

B.A. (HONOURS) COURSE STRUCTURE

SEMESTER-1			SEMESTER-2		
Course Name	Credits	Code	Course Name	Credits	Code
Microeconomics-I	4	ECC 101	Microeconomics-II	4	ECC 102
SEMESTER-3			SEMESTER-4		
Course Name	Credits	Code	Course Name	Credits	Code
Macroeconomics-I	4	ECC 103	Macroeconomics-II	4	ECC104
SEMESTER- 5			SEMESTER-6		
Course Name	Credits	Code	Course Name	Credits	Code
Core			Core		
Indian Economy-I	4	ECC 105	Indian Economy-II	4	ECC106
Public Finance-I	4	ECC107	Public Finance-II	4	ECC108
International Economics-I	4	ECC109	International Economics-II	4	ECC110
Electives (3 out of 5)			Electives (3 out of 5)		
Growth and Development-I	4	ECD111	Growth and Development-I	4	ECD112
Research Methodology-I	4	ECD113	Research Methodology-II	4	ECD114
Environmental Economics-I	4	ECD115	Environmental Economics-II	4	ECD116
Mathematical Economics-I	4	ECD117	Mathematical Economics-II	4	ECD118
Statistics and Econometrics-	4	ECD119	Statistics and Econometric-II	4	ECD120

ECC =CORE COURSES

ECD=DISCIPLINE SPECIFIC ELECTIVE

B.A. (GENERAL) COURSE STRUCTURE

SEMESTER-1			SEMESTER-2		
Course Name	Credits	Code	Course Name	Credits	Code
Microeconomics-I	4	ECC 101	Microeconomics-II	4	ECC 102
SEMESTER-3			SEMESTER-4		
Course Name	Credits	Code	Course Name	Credits	Code
Macroeconomics-I	4	ECC 103	Macroeconomics-II	4	ECC104
SEMESTER- 5			SEMESTER-6		
Course Name	Credits	Code	Course Name	Credits	Code
Core			Core		
Indian Economy-I	4	ECC 105	Indian Economy-II	4	ECC106
Elective (1 out of 3)			Elective (1out of 3)		
Public Finance-I	4	ECD107	Public Finance-II	4	ECD108
International Economics-I	4	ECD109	International Economics-II	4	ECD110
Growth and Development-I	4	ECD111	Growth and Development-II	4	ECD112

ECC =CORE COURSES

ECD=DISCIPLINE SPECIFIC ELECTIVE

Some of the core courses of B.A. Honours (Public Finance I &II, International Economics I&II) had been approved by the Academic Council as discipline specific elective courses (DSE) of the B.A. General with different codes.

The above tables are semester wise presentation of all courses approved by the Academic Council for B.A. Honours and B.A. General.

BA ECONOMICS SYLLABUS FOR GENERAL AND HONOURS PROGRAMME

B.A. ECONOMICS (Semester-I) (GENERAL / HONOURS)

Microeconomics - I [Core Course-ECC 101]

Credits: 04

Lectures: 60 (1 hour each)

Objective: To enable students to understand how optimum real life decisions are taken by individuals and firms under situations of scarcity.

1. Demand and Supply (20 Lectures)

Problem of scarcity and choice: scarcity, choice and opportunity cost; production possibility frontier; economic systems -meaning, types and features of capitalism. Socialism and mixed economy

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.

Applications of demand and supply: price rationing, price floors, consumer surplus, producer surplus.

2. Elasticity of Demand and Supply (10 Lectures)

Price elasticity of demand, types, measurement, determinants and importance; Cross and Income elasticity of demand -meaning, types and measurement.

Elasticity of supply: types, determinants, measurement.

3. Consumer Theory (15 Lectures)

Concept of utility, diminishing marginal utility, diamond-water paradox, consumer equilibrium; consumer choice: indifference curves, budget constraint, equilibrium, income and substitution effects; derivation of demand curve from indifference curve; introduction to Revealed Preference.

4. Production and Costs (15 Lectures)

Production: behaviour of profit maximising firms, production process, production functions, Law of Variable Proportions, Returns to Scale, choice of technology, isoquant and isocost lines, cost minimizing equilibrium condition.

