paradox

Unit 6 BALANCE OF PAYMENTS (BoP)

Accounting

Foreign Trade Multiplier

Foreign Exchange Market:

Spot and forward Exchange Rate
Speculation and arbitrage
Stability of foreign Exchange Market
Devaluation and Marshall –Lerner Condition

Suggested Readings:

1. Paul Krugman, Maurice Obstfeld, and Marc Melitz, *International Economics: Theory and Policy*, Addison-Wesley (Pearson Education Indian Edition), 9th edition, 2012.
2. Dominick Salvatore, *International Economics: Trade and Finance*, John Wiley International Student Edition, 10th edition, 2011
3. Miltiades Chacholiades 1990): *International Economics*, McGraw-Hill Education.

CC 14 PUBLIC FINANCE

Sem 6 2

Course Objectives: The course deals with the nature of government intervention and its implications for allocation, distribution and stabilization. Inherently, this study involves a formal analysis of government taxation and expenditures. The subject encompasses a host of topics including public goods, market failures and externalities. The learners will be able to know the theory of public economics and its application in the Indian economy.

Course outcome: Through this course learners will get to know how a country's economy influences other aspects of society including economic growth, social welfare and economic downturns.

Course Contents

Unit1 NATURE AND SCOPE OF PUBLIC ECONOMICS

Definition and Scope of Public Economics
Externalities,
Market Failure and Government Intervention
Coase Theorem

Unit 2 THEORIES OF PUBLIC GOOD

Definition of Public Good;
Characteristics of Pure Public Good
Distinction between Pure Public Good, Impure Public Good and Private Good
Free riding problem
Market Failure in case of Pure Public Good
Optimal provision of Public Goods
Lindahl Equilibrium
Voting Equilibrium

Unit 3 TAXATION

Classification of Taxes
Canons of Taxation
Benefit Principle
Equal Sacrifice Principle
Ability to Pay Principle
Incidence and Burden of Taxes
Effects of taxation
The Laffer curve

Unit 4 INDIAN PUBLIC FINANCE

Significance of taxation in Indian Context
Objectives of Taxation
Direct taxes
Indirect taxes
Goods and Services Tax (GST)
Tax reforms in India
Budget Deficits and Budget Surplus
Fiscal Deficit and Revenue Deficit
Fiscal Federalism in India

Unit 5 PUBLIC EXPENDITURE

Meaning and Classification of Public Expenditure
Government budget and its types
Government expenditure multiplier
Tax multiplier
Balanced budget multiplier

Unit6. PUBLIC DEBT

Meaning of Public Debt
Sources of Public Borrowings: Internal and External borrowing;
Why is Public Debt Incurred?
Demerits of Public debt
Effects of Public Debt
Public Debt in India

Suggested Readings:

1. J. Hindriks, G. Myles: *Intermediate Public Economics*, MIT Press, 2006.

2. H. Rosen, T. Gayer: *Public Finance*, 9th ed., McGraw-Hill/Irwin, 2009.
3. Joseph E. Stiglitz, *Economics of the Public Sector*, W.W. Norton & Company, 3rd edition, 2000.
4. R.A. Musgrave and P.B. Musgrave, *Public Finance in Theory & Practice*, McGraw Hill Publications, 5th edition, 1989.
5. John Cullis and Philip Jones, *Public Finance and Public Choice*, Oxford University Press, 1st edition, 1998.
6. Harvey Rosen, *Public Finance*, McGraw Hill Publications, 7th edition, 2005.
7. Mahesh Purohit, *Value Added Tax: Experiences of India and Other Countries*, 2007.
8. Kaushik Basu and A. Maertens (ed.), *The New Oxford Companion to Economics in India*, Oxford University Press, 2013.
9. M.M. Sury, *Government Budgeting in India*, 1990.
10. M. Govinda Rao, *Changing Contours of Federal Fiscal Arrangements in India*, Amaresh Bagchi (ed.), *Readings in Public Finance*, Oxford University Press, 2005.
11. Shankar Acharya, 2005, Thirty Years of Tax Reform in India, *Economic and Political Weekly*, May 14-20.
12. Rangarajan and D.K. Srivastava, 2005, Fiscal Deficit and Government Debt: Implications for Growth and Stabilization”, *Economic and Political Weekly*, July 2-8.
13. M. Govinda Rao, 2011, Goods and Services Tax: A Gorilla, Chimpanzee or a Genius like Primates? *Economic and Political Weekly*, February 12-18.
14. R.J. Chelliah (ed), *Towards Sustainable Growth*, OUP, 2009
15. *Report of the 14th Finance Commission*, 2010-15.
16. *Economic Survey*, Government of India (Latest).

