Semester- III

CC5

Intermediate MicroeconomicS

Topic	No of lectures
Imperfect Competition	**20**

- Theory of monopoly: Characteristics- AR and MR curves under monopoly – Relation among AR, MR and Elasticity of demand – Equilibrium under monopoly – major features of monopoly- index of monopoly power –   7
- price discrimination – Degree of price discrimination – equilibrium under price discrimination. 5
- Equilibrium under Multiple Plant monopoly –   2
- Monopsony - Equilibrium under bilateral monopoly.   2
- Monopolistic competition: Short run and long run equilibrium – excess capacity.2

Theory of Oligopoly   **15**

- Characteristics of oligopoly - non-collusive oligopoly models of Cournot and Stackelberg 7
- – collusive oligopoly – price leadership – market sharing model –   6
- price rigidity under oligopoly.   2

Theory of Factor Pricing   **23**

- Demand for factors of production – Determinants of price elasticity of demand for a factor – marginal productivity theory and its limitations   10
- Theory of wage - Choice between work and leisure – derivation of individual labour supply curve – total labour supply curve – demand for labour – determination of equilibrium in a competitive labour market- collective bargaining and wage rate.   07
- Theory of rent - Transfer earning and economic rent – quasi rent – Rent and price 04
- Theory of profit - Gross and net profit- elements of profit- risk and uncertainty theory ,Innovation theory of profit.   02

General Equilibrium and Economic Welfare   **12**

- Partial and general equilibrium – a formal statement of general equilibrium approach – 4
- the concept of Pareto optimum – Pareto optimality in consumption – Pareto optimality in production – General Pareto optimality condition.   08

Semester- III

CC6

Intermediate Macroeconomics

Full Marks: 75 Credit: 6 Lectures: 70

Topic
No of lectures

Investment function
(Lectures - 15)

• Keynesian theory of investment –   03
• Net present value (NPV) criterion of investment – 02
• Determination of optimum stock of capital by using MEC schedule – Relation between MC and MEI – factors affecting them - 06
• Acceleration Principle of investment – 02
• Induced investment function and different multipliers- 02

2. The classical system
(Lectures - 12)
• The Classical view of macroeconomics in respect of the determination of employment, output and prices - 03
• The Classical quantity theory of money and its criticisms – 03
• Complete Classical model – 06

3. The Complete Keynesian model
(Lectures – 13)
• Derivation of aggregate demand and aggregate supply curve – 02
  determination of equilibrium – 02
   Underemployment equilibrium – 02
• Comparison with the Classical system – 07

4. Theory of inflation
(Lectures - 13)
• The Quantity theory approach to inflation -01
• Demand pull inflation and cost push inflation – comparison between them – 02
 Hyperinflation, mild inflation, mark up inflation – 01
wage-price spiral- 01
• Inflationary gap – 02
• Phillips curve – implication – short run and long run Phillips curve – o2
 Okun's law – 01
Augmented Phillips curve – 01
 natural rate of unemployment - 01
• Consequences of inflation – measures to control inflation - 01

5. Economic Growth
(Lectures - 06)

The Harrod – Domar model – 06

6. Role of expectation
(Lectures - 8)

Naive expectation -02
Cobweb phenomenon - 02
Adaptive expectation-02
 Rational expectation -02

7. Open economy
(Lectures - 05)
Foreign trade multiplier -02
Mundell-Flemming model -03

SEMESTER- III

CC7

Course Module for Sem-III (CC7)

Mathematical Economics –II

Full Marks: 75

Credit: 6

Lectures: 70

1. <u>Determinants and Matrices: 15 Lectures</u>

Concepts of Scalar, Vector and Matrices – 1

System of Equations and their Representation through Vectors and Matrices –1

Some specific Matrices : Diagonal, Triangular, Identity, Null , Symmetric , Idempotent –1

Matrix operations ; Addition, Subtraction and Multiplication of Matrices – 1

Transpose and Inverse of Matrices- 2

Determinants-Minor and Cofactor- Properties of Determinants- 1

Bordered Hessian Determinant – 1

Technique of solving Simultaneous Equations by Cramer's Rule. Applications: Partial Market Equilibrium Model- 2