Costs: Cost concepts-economic, accounting, explicit, implicit, fixed, variable, sunk, opportunity, costs in the short run, costs in the long run, economies and diseconomies of scale -meaning and types, economies and diseconomies of scope -meaning.

Main Text

Pindyck, Robert S., Rubinfeld, Daniel L. and Mehta, Prem L. (2009). *Microeconomics*. Pearson Education. [Dorling Kindersle (India) Pvt. Ltd.] New Delhi

References

- Case, Karl E., Ray C. Fair and S. Oster (2014). *Principles of Economics*, 9th Edition. Pearson Education, New Delhi.
- Koutsoyiannis, A. (1979). *Modern Microeconomics* – 2nd Ed. English Language Book Society, London
- Samuelson, Paul A. & Nordhaus, William D. (2010). *Economics* – 19th Ed. Tata McGraw Hill, New Delhi.

B.A. ECONOMICS (Semester-II) (GENERAL / HONOURS)

Microeconomics -II [Core Course- ECC 102]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To enable students to understand how optimum decisions are taken by firms under different market conditions.*

1. Perfect Competition (15 Lectures)

Assumptions / features: 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.

2. Monopoly (15 Lectures)

Features; 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 -meaning, types, influencing factors, price-output determination.

3. Monopolistic Competition and Oligopoly (20 Lectures)

Monopolistic competition: features, short run & long run price and output determination, social cost, excess capacity, economic efficiency and resource allocation.

Oligopoly: features, price rigidity and kinked demand curve.

4. Income Distribution and Factor Pricing (10 Lectures)

Input markets: demand for inputs; labour markets -factors influencing level of wages, wage determination through demand and supply; Marginal Productivity Theory of Distribution.

Main Text

Pindyck, Robert S., Rubinfeld, Daniel L. and Mehta, Prem L. (2009). *Microeconomics*. Pearson Education. [Dorling Kindersle (India) Pvt. Ltd.] New Delhi

References

- Case, Karl E., Ray C. Fair and S. Oster (2014). *Principles of Economics*, 9th Edition. Pearson Education, New Delhi.

Koutsoyiannis, A. (1979). *Modern Microeconomics* – 2nd Ed. English Language Book Society, London
Samuelson, Paul A. & Nordhaus, William D. (2010). *Economics* – 19th Ed. Tata McGraw Hill, New Delhi

B.A. (GENERAL / HONOURS) ECONOMICS (Semester-III)

Macroeconomics – I

[Course Code: ECC103]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To expose students to national income accounting and the role of government, trade and money in the modern economy.*

1. Introduction and National Income Accounting (lectures 15)

The nature of macroeconomics; Major macroeconomic issues; Meaning of National Income; National Income and related aggregates; Measurement of National Income; Nominal and Real income; Limitations of the GDP concept.

2. Determination of National Income: Two Sector Model (lectures 15)

Actual and Potential GDP; Aggregate Expenditure; Consumption Function; Investment Function; Equilibrium GDP; concepts of APC, MPC, APS, MPS; Autonomous Expenditure; Concept of Multiplier.

3. Determination of National Income: Three Sector and Four Sector Models (lectures 15)

Fiscal Policy: Role of Government Expenditure and Taxes; Foreign Trade; Net Export Function; Balance of Payments: Concept and Structure.

4. Money in a Modern Economy (lectures 15)

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 creations; Monetary Policy.

Main text

Abel, Andrew B, Bens Bernanke and Dean Croushore (2014). *Macroeconomics*, 8th edition. Pearson.

References

Blanchard, Oliver (2009). *Macroeconomics*, 5th edition. Pearson Education, New Delhi.
Case, Karl E. and Ray C. Fair (2007). *Principles of Economics*, 8th edition. Pearson Education.
Dornbusch, Fischer and Statz (2010). *Macroeconomics*, 11th edition. McGraw Hill, New Delhi.
Hyman, David N. (1997). *Macroeconomics*. Irwin, Chicago.
Mankiw, N. Gregory (2008). *Macroeconomics*. Worth Publishers, New York Indian Paperback edition.

B.A. (GENERAL / HONOURS) ECONOMICS (Semester-IV)

Macroeconomics – II

[Course Code: ECC104]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To understand how the commodity, labour and money markets interact to determine output, prices and employment.*

1. IS-LM Analysis (lectures 15)

Derivation of IS and LM functions; Shifts in IS curve and LM curve; Simultaneous Equilibrium in the Goods Market and Money Market.