DSE-3: DEVELOPMENT ECONOMICS -II

Semester 6 3

Course Objectives: This course begins with basic demographic concepts and their evolution during the process of development. The structure of markets and contracts is linked to the particular problems of enforcement experienced in poor countries. The governance of communities and organizations is studied and this is then linked to questions of sustainable growth. The course ends with reflections on the role of globalization and increased international dependence on the process of development

Course outcome: Learners will get to learn the factors that improve the standard of living of the society as a whole, create jobs, improve infrastructure, support the community and provide services.

Course Contents

Unit 1 DEMOGRAPHY AND DEVELOPMENT

Preliminary Concepts on Demography:

Birth and Death rates,

Age Structure,

Fertility and Mortality;

Demographic transitions during the process of development

Migration

Unit 2 LAND, LABOR AND CREDIT MARKETS

Land Market

The distribution of land ownership
Land reform and its effects on productivity
Contractual relationships between tenants and landlords
Land acquisition

Labour Market

Nutrition and labor productivity

Credit Market

Informational problems and credit contracts
Micro-finance
Inter-linkages between rural factor markets.

Unit 3 GOVERNANCE AND INSTITUTIONS**What is Good Governance****Nexus between Good Governance and Economic Development****State, market and Institution****Role of Governance****Need for Governance in organizations and in communities****Good Governances— Characteristics****Unit 4. ENVIRONMENT AND SUSTAINABLE DEVELOPMENT**

What is sustainability for renewable resources?

A Brief History of Environmental (Climate) Change:

From 1972 First World Geneva Conference to 2015 Paris Convention

How does climate change affect the poor?

Commons or Pool Resources

Governing the Commons: Institutions for collective actions

Environmental externalities and state regulation of the environment

Unit 5 GLOBALIZATION**Introduction: What is Globalization****Globalization in Historical Perspectives****Measurement of Globalization:**

Goods and Services Exports

FDI

Technology Diffusion

Intensity

Sensitivity

Globalization Paradox**Unit 6. GLOBALIZATION AND INDIA****India in the Global Economy:**

Trade GDP Ratio
Mean Tariff Rate
Diversification of Exports
Product Composition of Exports
Direction of Exports
Financial Integration

Globalization and its Impacts

World Inequality

Economics and Politics of Multilateral Trade Agreements

Financial Instability in a Globalized World

Suggested Readings

1. Debraj Ray, *Development Economics*, Oxford University Press, 2009.
2. Partha Dasgupta, *Economics, A Very Short Introduction*, Oxford University Press, 2007.
3. Abhijit Banerjee, Roland Benabou and Dilip Mookerjee, *Understanding Poverty*, Oxford University Press, 2006.
4. Thomas Schelling, *Micromotives and Macrobehavior*, W. W. Norton, 1978.
5. Albert O. Hirschman, *Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States*, Harvard University Press, 1970.
6. Raghuram Rajan, *Fault Lines: How Hidden Fractures Still Threaten the World Economy*, 2010.
7. Elinor Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action*, Cambridge University Press, 1990.
8. Dani Rodrik, *The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist*, Oxford University Press, 2011.
9. Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), *Globalization in Historical Perspective*, University of Chicago Press, 2003.
10. Budhen K. Saikia, Asim K. Karmakar, & Sebak K. Jana , *An Introduction to Environmental Economics*, Panchajanya Book, Guwahati, 2017.
11. Debra Johnson and Collin Turner. *International Business: Themes and Issues in the Modern Global Economy*, 2nd Edition, Routledge, 2010.

