

# **Economics**

## ***Syllabus***

*For*

***B.A Programme***

**Based on CBCS**

(w.e.f. 2015-16)

**Department of Economics**

**H.N.B. Garhwal University**

**(A Central University)**

**Srinagar Garhwal**

## H.N.B. Garhwal University

### B.A Programme in Economics based on CBCS (w.e.f. from 2015-16)

Semester	Paper category	Paper title	Credits
Semester-I	DSC-I	Principles of Micro Economics-I	6 Credit (Economics) + 6 credit (Other subject) + 6 Credit (English-I) + 2 credit (AECC)= 20
Semester-II	DSC-II	Principles of Micro Economics-II	6 Credit (Economics) + 6 credit (Other subject) + 6 Credit (MIL-1) + 2 credit (AECC)= 20
Semester-III	DSC-III	Principles of Macro Economics-I	6 Credit (Economics) + 6 credit (Other subject) + 6 Credit (English-2) + 2 credit (SEC)= 20
	SEC*		
Semester-IV	DSC-IV	Principles of Macro Economics-II	6 Credit (Economics) + 6 credit (Other subject) + 6 Credit (MIL-2) + 2 credit (SEC)= 20
	SEC*		
Semester-V	DSE-I (Any one of the three electives)	DSE-I Economic Development and Policy in India-I	6 Credit (Economics) + 6 credit (Other subject) + 6 Credit (Generic-1) + 2 credit (SEC)= 20
		DSE-II Money and Banking	
		DSE- III Environmental Economics	
	SEC*		
	GE-1**		
Semester-VI	DSE-II (Any one of the four electives)	DSE-IV Economic Development and Policy in India-II	6 Credit (Economics) + 6 credit (Other subject) + 6 Credit (Generic-2) + 2 credit (SEC)= 20
		DSE-V Economic History of India 1857-1947	
		DSE-VI Public Finance	
		DSE-VII Dissertation/Project Work	
	SEC*		
	GE-2**		

\*Note: Student has to select a minimum of two skill enhancement course (SEC) minimum one in each alternative semester i.e either in 3<sup>rd</sup> and 5<sup>th</sup> semester or in 4<sup>th</sup> and 6<sup>th</sup> semester.

\*\* Note: GE-Generic Elective; Student may opt for GE-1 in fifth semester and GE-2 in sixth semester, only if he does not have Economics as main core paper in the B.A Course.

#### List of Skill Enhancement course (SEC):

*SEC-1 Computer skills for business communication and Economic Research*

*SEC-2 Entrepreneurship and small business development*

*SEC-3 Financial Economics*

*SEC-4 Data Analysis*

DSC: Discipline specific Core

DSE: Discipline specific Elective

SEC: Skill Enhancement Course

**List of Generic Elective (GE) course:**

GE-1 Introductory Economics-I

GE-2 Introductory Economics-II

## Semester-I

### Discipline Specific Core Course (DSC)-I

#### Principles of Micro Economics-I

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##### 1. Introduction

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

##### 2. Consumer Theory

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

##### 3. Production and Costs

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

##### 4. Perfect Competition

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

##### Suggested Readings:

1. Ahuja H.L. (2003) *Advanced Economic Theory: Microeconomic Analysis*, 13th Edition, S. Chand and Company Ltd. New Delhi
2. Case, Karl E., Ray C. Fair and Sharon E. Oster (2013) *Principles of Economics*, (11th Edition), Prentice Hall of India, New Delhi
3. Koutsoyiannis, A. (1990) *Modern Microeconomics*, Macmillan Press Ltd., London
4. Layard, P.R.G. and A. W. Walters (1978) *Microeconomic Theory*, McGraw Hill, New York
5. Lipsey, R.G. and K.A. Chrystal (2004) *Principles of Economics*, (9th Edition), Oxford University Press, New Delhi
6. Perloff, Jeffrey M. (2001) *Micro Economics*, Addison Wesley Longman Pvt. Ltd., New Delhi
7. Sen, A. (1999) *Microeconomics Theory and Applications*, Oxford University Press, New Delhi
8. Stigler, G. (1996) *Theory of Price*, (4th Edition), Prentice Hall of India, New Delhi
9. Varian, H. (2000) *Microeconomic Analysis*, W. W. Norton, New York