2. Aggregate Demand and Aggregate Supply (lectures 15)

The concept of aggregate demand; Derivation of aggregate demand curve; Shifts in aggregate demand curve; The concepts of aggregate supply and aggregate supply curve; Short run aggregate supply curve; Shifts in short run aggregate supply curve; Macroeconomic equilibrium, long-run aggregate supply curve.

3. Inflation and Unemployment (lectures 15)

Concept of Inflation; Determinants of Inflation; Unemployment: meaning and types; relationship between Inflation and Unemployment: Philips curve in the short run and long run.

4. Economic Fluctuations and Macroeconomic Policy (lectures 15)

Business Cycles: meaning and features; Phases of a Business Cycle; Theories of Business Cycles; The role of Fiscal Policy and Monetary Policy in Economic Stabilization.

Main text

Abel, Andrew B, Bens Bernanke and Dean Croushore (2014) *Macroeconomics*, 8th edition. Pearson.

References

Blanchard, Oliver (2009). *Macroeconomics*, 5th edition. Pearson Education, New Delhi.
Case, Karl E. and Ray C. Fair (2007) *Principles of Economics*, 8th edition. Pearson Education.
Dornbusch, Fischer and Statz (2010). *Macroeconomics*, 11th edition. McGraw Hill, New Delhi.
Hyman, David N. (1997). *Macroeconomics*. Irwin, Chicago.
Mankiw, N. Gregory (2008) *Macroeconomics*. Worth Publishers, New York (Indian Paperback edition)

B.A. (GENERAL / HONOURS) ECONOMICS (Semester-V)

Indian Economy - I

[Course Code: ECC 105]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To familiarize students on the paradigm shifts and ground realities related to the Indian and Goan economy with special focus on the post-reforms period.*

1. Economic Development of Indian Economy (15 lectures)

Major features of the economy at Independence; growth and development (in brief); Income & Non-Income Indices (GDP, standard of living, foreign trade, PQLI and HDI).

2. Population and Human Development (15 lectures)

Demographic trends and issues; National Population Policy (2000); Education, Health and Malnutrition.

3. Poverty, Inequality and Unemployment (15 lectures)

Meaning, causes, trends, effects, policies and inter-relationship; Regional characteristics of income distribution and poverty.

4. Goan Economy (15 lectures)

Demographic features of Goan population (comparison between 1961 and 2011); Agriculture (including fisheries), Industry (including mining), Service Sector (with special reference to tourism); State Public Finances.

Main Text

Datt Gaurav & Mahajan Ashwani (2016). *Indian Economy*. S. Chand & Company, New Delhi.

Government of Goa (2016-17), *Economic Survey*.

References

Agarwal A N & Agarwal M K (2017) *Indian Economy: Problems of Development and Planning*, Wishwa Prakashan, New Delhi.

Basu, Kaushik and A. Maertens (Eds) (2013). *The New Oxford Companion to Economics*, Oxford University Press.

Dhingra, Ishwar C (2014). *Indian Economy*. Sultan Chand, New Delhi.

Dreze, Jean and Amartya Sen (2013). *An Uncertain Glory: India and its Contradictions*, Princeton University Press.

Misra, S.K. and Puri, V.K. (2014). *Indian Economy*. Himalaya Publishing House, Mumbai.

B.A. (GENERAL / HONOURS) ECONOMICS (Semester VI)

Indian Economy - II

[Course Code: ECC 106]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To provide an overview on the policies and outcomes related to the Indian economy with special focus on the post-reforms period.*

1. Policies and Performance of the Agricultural Sector (15 lectures)

Significance of agriculture in Indian economy; growth and productivity; role of technology; pricing; marketing.

2. Policies and Performance of the Industrial Sector (15 lectures)

Significance of industry in Indian economy; Industrial Policy of 1991; structural composition of Indian industrial sector; small scale industries (case for and against); public sector (role and performance); competition policy.

3. Policies and Performance of the Service Sector (30 lectures)

Significance of services in the Indian economy; Banking and Finance: Role, forms and trends; Trends, composition and performance of health, education, IT, transport, energy, communication and tourism sectors.