Simple National Income Determination Model – 2

The IS – LM model and Comparative Static Analysis- Derivation of Slutsky Equation-3

2. <u>Linear Programming: 15 Lectures</u>

Linear Programming Technique as a Tool of optimization – 2

General Formulation of the LP Problem – Applications in Economics –2

Graphical solution of some standard problems (Maximization and Minimization) – 2

Concepts of Slack Variable, Basic Feasible Solution – 2

Solution of some simple problems by Simplex Method (Maximization case only)- 3

The Dual problem – 2

Economic Interpretation of Duality- 2

3. Input – Output Analysis: 15 Lectures

Basic Concept of Input – Output Analysis –2

Assumptions and structure of the Leontief Static Open Model (2×2 Case) – 3

Solution in such a Model – 3

Hawkins – Simon condition and its Economic Interpretation – 3

Price System in LSOM (2×2 Case) with Economic Implications-4

4. Basic Game Theory: 15 Lectures

Basic Concepts and Assumptions of Game Theory – 1

Two Person – Zero – 2

Sum Game with Saddle Point – 1

Concept of Dominance – 2

Elements of Non – Zero – Sum Game – 2

Prisoner's Dilemma – 2

Concept of Dominant Strategy equilibrium and Nash Equilibrium – 2

Sub-game Perfect Nash Equilibrium- 1

Applications-2

5. Decisions under Uncertainty: 10 Lectures

 Maximin-2

Maximax -2

Hurwicz -2

Laplace-2

Savage-2

SKILL ENHANCEMENT COURSE (SEC)

SEC1

Managerial Economics

Full Marks: 50 Credit: 2 Lectures: 30

1. Meaning and Scope of Managerial Economics :

Organisational Goals – Profit maximization hypothesis, Critique of profit maximization hypothesis-2 classes

Alternative goals of the firm: 2 class

Managerial theory of Baumol: 2 classes

Managerial theory Williamson: 2 classes

Behavioural Theory of the Firm: 2 classes

2. Demand Analysis: Demand forecasting,

Methods of demand forecasting (reasons and implications): 2 classes

Survey Method: 2 classes

Statistical Methods – Trend Projection method, Regression Method, Leading Indicator Method: 4 classes

Simple numerical problems: 2 classes

3. Price determination under different structures:

Methods of price determination in practice (introductions and motivation): 1 class

Mark up pricing, Limit pricing, Average cost pricing, Peak load pricing, Multiple product pricing, Transfer pricing: 4 classes

Simple numerical problems: 1 class

4. Financial Investment decisions:

Distinction between real and financial assets: 1 class

Needs of financial investment: 1 class

Alternative financial instruments and investments: 1 class

CC-1C/GE 3

Development Economics

Full Marks: 75 Credit: 6 Number of Lectures: 70

1. **Meaning of Economic Development and Growth**

   Distinction between Economic Growth and Economic Development.:2 classes
   Net National Income and Per Capita Income as Growth Indicators : 1 class
   construction and interpretation of HDI: 2 classes
   international variations in development measures: 3 classes
   comparing development trajectories across nations and within them:2 classes
    Dependency school of development: 5 classes

2. **Economic Growth:**

   An overview and policy implications of one sector growth models- Harrod- Domar, and
   Solow: 5 classes
   Sources of economic growth: 1 class
   international comparisons,: 1 class
   Development Planning and its necessity: 3 classes
   balanced vs. Unbalanced Growth: 5 classes

3. **Poverty and Inequality**

   Inequality axioms: 2 classes
   A comparison of commonly used inequality measures: 3 classes
   Gender Inequality :2 classes
   Gender Development Index, connections between inequality and development: 3 classes
   poverty measurement, HPI: 2 classes
   poverty traps and path dependence of growth processes: 3 classes

4. **Political Institutions and the State**

   Definition of institutions,: 2 classes
   Evolution of Political and Economic Institutions: 3 classes
   The determinants of democracy; alternative institutional trajectories and their relationship
   with economic performance;: 4classes
   within-country differences in the functioning of state institutions: 4 classes
   state ownership and regulation; government failures and corruption.: 2 classes