## Semester-II

Discipline Specific Core Course (DSC)-II

### Principles of Micro Economics-II

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#### 1. Market Structures

##### a. Theory of a Monopoly Firm

Concept of imperfect competition; short run and long run price and output decisions of a monopoly firm; concept of a supply curve under monopoly; comparison of perfect competition and monopoly, social cost of monopoly, price discrimination; remedies for monopoly: Antitrust laws, natural monopoly.

##### b. Imperfect Competition

Monopolistic competition: Assumptions, SR & LR price and output determinations under monopolistic competition, economic efficiency and resource allocation; oligopoly: assumptions, oligopoly models, game theory, contestable markets, role of government.

#### 2. Consumer and Producer Theory

##### a. Consumer and Producer Theory in Action

Externalities, marginal cost pricing, internalising externalities, public goods; imperfect information: adverse selection, moral hazard, social choice, government inefficiency.

##### b. Markets and Market Failure

Market adjustment to changes in demand, efficiency of perfect competition; sources of market failure: imperfect markets, public goods, externalities, imperfect information; evaluating the market mechanism.

#### 3. Income Distribution and Factor pricing

Input markets: demand for inputs; labour markets, land markets, profit maximization condition in input markets, input demand curves, distribution of Income.

#### 4. International Trade

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

#### Suggested Readings:

1. Ahuja H.L. (2003) *Advanced Economic Theory: Microeconomic Analysis*, 13th Edition, S. Chand and Company Ltd. New Delhi
2. Case, Karl E., Ray C. Fair and Sharon E. Oster (2013) *Principles of Economics*, (11th Edition), Prentice Hall of India, New Delhi
3. Koutsoyiannis, A. (1990) *Modern Microeconomics*, Macmillan Press Ltd., London
4. Layard, P.R.G. and A. W. Walters (1978) *Microeconomic Theory*, McGraw Hill, New York
5. Lipsey, R.G. and K.A. Chrystal (2004) *Principles of Economics*, (9th Edition), Oxford University Press, New Delhi
6. Perloff, Jeffrey M. (2001) *Micro Economics*, Addison Wesley Longman Pvt. Ltd., New Delhi
7. Sen, A. (1999) *Microeconomics Theory and Applications*, Oxford University Press, New Delhi
8. Stigler, G. (1996) *Theory of Price*, (4th Edition), Prentice Hall of India, New Delhi
9. Varian, H. (2000) *Microeconomic Analysis*, W. W. Norton, New York

## Semester-III

Discipline Specific Core Course (DSC)-III

### Principles of Macro Economics-I

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#### **1. Introduction**

What is macroeconomics? Macroeconomic issues in an economy.

#### **2. National Income Accounting**

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

#### **3. Determination of GDP**

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

#### **4. National Income Determination in an Open Economy with Government**

Fiscal Policy: impact of changes in government expenditure and taxes; net exports function; net exports and equilibrium national income.

#### **5. Money in a Modern Economy**

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

#### **Suggested Readings**

1. Agarwal, V. (2010) *Macroeconomics: theory and Policy*, Dorling Kindersley (India) Pvt. Ltd., New Delhi
2. Ahuja, H.L. (2012) *Macro Economics, Theory and policy*, S. Chand and Company Ltd., New Delhi
3. Dornbusch, R. and F. Stanley (1997) *Macroeconomics*, McGraw Hill, Inc., New York
4. Errol D'souza, (2008) *Macroeconomics*, Dorling Kindersley (India) Pvt. Ltd. New Delhi
5. Jha, R. (1991) *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
6. Mankiw, N.G. (2013) *Principles of Macroeconomics*, Cengage Learning India (Pvt.) Ltd., New Delhi

## Semester-IV

Discipline Specific Core Course (DSC)-IV

### Principles of Macro Economics-II

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#### 1. IS-LM Analysis

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

#### 2. GDP and Price Level in Short Run and Long Run

Aggregate demand and aggregate supply; multiplier Analysis with AD curve and changes in price levels; aggregate supply in the SR and LR.