Main Text

Datt Gaurav & Mahajan Ashwani (2016). *Indian Economy*. S. Chand & Company, New Delhi.

Government of Goa (2016-17), *Economic Survey*.

References

Agarwal A N & Agarwal M K (2017) *Indian Economy: Problems of Development and Planning*, Wishwa Prakashan, New Delhi.

Basu, Kaushik and A. Maertens (Eds) (2013). *The New Oxford Companion to Economics*, Oxford University Press.

Dhingra, Ishwar C (2014). *Indian Economy*. Sultan Chand, New Delhi.

Dreze, Jean and Amartya Sen (2013). *An Uncertain Glory: India and its Contradictions*, Princeton University Press.

Misra, S.K. and Puri, V.K. (2014). *Indian Economy*. Himalaya Publishing House, Mumbai.

**Editions to be updated every year to the latest one available.*

B.A. (GENERAL / HONOURS) ECONOMICS (Semester V)
Public Finance - I

[Course Code: Honours - ECC107; General - ECD107]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To introduce students to the preparation of the budget and its role in macroeconomic management, and to expose them to the financial transfers between different tiers of the government in the Indian context.*

1. Nature and Scope of Public Finance (10 lectures)

Definition and scope: normative and positive aspects; Distinction between public and private finance; Public and private goods: features and dissimilarities; Merit goods (concept); Market failure: market failure due to non rival consumption, non-excludability and combined causes; Role of public sector; Maximum Social Advantage: theory and limitations.

2. Fiscal Policy (10 lectures)

Objectives: Full Employment, Economic Stabilization, Economic Growth, Price Stability, Balance of Payments; Functional Finance: concept; Tools of Fiscal Policy: Keynesian Demand side fiscal policy - Automatic fiscal stabilizers, Discretionary fiscal stabilizers; Supply side fiscal policy – basic approach.

3. Budgeting Techniques (10 lectures)

Concept of Budget: Meaning, features and importance/purpose of budget; Budgeting (concept); Programme Budgeting (concept); Performance Budgeting (concept, principles, advantages and disadvantages; comparison of performance and programme budgeting); Incremental budgeting (concept, significance and limitations); Zero based budgeting (meaning, methodologies and limitations).

4. Budgetary Process (15 lectures)

Process of preparation and passing of budgets in India; Structure of a Budget in India: Revenue and Capital account of Central Govt., Balanced and unbalanced budgets: Types of unbalanced budgets (surplus and deficit budgets) - concept and implications; Concept of fiscal imbalance: Revenue, Fiscal, Primary and Budgetary deficits; Budgetary Reforms: Expenditure reforms, Tax reforms, FRBM Act 2013.

5. Fiscal Federalism in India (15 lectures)

Centre-State Financial Relations: Division of powers and division of resources under the Constitution of India; Finance Commission of India and sharing of resources as per the latest Finance Commission; Local finance: Local bodies and their functions, finances of local bodies; State Finance Commission.

Main texts

Musgrave, R.A. and P.B. Musgrave (2015). *Public Finance in Theory and Practice*. 16th Reprint edition, Tata Mc-Graw Hill, New Delhi.

References

Government of India, *Report of the 14th Finance Commission*.
 Government of India, (2016-17), *Economic Survey*
 Houghton, J. M. (1970). *Public Finance: Selected Readings*. Penguin, Harmondsworth.
 Mundle, S. (Ed). *Public Finance: Policy Issues for India*. Oxford University Press, Delhi.
 Musgrave, R. (1959). *A Theory of Public Finance*, McGraw Hill, Tokyo.
 Reserve Bank of India, (2017) *State Finances: A Study of Budgets*, India.
 Sury, M.M. (1990). *Government Budgeting in India*. Commonwealth Publishers.
 Bagchi, Amaresh (2005), *Readings in Public Finance*, Oxford University Press, New Delhi.
 Sundharam, K. P. M, K. K. Andley (2003), *Public Finance-Theory and Practice*, S. Chand & Company, New Delhi.
 Singh, S. K. (2008), *Public Finance in Theory and Practice*, . Chand & Company, New Delhi.
 Tyagi, B. P. (2015), *Public Finance*, Jai Prakash Nath & Co. Meerut, India.
 Bhatia, H. L. (2017), *Public Finance, 28th Edition*, Vikas Publishing House Pvt. Ltd., New Delhi