OR

DSE 3 INTERNATIONAL TRADE & PAYMENTS INSTITUTIONS

Course Objectives: This course focuses on development of Trade and Payments Institutions and advent of globalization since the World War II.

Course outcome: This course is important as learners will understand the factors that facilitate the global economy and promote economic growth thereby creating stability and providing financial assistance.

Course Contents

UNIT 1: BRETTON WOODS

The rise of the Bretton Woods System
The high Bretton Woods System
The fall of the Bretton Woods System
Implications

UNIT 2 THE IMF

Structure of the IMF
The role and functions of the IMF
Open –economy macroeconomic Models Under the IMF
Polak model of financial Programming
Alexander’s Absorption Model
The Structural Adjustment Policies of the IMF
IMF and Bretton Woods: Appraisal

UNIT 3 THE WORLD BANK AND ITS OPERATION

What is World Bank?
Objectives, Role and Functions
Operations in Developing countries

UNIT 4 GATT AND WTO

What is GATT?
Three characteristics of GATT negotiations
Role and Functions of GATT Prior to 1993

UNIT 5 WTO AND ITS OPERATIONS

Role and Functions of WTO
Trade Rounds and the WTO
Agriculture and the WTO
Dispute Settlement

UNIT 6 WORLD TRADE UNDER THE WTO

World trade before WTO
World Trade after WTO
Multilateralism system under WTO
Preferential Trading agreements (PTAs)
How do international trade and investment affect labour market?

Suggested Readings

Gramm, Teresa (2013). Development of Trade Institutions and Advent of Globalization since the World War II In Randall E. Parkar and Robert Whaples (eds.), *Routledge Handbook of Major Events in Economic History* (pp. 350-363). Routledge.
Joyce, Joseph(2013). *The IMF and Global Financial Crises: Phoenix Rising?* Ch.2 Cambridge University Press

Patrick Love and Ralph Lattimore(2010). *International Trade: Free, Fair and Open?*
Academic Foundation, New Delhi.

DSE- 4: ENVIRONMENTAL ECONOMICS Sem 6 4

Course Objectives: This course focuses on economic causes of environmental problems. Selected topics on international environmental problems are also discussed.

Course outcome: Learners will understand how economics play a crucial role in balancing the use of natural resources with the protection of the environment.

Course Contents

Unit 1 INTRODUCTION

What is environmental economics?
How does it relate to Environmental Policy?
How does it differ from other branches of Economics?
How to Approach Environmental Issues?
The Linkage between the Economy and the Environment: The Basic Ideas
Review of Microeconomics and Welfare Economics

Unit 2 THE THEORY OF EXTERNALITIES

Pareto optimality and market failure in the presence of externalities
Property Rights and the Coase theorem
Common Property Resources(CPRs)
The Tragedy of the Commons

Unit 3 THE DESIGN AND IMPLEMENTATION OF ENVIRONMENTAL POLICY

Overview

**Pigouvian Taxes and Effluent Fees
Environmental Economics and Pollution Control Policies**

Environmental Economics
Pollution Control Policies:

- A. Command and Control instruments
 - B. Regulations or Incentive- based Instruments; Marketable Tradable (Pollution) Permits
 - C. Liabilities Laws in environmental cases
- Why Incentive base approach is more efficient than command and control?**
Why Command and Control Strategy is popular?
Choice between taxes and quotas

Unit 4 INTERNATIONAL ENVIRONMENTAL PROBLEMS

**Trans-boundary environmental problems
Trade and Environment.**

Unit 5 ECONOMICS OF CLIMATE CHANGE

Climate change is a difficult area for policy-makers
A Brief History of Climate Change
The Potential Physical and Socio- Economical Consequences of Climate Change
Managing “the Climate Change Problem through Emission Control, Sequestration,
geo-Engineering, Mitigation and Adaptation
To what extent climate change will impact on Development?