5. **Foreign Investment**

   Different forms, Their Roles in Economic Development: 10 classes

Selected Features of Indian Economy
Full Marks: 75 Credit: 6 Lectures: 70

1. Economic Development since Independence (Lectures:15)

Major features of the economy at independence;
 Planning: Evolution of India's development goals and strategies -Structural constraints and Indian development strategy:
Debates between Growth and distribution, Public sector vs. Private sector, Consumer goods vs. Capital goods, Import substitution vs. Export promotion ; growth and development under different policy regimes—goals, constraints, institutions and policy framework; an assessment of performance—sustainability and regional contrasts;
structural changes, savings and investment including the saving-investment paradox
Population and Human Development

2. Population and Human Development (Lectures:10)

Demographic trends and issues;
Education;
 Health and malnutrition

3. Development and Distribution (Lectures:10)

Trends and policies in poverty including Sen's Entitlement Analysis;
inequality and unemployment

4. Macroeconomic Policies and Their Impact (Lectures:15)

Objectives of Fiscal Policy.

Centre – State financial relation. Composition of govt. revenue and expenditure.
 Tax reforms since 1991.
Public debt.
Objectives of RBI's monetary policy.
Structure of Indian money market. Bank Nationalization and its achievements.
Banking and insurance sector reforms since1991.
Capital market and its reforms since1991,
Labour regulations Fiscal Policy; t
rade and investment policy;
Financial and Monetary Policies

5. Policies and Performance in Agriculture (Lectures:10)

Growth: productivity,
agrarian structure and technology;
 capital formation;
trade;
pricing and procurement

6. Policies and Performance in Industry   **(Lectures: 10)**

Growth; productivity; diversification;
small scale industries;
public sector;
competition policy;
foreign investment

CC9

Statistical Methods – II

Topic	No of lectures

Set Theory   **05**

Set Notations – Universal Set – Subsets – Null Set – Finite & Infinite Sets – Convex Sets – - Convex Sets - Relationships between Sets – Basic Set Operations. Applications: Consumer Preference & Budget in terms of Sets

Probability Theory   **12**

- Random Experiments – Sample or Outcome Spaces (Discrete and Continuous case) – Events and their Algebra – Mutually Exclusive, Equally Likely and Collectively Exhaustive Events – Probability: 06
- Classical and Axiomatic Definition – Complementary Event – Theorem of Total Probability – Conditional Probability – Theorem of Compound Probability – Independent Events, 04
- Bayes' Theorem.   02

Random Variables and related concepts: **04**

- Random Variables – Probability Mass and Density Functions - Expectation and Variance of Random Variables (for Random Sampling With and Without replacement)

Univariate Probability Distributions: **10**

- Uniform, Binomial, Poisson, Normal Distributions – Mean, Variance. Moment Generating Functions

Sampling Theory and Sampling Distributions: **15**

- Population and Sample – Parameter and Statistic – Random Sampling – Practical Methods of Drawing Random samples –   03
- Random sampling Numbers – Sampling Distribution – Standard Error Sampling Distributions associated with Normal Population,   04
- Expectation and Standard Error of Sample Mean,Stratified Sampling (Definition and Purpose), Sampling vs Non sampling error,   03
- ChiSquare Distribution, Student's t Distribution, F-Distribution (definition and importance, properties and uses only)   05

Estimation: **14**

- Desirable Properties of estimators – Unbiasedness, Minimum Variance –02
- Simple Methods of Point Estimation – Maximum Likelihood. Estimators and their properties – 06
- Maximum Likelihood estimation of the parameter of Binomial, Poisson and Normal Distribution and estimation of population parameters using method of moments   06

Testing of Hypothesis: **10**

- Null hypothesis & Alternative Hypothesis–Confidence Intervals –   03
- Testing of Hypothesis – P-value – Type-I and Type-II Errors – Simple applications of tests for the Mean and Variance of a Univariate Normal Population.   07

Development Economics
Full Marks: 75 Credit: 6 Lectures: 70

75 Credit: 6 Lectures: 70

1. Economic Development

Different concepts of development –Sustainable development, Participatory development, Inclusive development, Human development, Growth and Development: 6 classes
Broad Indicators of Economic Development–Per capita Income–PQLI –Basic needs approach:6 classes
Human Development Index:2 classes
Gender Development Index:2 classes
Gender Empowerment Measure:2 classes
Human Poverty Index. : 2 classes