#### 3. Inflation and Unemployment

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

#### 4. Balance of Payments and Exchange Rate

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

#### Suggested Readings

7. Agarwal, V. (2010) *Macroeconomics: theory and Policy*, Dorling Kindersley (India) Pvt. Ltd., New Delhi
8. Ahuja, H.L. (2012) *Macro Economics, Theory and policy*, S. Chand and Company Ltd., New Delhi
9. Dornbusch, R. and F. Stanley (1997) *Macroeconomics*, McGraw Hill, Inc., New York
10. Errol D'souza, (2008) *Macroeconomics*, Dorling Kindersley (India) Pvt. Ltd. New Delhi
11. Jha, R. (1991) *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
12. Mankiw, N.G. (2013) *Principles of Macroeconomics*, Cengage Learning India (Pvt.) Ltd., New Delhi

## Semester-V

Discipline Specific Elective Course (DSE)-I

### Economic Development and Policy in India–I

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#### 1. Issues in Growth, Development and Sustainability

#### 2. Factors in Development

Capital formation (Physical and Human); technology; institutions.

#### 3. Population and Economic Development

Demographic trends; urbanisation.

#### 4. Employment

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

#### 5. Indian Development Experience

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

#### Suggested Readings:

1. Michael P Todaro and Stephen Smith. *Economic Development*, Pearson, 11<sup>th</sup> edition (2011)
2. Uma Kapila, *Indian Economy since Independence*, Academic Foundation, 19<sup>th</sup> edition (2009).
3. United Nations Development Programme, *Human Development Report 8 2010*, Palgrave Macmillan (2010).
4. Government of India, *Economic Survey* (latest)
5. Government of India, *Five Year Plan* (latest)
6. Government of India, *Finance Commission Report* (latest)



## Semester-V

### Discipline Specific Elective Course (DSE)-II

### Money and Banking

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#### 1. Money

Concept, functions, measurement; theories of money supply determination.

#### 2. Financial Institutions, Markets, Instruments and Financial Innovations

a. Role of financial markets and institutions; problem of asymmetric information – adverse selection and moral hazard; financial crises.

b. Money and capital markets: organization, structure and reforms in India; role of financial derivatives and other innovations.

#### 3. Interest Rates

Determination; sources of interest rate differentials; theories of term structure of interest rates; interest rates in India.

#### 4. Banking System

a. Balance sheet and portfolio management.

b. Indian banking system: Changing role and structure; banking sector reforms.

#### 5. Central Banking and Monetary Policy

Functions, balance sheet; goals, targets, indicators and instruments of monetary control; monetary management in an open economy; current monetary policy of India.

#### Suggested Readings

1. F. S. Mishkin and S. G. Eakins, *Financial Markets and Institutions*, Pearson Education, 6<sup>th</sup> edition, 2009.
2. F. J. Fabozzi, F. Modigliani, F. J. Jones, M. G. Ferri, *Foundations of Financial Markets and Institutions*, Pearson Education, 3<sup>rd</sup> edition, 2009.
3. L. M. Bhole and J. Mahukud, *Financial Institutions and Markets*, Tata McGraw Hill, 5<sup>th</sup> edition, 2011.
4. M. Y. Khan, *Indian Financial System*, Tata McGraw Hill, 7<sup>th</sup> edition, 2011.
5. Various latest issues of R.B.I. Bulletins, Annual Reports, Reports on Currency and Finance and Reports of the Working Group, IMF Staff Papers.