B.A. (GENERAL / HONOURS) ECONOMICS (Semester VI)

Public Finance - II

[Course Code: Honours - ECC108; General - ECD108]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To introduce students to the role of revenue and expenditure in macroeconomic management.*

1. Revenue Generation (10 lectures)

Sources of Revenue: Tax and non-tax sources of revenue; relative importance of tax and non-tax revenue in India (trends of last 5 years); Equity (concept); Ability to Pay Theory: objective and subjective indices; Benefits Received Theory: implications and evaluation.

2. Taxation (10 lectures)

Direct and Indirect taxes: distinction, relative importance (merits & demerits); Progressive and proportional taxes: concept, advantages of proportional taxes, advantages of progressive taxes; Regressive and Degressive Taxation: concepts.; Canons of Taxation (Adam Smith); Structure of tax rates (brief account of India's tax structure as per latest budget); Tax rates and Tax yields: Laffer curve; Concept of Impact, Shifting and Incidence of Tax: statutory and economic incidence and tax shifting; Effects of taxation: Efficiency and allocative effect on production and distribution.

3. Indian Tax System (10 lectures)

Direct taxes: Income tax, Corporate tax, Wealth tax, Capital gains tax, Inheritance tax, Expenditure tax; Indirect taxes: Excise duty, Custom duty, Sales tax, Entertainment tax, Service tax, Octroi duty; Tax reforms in India: Kelkar Committee; GST (rationale and working).

4. Public Expenditure (15 lectures)

Growth of Public Expenditure: Adolph Wagner's approach; Classification of Public Expenditure: Dalton's, Hicks, Benefit, Functional and Agency; Canons of Public Expenditure; Growth (trends of 5 years prior to current year) and effects of Public Expenditure in India; Concepts of pump priming and compensatory spending and their effectiveness as anti-

depression measures; Cost-benefit approach: types of benefits and costs, measurement of benefits and costs.

5. Public Debt

(15 lectures)

Public debt: meaning, classification and importance; Sources of public borrowing: internal and external; Burden of internal and external debt; Shifting of burden of public debt; Methods of debt redemption; Size and growth of Public Debt in India (trends prior to 5 years to the current year); Debt management: Concept and debt management policy in India.

Main texts

Musgrave, R.A. and P.B. Musgrave (2015). *Public Finance in Theory and Practice*. 16th Edition, Tata Mc-Graw Hill, New Delhi.

References

Government of India, *Report of the 14th Finance Commission*.

Government of India, (2016-17), *Economic Survey*

Houghton, J. M. (1970). *Public Finance: Selected Readings*. Penguin, Harmondsworth.

Mundle, S. (Ed). *Public Finance: Policy Issues for India*. Oxford University Press, Delhi.

Musgrave, R. (1959). *A Theory of Public Finance*, McGraw Hill, Tokyo.

Reserve Bank of India, (2017) *State Finances: A Study of Budgets*, India.

Sury, M.M. (1990). *Government Budgeting in India*. Commonwealth Publishers.

Bagchi, Amaresh (2005), *Readings in Public Finance*, Oxford University Press, New Delhi.

Sundharam, K. P. M, K. K. Andley (2003), *Public Finance-Theory and Practice*, S. Chand & Company, New Delhi.

Singh, S. K. (2008), *Public Finance in Theory and Practice*, . Chand & Company, New Delhi.

Tyagi, B. P. (2015), *Public Finance*, Jai Prakash Nath & Co. Meerut, India.

Bhatia, H. L. (2017), *Public Finance*, 28th Edition, Vikas Publishing House Pvt. Ltd., New Delhi

B.A. (GENERAL / HONOURS) ECONOMICS (Semester V)

International Economics - I

[Course Code: Honours - ECC109; General - ECD109]

Credits: 04

Lectures: 60 (1 hour each)

Objective: To provide the students theoretical background to understand the functioning of the global economy.