Unit 6 SUSTAINABLE DEVELOPMENT

What is meant by Sustainable Development?
Rules
Measurement

Suggested Readings:

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press, 2nd edition, 2010.
2. Robert N. Stavins (ed.), *Economics of the Environment: Selected Readings*, W.W. Norton, 5th edition, 2005.
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, *Natural Resource and Environmental Economics*, Pearson Education/Addison Wesley, 3rd edition, 2003.
4. Maureen L. Cropper and Wallace E. Oates, 1992, —Environmental Economics: A Survey, *Journal of Economic Literature*, Volume 30:675-740.
5. Molly Scott Cato, *Environment and Economy*, Routledge 2011
6. R.H. Coase, ‘ the Problem of Social Cost’, *Journal of Law and Economics*,3/1:1-44: A Seminal work in neoclassical Economics , addressing Specifically the question of pollution., 1960.
7. F. Akerman, *Can We Afford the Future? The Economics of a Warming World*, London: Zed, 2009 : offers a neoclassical approach to climate change with focus on discounting.
8. Biswajit Chatterjee and Asim K. Karmakar, ‘Trade and Environment in an Open Economy ,I n G.S. Monga (ed.), *Environment and Development* , New Delhi, Deep and Deep Publications.2001

OR

DSE 4 APPLIED ECONOMICS

Sem 6 No 4

Course objective:

After completion of the course the learner will be able to know how mathematical techniques are employed in different branches of economics.

Course outcome: Through this course learners will understand how to make informed decisions and improve outcomes in many areas of lives, including business, healthcare and public policies.

Course contents:**Unit1 1 INTRODUCTION**

Subject Matter
The Approach
The Terminology

Unit 2 DEMAND ANALYSIS, ESTIMATION AND FORECASTING**Demand Estimation and Forecasting**

Elasticity
Market Survey and Market Experiment
Delphi Method
Regression Analysis
Exponential Smoothing Analysis

Unit 3 ESTIMATING COST

Cost –output Relationship: Long vs. Short
Estimation of Cost Function
Uses of Cost Function

UNIT 4 THE METHODOLOGY OF PRODUCTION FUNCTION ANALYSIS

Specification of the Economic model
The Measurement and Classification of Inputs and Outputs
Gathering the Data
Econometric Techniques for Estimating the production functions
Evaluation of the Estimates

Unit 5 TECHNIQUES FOR INVESTMENT APPRAISAL

Net Present Value (NPV) Criteria,
Internal Rate of Return (IRR)
The Pay Back Technique

Unit 6 CAPITAL BUDGETING & BENEFIT-- COST ANALYSES**6A Capital budgeting**

Types of Capital Investments
Estimating Outlays and Cash Flows
Methods for Project Evaluation

6B Benefit –Cost Analysis

The Benefit Cost Ratio
The Discount Rate

Example of Benefit Cost Analysis

Suggested Readings:

1. Peter Cassimatis *Managerial Economics*, Routledge, 1996.
2. Sadananda Prusty (2010) *Managerial Economics*, Chap 3. PHI Learning Private Limited
3. G.S Gupta(1990) *Managerial Economics*, Chapter 5 & 8, Tata McGraw Hil, New Delhi
4. I.M.D. Little & I.A. Mirrless(1974) *Project appraisal and planning for developing countries*, basic books, New York .
- 5 .Piyali Ghosh Geetika & Purba Roy Choudhury (2017) *Managerial Economics* , 3rd Edition, Tata McGraw Hill.