## Semester-V

Discipline Specific Elective Course (DSE)-III

### Environmental Economics

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#### 1. Introduction

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

#### 2. The Design and Implementation of Environmental Policy

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

#### 3. Environmental Valuation Methods and Applications

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

#### 4. Sustainable Development

Concepts; measurement; perspectives from Indian experience

#### Suggested Readings

1. Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, "*Natural Resource and Environmental Economics*", Pearson Education/Addison Wesley, 4<sup>th</sup> edition, 2011.
2. Charles Kolstad, "*Intermediate Environmental Economics*", Oxford University Press, 2<sup>nd</sup> edition, 2010.
3. Robert N. Stavins (ed.), "*Economics of the Environment: Selected Readings*", W.W. Norton, 6<sup>th</sup> edition, 2012.
4. Robert Solow, "An Almost Practical Step toward Sustainability," Resources for the Future 40<sup>th</sup> anniversary lecture, 1992.
5. Kenneth Arrow et al., "Are We Consuming Too Much?" *Journal of Economic Perspectives*, 18(3): 147-172, 2004.
6. IPCC (Intergovernmental Panel on Climate Change), Fifth Assessment Report (forthcoming 2014).

## Semester-VI

Discipline Specific Elective Course (DSE)-IV

### Economic Development and Policy in India–II

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#### **1. Agriculture: Policies and Performance**

Production and productivity; credit; labour; markets and pricing; land reforms; regional variations.

#### **2. Industry: Policies and Performance**

Production trends; small scale industries; public sector; foreign investment.

#### **3. Foreign Trade: Trends and Policies**

Balance of trade and balance of payments; India and the World Trade Organisation.

#### **Suggested Readings:**

1. Uma Kapila, *Indian Economy since Independence*, Academic Foundation, 19<sup>th</sup> edition (2009).
2. Government of India, *Economic Survey* (latest)
3. Government of India, *Five Year Plan* (latest)

## Semester-VI

### Discipline Specific Elective Course (DSE)-V

#### Economic History of India 1857-1947

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#### **1. Introduction: Colonial India: Background and Introduction**

Overview of colonial economy.

#### **2. Macro Trends**

National Income; population; occupational structure.

#### **3. Agriculture**

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

#### **4. Railways and Industry**

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

#### **5. Economy and State in the Imperial Context**

The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

#### **Suggested Readings:**

1. Lakshmi Subramanian, “*History of India 1707-1857*”, Orient Blackswan, 2010, Chapter 4.
2. Sumit Guha, 1991, ‘Mortality decline in early 20<sup>th</sup> century India’, *Indian Economic and Social History Review (IESHR)*, pp 371-74 and 385-87.
3. Tirthankar Roy, *The Economic History of India 1857-1947*, Oxford University Press, 3rd edition, 2011.
4. J. Krishnamurty, *Occupational Structure*, Dharma Kumar (editor), The Cambridge Economic History of India, Vol. II, (henceforth referred to as CEHI), 2005, Chapter 6.
5. Irfan Habib, *Indian Economy 1858-1914*, A People’s History of India, Vol.28, Tulika, 2006.
6. Ira Klein, 1984, —When Rains Fail: Famine relief and mortality in British India, *IESHR* 21.
7. Jean Dreze, *Famine Prevention in India in Dreze and Sen (eds.) Political Economy of Hunger*, WIDER Studies in Development Economics, 1990, pp.13-35.
8. John Hurd, *Railways*, CEHI, Chapter 8, pp.737-761.
9. Rajat Ray (ed.), *Entrepreneurship and Industry in India*, 1994.
10. AK Bagchi, —Deindustrialization in India in the nineteenth century: Some theoretical implications, *Journal of Development Studies*, 1976.
11. MD Morris, *Emergence of an Industrial Labour Force in India*, OUP 1965, Chapter 11, Summary and Conclusions.
12. K.N. Chaudhuri, *Foreign Trade and Balance of Payments*, CEHI, Chapter 10.
13. B.R. Tomlison, 1975, *India and the British Empire 1880-1935*, IESHR, Vol.XII.
14. Dharma Kumar, *The Fiscal System*, CEHI, Chapter 12.
15. Basudev Chatterjee, *Trade, Tariffs and Empire*, OUP 1992

## Semester-VI

### Discipline Specific Elective Course (DSE)-VI

### Public Finance

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#### Part 1: Theory

1. Overview of Fiscal Functions, Tools of Normative Analysis, Pareto Efficiency, Equity and the Social Welfare.
2. Market Failure, Public Good and Externalities.
3. Elementary Theories of Product and Factor Taxation (Excess Burden and Incidence).