1. Comparative Advantage and Terms of Trade

(15 lectures)

Internal and International Trade; Concepts of Absolute and Comparative Cost (weaknesses of the Comparative Cost doctrine); Comparative Advantage in terms of Opportunity Cost; Theory of Reciprocal Demand; Terms of Trade: Different Terms of Trade Indexes (Net Barter, Gross Barter, Income, Single and Double Factoral), Factors influencing Terms of Trade; Prebisch-Singer Thesis.

2. Contemporary Trade Theories

(15 lectures)

Factor Endowments Theory: Heckscher-Ohlin Theorem and Factor-Price Equalisation Theorem; Leontief Paradox; Rybczynski theorem; Stolper-Samuelson theorem; Factor Intensity Reversal; Trade based on Economies of Scale, Differentiated Products, Technological Gaps, Product Cycles, Differences in Tastes.

3. Trade Barriers

(20 lectures)

Protectionism versus Free Trade (merits and weaknesses); Trade Barriers: Tariffs (types and effects); Quotas (concept and types); Exchange Control (concept, objectives, methods, and weaknesses); Dumping (concept and weaknesses); Voluntary Export Restraints (concept); Export Subsidies (concept); Dual Exchange Rates (concept); Discriminatory Procurement (concept); Eco Labeling (concept); Counter Trade (concept); International Cartels (concept) [*examples of merits and/or weaknesses to be highlighted*].

4. Growth of Trade and Globalisation

(10 lectures)

Growth of International Trade (post-1991); Trade in Goods and Services; India's Foreign Trade: Value, Composition and Direction (post-1991); Globalisation: Factors/Drivers contributing towards Globalisation of Trade; Impact of Globalisation (positive and negative).

Main text

Cherunilam, Francis (2008). *International Economics*. Tata McGraw-Hill, New Delhi.

References

Carbaugh, Robert J. (2000): *International Economics*. South Western Publishers, Cincinnati Ohio.

Krugman, P.R., Obstfeld, M. and Melitz M. (2015). *International Economics: Theory and Policy*. Pearson Education, New Delhi.

Salvatore, D. (2013). *International Economics*. Wiley International, New York.

B.A. (GENERAL / HONOURS) ECONOMICS (Semester VI)

International Economics - II

[Course Code: Honours - ECC110; General - ECD110]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To introduce the students to the impact of global trade in commodities and services, and the institutions that govern them.*

1. Balance of Payments

(10 lectures)

Meaning and Structure of Balance of Payments; Balance and Equilibrium in Balance of Payments; Types and Causes of Disequilibrium; Corrective Measures: Exchange Rate (devaluation/revaluation), Monetary measures (expansion/contraction of money supply, exchange control and changes in interest rates) and Fiscal measures (taxes and public spending).

2. Foreign Exchange Market and Exchange Rates

(20 lectures)

Foreign Exchange Market: Functions, Instruments and Participants; Theories of Exchange Rate Determination: Purchasing Power Parity theory and Balance of Payments theory (including demerits); Types of Foreign Exchange rates: Fixed and Flexible Exchange Rates, Managed Float, Spot and Forward Exchange Rates; Factors influencing exchange rates; Exchange Rate Policy: Liberalised Exchange Rate

Management System, Introduction to Currency Convertibility; Hedging and Exchange Rate Risk Management.

3. Global Resource Movements (15 lectures)
International Capital Flows: Forms, Role, Factors influencing International Capital Flows, Effects of International Capital Movements, Migration of Human Capital (types), Brain Drain (concept and effects); Multinational Corporations (merits and demerits).

4. Regional Economic Integration and International Institutions (15 lectures)
Forms, Objectives and Effects of Economic Integration; Trading Blocs: EU, NAFTA and SAFTA (origin, objectives and evaluation); IMF and IBRD: objectives and functions; WTO: objectives and structure; WTO Agreements (AoA, GATS, TRIPS and TRIMS).

Main text

Cherunilam, Francis (2008). *International Economics*. Tata McGraw-Hill, New Delhi.

References

Carbaugh, Robert J. (2000): *International Economics*. South Western Publishers, Cincinnati Ohio.

Krugman, P.R., Obstfeld, M. and Melitz M. (2015). *International Economics: Theory and Policy*. Pearson Education, New Delhi.

Salvatore, D. (2013). *International Economics*. Wiley International, New York.