2. Development and Underdevelopment as a Historical Process

Dependency theory of Baran:3 classes
Frank's Theory of colonial exploitation : 3 classes
Merchant Capital in shaping underdevelopment (Kay): 3 classes
Emmanuel's theory of unequal exchange.: 3 classes

3. Persistence of Underdevelopment and Way to Develop

Characteristics of underdevelopment: 2 classes
Obstacles to underdevelopment: 1 class
Trap Models ; Vicious circle of poverty : 4 classes
Critical minimum effort thesis: 2 classes
Low level equilibrium trap:2 classes
Process of cumulative causation : 1 classes
Concept of surplus labour – Surplus labour as potential saving: 4 classes
Economic development with unlimited supplies of labour (Lewis Model).: 4 classes

4. Development Strategy
Capital intensive Vs Labour intensive technique: 3 classes
Choice of technique in a labour surplus economy: 3 classes
Sustainable development: 2 classes

5. Migration and Development – Haris-Todaro Model: 5Lectures

6. Poverty and Inequality

Absolute and Relative Poverty: 1 class
poverty line : 1 class
poverty measurement: Head Count Ratio, Income Gap Approach- HPI: 2 classes
Inequality axioms- Common Measures of Inequality-Gini index: 1 class

Course Module

SKILL ENHANCEMENT COURSE (SEC) IN SEMESTER- IV

SEC2

Basic Computer Applications

Full Marks: 50

Credit: 2   Lectures: 15 + Practical: 15

It is a Lab Based Practical Paper. The student shall learn the operations through Lectures, Hands-on Practical Training followed by practical tests.

1. File Creation and Management System   (3 L + 2 P)

The File Tree; File Naming Conventions;

 2. Word Processing   (2L + 3P)

Basic features of Text formatting; creating documents; Heading Styles; Creating

Reference Lists

 3. Spread Sheet Solutions   (7L + 7P)

Basic features of Spreadsheets; Data entry, Mathematical Functions, Financial functions,

Statistical Functions, Creating simple Line, Bar and Pie charts;

 4. Presentations   (3L + 3P)

Creating Presentations; Pasting Charts etc in Presentations; Exporting Presentations as

PDF

Semester – IV

CC-1D/GE4

Features of Indian Economy

Full Marks: 75 Credit: 6 Number of Lectures: 70

1. Structure of Indian Economy: (08 lectures)

• Sectoral distribution of National Income and its change since inception of Planning - 02

• Occupational pattern in India-A trend analysis since 1901 - 01

• Inequalities in Income distribution - 01

• Economic reforms and reduction of poverty; Poverty eradication programmes and their effectiveness - 02

• Structure and quality if employment in India; Government undertaken different schemes to reduce unemployment and underemployment -02

2. Human resources and economy development: (08 lectures)

• Size and growth rate of population in India - 02

• Changes in sex composition since inception of planning 03

• Population policy and population projections for India -03

3. Agriculture: (14 Lectures)

• Causes for low productivity - 02

• Targeted public distribution system -02

• New agricultural policy; Green revolution and its prospects - 04

• Land reforms and its appraisal - 04

• Effects of GATT on Indian Agriculture - 02

4. Industry: (12 lectures)

• Review of Industrial growth under planning - 04

• Role of small-scale industries and policy perspective to help them - 04

• Role of trade union and social security measures in India - 04

5. Banking: (10 lectures)

• Role of Indian Commercial Banks and Reserve Bank of India - 04

• Monetary Policy of the Reserve Bank of India - 02

• Profitability of banks in India -02

• Call money market, Repo, reverse repo rate, TBs, CDs - 02

6. Indian Public Finance: (12 lectures)

• Sources of Revenue and Expenditure of Union and State Government - 04

• Union-State Financial Relation - 04

 • Centre-State Conflict on Finances - 04

7. Foreign trade (6 lectures)

 • Volume and direction of India's foreign trade in the post-Liberalization period – 06