#### Part 2: Issues from Indian Public Finance

4. Working of Monetary and Fiscal Policies.
5. Current Issues of India's Tax System.
6. Analysis of Budget and Deficits
7. Fiscal Federalism in India
8. State and Local Finances

#### Suggested Readings:

1. Musgrave, R.A. and P.B. Musgrave, *Public Finance in Theory and Practice*, Mc-Graw Hill, 1989.
2. Mahesh Purohit , “*Value Added Tax: Experience of India and Other Countries*”, Gayatri Publications, 2007.
3. Kaushik Basu, and A. Maertens (ed.), *The Oxford Companion to Economics in India*, Oxford University Press,2007.
4. M.M Sury, *Government Budgeting in India*, Commonwealth Publishers, 1990.
5. Shankar Acharya, “Thirty years of tax reform” in India, *Economic and Political Weekly*, May 2005.
6. Government of India, *Report of the 13th Finance Commission*.
7. *Economic Survey*, Government of India (latest).
8. State Finances: A Study of Budgets, *Reserve Bank of India* (latest).

## Semester-VI

### Discipline Specific Elective Course (DSE)-VII

#### Dissertation/Project Work

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Dissertation/Project work will comprise of either field work or research study based on secondary data on topic based on relevant economic problems allocated by internal supervisor. In both cases student will have to submit a report.

Performance of student in field project report/dissertation will be evaluated on the following basis:

- (a) Field study report/Dissertation Report/Final presentation      70 Marks
- (b) Two periodical Presentation      30 Marks

*Note:* Two periodical presentations will be assessed by internal examiner but the field study Project report/Dissertation and final presentation will be assessed jointly by internal and external examiner.

Note: Only those students who attains Grade point 9 and letter Grade A+ (Excellent) in Economics subject in each semester (up to 4<sup>th</sup> semester) will be eligible for opting dissertation/project work as one of the Discipline Specific elective course (DSE).

## **Skill Enhancement Course (SEC)-1**

### **Computer skills for Business Communication and Economic Research**

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#### **Course Description**

This course introduces students to the use of computer technology for developing effective business communication skills and for assisting in his/her research work.

#### **Course Outline**

**Unit I:** Office applications and Internet: Word Processing: Its main elements, Opening Documents and Closing documents, Text Creation and Manipulation, Formatting the Text, Table Manipulation; Electronics Spread Sheet: Its main elements, Data management on spreadsheet, providing Formulas; Power point: Creation of Presentation, Preparation of Slides; WWW and Web Browsers; Surfing the Internet; Basic of electronic mail, Using Emails, Document handling.

**Unit II:** Business Correspondence: Letter Writing, presentation, Inviting quotations, Sending quotations, Placing orders, Inviting tenders, Sales letters, claim & adjustment letters and social correspondence, Memorandum, Inter -office Memo, Notices, Agenda, Minutes, Job application letter, preparing the Resume.

#### **Suggested Readings:**

1. Lesikar, R.V. & Flatley, M.E.; Basic Business Communication Skills for Empowering the Internet Generation, Tata McGraw Hill Publishing Company Ltd. New Delhi.
2. Bovee, and Thill, Business Communication Today, Pearson Education
3. Shirley Taylor, Communication for Business, Pearson Education
4. Locker and Kaczmarek, Business Communication: Building Critical Skills, TMH
5. Sinha, K.K., Business Communication, Galgotia and Sons, New Delhi.

## **Skill Enhancement Course (SEC)-2**

### **Entrepreneurship and Small Business Development**

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#### **Course Description**

This course introduces students to the basic knowledge of starting new ventures. It will impart skills for formulation and planning of projects. It will also provide them knowledge of institutions helpful for development of small business.