B.A. (GENERAL / HONOURS) ECONOMICS (Semester V)

Growth and Development - I

[Course Code: ECD111]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To understand the dynamics of change in the economy from a theoretical framework.*

1. Economic Growth and Development (lectures 20)

Meaning of Economic Growth and Development; Measuring Development and Development Gap; Per Capita Income, Human Development Index, Human Poverty Index; Other dimensions of the Development Gap: Unemployment, Education, Inequality and Distribution of Income, Growth and Distribution, Nutrition and Health, Poverty, Famine and Entitlements, Food Production, Basic Needs; The characteristics of Underdevelopment.

2. Land and Labour (lectures 10)

Land: The Role of Agriculture in Development, The Supply Response of Agriculture, The Interdependence of Agriculture and Industry; Labour: Economic Development with Unlimited Supplies of Labour, Rural-Urban Migration and Urban Unemployment, Disguised Unemployment (types and measurement).

3. Capital (lectures 10)

The Role of Capital in Development; The Capital-Output Ratio; Investment in Human Capital; Obstacles to Development: Dualism, the process of Cumulative Causation, Regional Inequalities, The Conflicting Role of Population Growth in the Development Process.

4. Theories of Economic Growth and Development (lectures 20)

Contribution of Smith, Ricardo, Malthus and Marx (in brief); Balanced and Unbalanced Growth, Model of the Low-level Equilibrium Trap, Critical Minimum Effort Thesis; Neo-Classical Growth Theory: Solow-Swan; New Growth Theories: Romer-Lucas.

Main text

Thirlwall, A.P. (2006). *Growth and Development with special reference to Developing Economies*, 8th Edition. Palgrave Macmillan, London.

References

Gillis M., Perkins D.H, Roemer M. and Snodgrass D.R. (1983). *Economic Development*. W.W. Norton & Co, New York.

Hayami, Yujiro and Godo, Yoshihisa (2008). *Development Economics - From the Poverty to the Wealth of Nations*. Oxford University Press, New Delhi.

Meier G.M. and Rauch J.E. (2005). *Leading issues in Economic Development*, 6th Edition. Oxford University Press, New Delhi

Ray, Debraj (1998). *Development Economics*. Oxford University Press, New Delhi.

Todaro, Michael P. and Smith, Stephen (2014). *Economic Development*, 12th edition. Prentice Hall, New Delhi.

Yotopoulos, Ran A. and Nugent, Jeffery B. (1976). *Economics of Development-Empirical Investigation*, Harper & Row Publisher, New York

B.A. (GENERAL / HONOURS) ECONOMICS (Semester VI) Growth and Development - II

[Course Code: ECD112]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To provide a perspective of factors in economic development.*

1. Technological Progress and Development (lectures 15)

Marx versus Kuznets Pattern of Economic Growth: Technological conditions of the two Growth Patterns; Sources and types of Technological Progress (Capital and Labour saving); Technological Progress of Societies; Learning by Doing.

2. Institutions and Economic Systems (lectures 15)

The Economic Functions of the Market and the State; The Rise and Fall of Developmentalist Models; Success and Failure of the New Developmental Market Economies; Resurgence of Market Liberalism and its consequences.

3. The Role of Community in Economic Development (lectures 15)

The Economic Functions of Community; Rural Organization in Developing Economies; The Community in Market Development; Towards an Optimal combination of the Community, the Market and the State.

4. Institutional Reforms and Freedom (lectures 15)

Role of Institutional Reforms; Amartya Sen's Institutional Freedoms as Ends and Means of Development: Political Freedoms; Economic Facilities; Social Opportunities; Transparency Guarantees; Protective Security.

Main text

Hayami, Yujiro and Godo Yoshihisa (2008). *Development Economics - From the Poverty to the Wealth of Nations*. Oxford University Press, New Delhi.