#### **Course Outline**

**Unit 1:** Establishing a small enterprise: The start up process, project identification, selection of the product, project formulation, Project Report Preparation; Specimen of Project Report, assessment of project feasibility, analysis's of project, Project Planning and Scheduling using Networking Techniques of PERT / CPM preparation of project report, selection of site/location and legal considerations

**Unit 2:** Small Enterprises and Enterprise Launching Formalities : Definition of Small Scale; Rationale; Objective; Scope; SSI; Registration; NOC from Pollution Board; Machinery and Equipment Selection

**Unit 3:** Role of Support Institutions and Management of Small Business : Director of Industries; DIC; SIDO; SIDBI; Small Industries Development Corporation (SIDC); SISI; NSIC; NISBUD; State Financial Corporation SIC

#### **Suggested Readings:**

1. Desai, Vasant (2003). Small-Scale Industries and Entrepreneurship. Himalaya Publishing House, Delhi.
2. Kaulgud, Aruna (2003). Entrepreneurship Management. Vikas Publishing House, Delhi. 38
3. Cynthia, L. Greene (2004). Entrepreneurship Ideas in Action. Thomson Asia Pvt. Ltd., Singapore.



## Skill Enhancement Course (SEC)-3

### Financial Economics

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#### **Course Description**

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

#### **Course Outline**

##### **Unit 1. Deterministic cash-flow streams**

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

##### **Unit 2. Single-period random cash flows**

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

##### **Unit 3. Capital Asset Pricing Model (CAPM)**

The capital market line; the capital asset pricing model; the beta of an asset and of a portfolio; security market line; use of the CAPM model in investment analysis and as a pricing formula.

#### **Suggested Readings**

1. David G. Luenberger, *Investment Science*, Oxford University Press, USA, 1997.
2. Richard A. Brealey and Stewart C. Myers, *Principles of Corporate Finance*, McGraw-Hill, 7<sup>th</sup> edition, 2002.
3. Burton G. Malkiel, *A Random Walk Down Wall Street*, W.W. Norton & Company, 2003.
4. Simon Benninga, *Financial Modeling*, MIT Press, USA, 1997.

## Skill Enhancement Course (SEC)-4

### Data Analysis

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#### **Course Description**

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

#### **Course Outline**

**Unit 1:** Sources of data. Population census versus sample surveys. Random sampling.

**Unit 2:** Univariate frequency distributions. Measures of central tendency: mean, median and mode; arithmetic, geometric and harmonic mean. Measures of dispersion, skewness and kurtosis.

**Unit 3:** Bivariate frequency distribution. Correlation and regression. Rank correlation.

**Unit 4:** Introduction to probability theory. Notions of random experiment, sample space, event, probability of an event. Conditional probability. Independence of events. Random variables and probability distributions. Binomial and normal distributions.

**Unit 5:** Estimation of population parameters from sample data. Unbiased estimators for population mean and variance.

**Unit 6.** Basics of index numbers: price and quantity index numbers.

#### **Suggested Readings:**

1. P.H. Karmel and M. Polasek (1978), *Applied Statistics for Economists*, 4th edition, Pitman.
2. M.R. Spiegel (2003), *Theory and Problems of Probability and Statistics* (Schaum Series).

## Semester-v

### Introductory Economics-1

(Generic Elective Paper offered for other Department Students)

#### Objectives

**To provide a basic concepts of Economics to the students who have not studied Economics and make them to understand the basics of Economics.**

1. Introduction: **Definition, Economic Problems**-Scarcity and choice; Central Problems of an Economy; Micro and Macro Economics; Positive and Normative Economics; Production Possibility Curve
2. Demand Analysis: Law of Demand and Supply, Utility Analysis of Demand, Indifference Curve Analysis of Demand, Consumer equilibrium, Elasticity of Demand, Consumer's Surplus.
3. Theory of Production: Law of Variable Proportion; Production Function, Isoquants, Producer equilibrium; Returns to Scale.
4. Theory of Product Pricing: Market Structures and Revenue and cost Curves; Meaning, Characteristics, Equilibrium of the Firm, Price and Output Determination under Perfect Competition and Monopoly; Meaning and characteristics: Monopolistic Competition, Oligopoly
5. Theory of Factor Pricing: Scarcity and differential Rent; Liquidity preference theory of interest, Schumpeter's Knight's and theory of profit, Marginal productivity theory.

#### **Recommended Reading List**

1. Ahuja, H. L. (2010): **Advanced Economic Theory**, S. Chand & Co., New Delhi
2. Baumol W.J. (1982), **Economic Theory and Operations Analysis**, Prentice Hall of India, New Delhi.
3. Chauhan. S.P.S (2009) **Microeconomics: Theory and Applications**, PHI Learning Pvt. Ltd., New Delhi – 110001.
4. Dwivedi (2008), **Microeconomics: Theory and Applications (Second Edition)**, Dorling Kindersley (India) Pvt. Ltd.
5. Kreps David. M. (1990), **A Course in Microeconomic Theory**, Princeton University Press, Princeton
6. Koutsoyiannis A (1982): **Modern Micro Economics**, McMillan.
7. Layard P.R.G and A.W. Walters (1978), **Micro Economic Theory**, McGraw Hill, New York.
8. Sen, Anindya (1999): **Microeconomic Theory and Applications**, Oxford University, Press, New Delhi.
9. Stigler G. (1996), **Theory of Price (4th Edition)**, Prentice Hall of India, New Delhi.
10. Varian. H. (2000), **Micro Economic Analysis**, W.W. Norton, New York.

**Semester- VI**  
**Introductory Economics-2**  
**(Generic Elective Paper offered for other Department Students)**

**Objectives**

**To provide a basic concepts of Economics to the students who have not studied Economics and make them to understand the basics of Economics.**

- 1. Macro Economics: Major issues, importance and Macro Economic Paradoxes; Classical and Keynesian Macro Economics; Post Keynesian development in Macro Economics: Monetarism; Supply-side Economics; New Classical Economics: Rational Expectation Theory**
- 2. Money: Nature, Functions, Importance of Money in Capitalist, Socialist and Mixed Economies. Inflation: Definition, Types, Causes, Effects of Inflation, Measures to Control Inflation, Deflation.**
- 3. Banking: Functions of Commercial Banks, Credit Creation, Functions of Central Bank, Credit Control, Role and Functions of RBI, National Income: Meaning, Measurement and Importance, Circular flow of income;**
- 4. Public Revenue: Meaning and Sources, Taxation: Meaning and Objectives, Canons and Elements of a good tax system, Kinds of Taxes, Impact, Incidence and Shifting of Taxes, Taxable Capacity.**
- 5. Public Debt: Meaning, Objectives and Sources, Effects and Burden of Public Debt, Methods of Debt Redemption; Nature and Characteristics of Trade Cycles, Control of Trade Cycles.**

**Recommended Reading List**

- 1. Auerbach, A.J. and M. Feldstern (Eds.) (1985), Handbook of Public Economics, Vol. I, North Holland, Amsterdam.**
- 2. Bhargava, R.N. (1969), Indian Public Finances, B.D. Bhargava and Sons, Chandausi.**
- 3. Gandhi, V.P. (1970), Some Aspects of India's Tax Structure, Vora and Company, Bombay.**
- 4. Hall, R.E. and J.B. Taylor (1986), Macroeconomics, W.W. Norton, New York.**
- 5. Jha, R. (1998), Modern Public Economics, Routledge, London.**
- 6. Lockett, D.G., (1976), Money and Banking, McGraw Hill, New York.**
- 7. Musgrave, R.A. and P.B. Musgrave (1976), Public Finance in Theory and Practice, McGraw Hill, Kogakusha, Tokyo.**
- 8. Mithani D.M.(2015) Principles of Public Finance and Fiscal Policy Himalaya Publishing House, New Delhi.**
- 9. Ritter, L.S. and Sibling, W.L., (1977), Principles of Money, Banking and Markets, Basic Books, New York, 3rd ed.**
- 10. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi**

**11. Thorn, Richard S., (1976), Introduction to Money and Banking, New York, Harper & Row.**