References

- Gillis M, Perkins D.H, Roemer M. and Snodgrass D.R. (1983). *Economic Development*. W.W. Norton & Co, New York.
- Meier G.M. and Rauch J.E. (2005). *Leading issues in Economic Development*, 6th Edition. Oxford University Press.
- Ray, Debraj (1998). *Development Economics*. Oxford University Press, Delhi.
- Sen, Amartya (1999). *Development as Freedom*. Oxford University Press, Delhi.
- Thirlwall, A.P. (2006). *Growth and Development with special reference to Developing Economies*, 8th Edition. Palgrave Macmillan, London.
- Todaro Michael P. and Smith, Stephen (2014). *Economic Development*, 12th edition. Prentice Hall, New Delhi.
- Yotopoulos, Ran A. and Nugent, Jeffery B. (1976). *Economics of Development-Empirical Investigation*. Harper & Row Publisher, New York.

B.A. (HONOURS) ECONOMICS (Semester V)

Research Methodology - I

[Course Code: ECD113]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To equip students with basic methods of scientific research.*

1. Introduction to Research (20 lectures)

Scientific Methods of Research; Process of Scientific Method; Criteria of Scientific Methods of Research; Social Research: Assumptions and Steps; Problems of Research in Social Sciences: Quantification, Organizing Controlled Experiments, Replication and Verification; Criteria of Good Research.

2. Hypothesis (10 lectures)

Meaning, Importance and Sources of Hypothesis; Characteristics of Good Hypothesis; Difficulties in Formulating Hypothesis; Testing Hypothesis.

3. Research Methods (15 lectures)

Different type of Research Methods: Social Survey, Case Study, Experimental Method and Statistical Method (definition, features, importance and limitations).

4. Empirical Investigations (15 lectures)

Sources of Primary and Secondary Data; Census and Sampling Methods; Different Types of Samples: Simple Random, Stratified, Serially Stratified, Systematic, Cluster, Multistage and Sequential; Sampling and Non-sampling Errors.

Main text

Kumar, Ranjit (2011). *Research Methodology*. Sage Publications, New Delhi.

References

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- Bell, J. (1999). *Doing your Research Project*. Viva Books, New Delhi.
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- Bryman, Alan (2004). *Social Research Methods*. Oxford University Press, Oxford.
- Cooper, Donald (2008). *Business Research Methods*. McGraw-Hill, New Delhi.
- Denicolo, Pam and Becker, Lucinda (2012). *Developing Research Proposals*. Sage Publications, New Delhi.
- Flick, Uwe (2011). *Introducing Research Methodology*. Sage Publications, New Delhi.
- Gupta, Mukul and Gupta, Deepa (2011). *Research Methodology*. Prentice Hall of India, New Delhi.
- Guthrie, Gerard (2010). *Basic Research Methods*. Sage Publications Pvt. Ltd, New Delhi.
- Henn, Matt and Weinstein, Mark (2009). *A Critical Introduction to Social Research*. Sage Publications, New Delhi.
- Kothari, C.R. (2004). *Research Methods*. Wishwas Publications, New Delhi.
- Krishnaswami, O.R. and Ranganatham, M. (2014). *Methodology of Research in Social Sciences*. Himalaya Publishing House, Mumbai.
- Mukherjee, Pratha (2000). *Methodology in Social Research*. Sage Publications, New Delhi
- Neuman, W. Lawrence (2000). *Social Research Methods*. Allyn and Bacon, Boston.
- Saunders, Mark and Lewis Philip (2011). *Research Methods for Business Students*. Pearson, New Delhi.
- Somekh, Bridget and Lewin Cathy (2011). *Theory and Methods in Social Research*. Sage Publications, New Delhi.
- Silverman, David (2011). *Qualitative Research*. Sage Publications. New Delhi.

B.A. (HONOURS) ECONOMICS (Semester VI)

Research Methodology - II

[Course Code: ECD114]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To equip students with the application of scientific methods of research.*

1. Data Collection and Presentation (15 lectures)

Schedules, Questionnaire, Interview, Observations (definition, features, importance and limitations); Classification of Data; Tables; Frequency Distribution; Graphical Presentation of Data: Histograms, Frequency Polygons, Cumulative Frequency Curves, Pie charts.

2. Measures of Central Tendency and Dispersion (15 lectures)

Mean, Median and Mode; Mean Deviation; Variance; Standard Deviation; Skewness and Kurtosis.

3. Simple Correlation and Regression (20 lectures)

Scatter Diagrams; Pearson's Coefficient of Correlation; Spearman's Rank Correlation; Coefficient of Regression; Curve Fitting; Time Series Analysis: Smoothing by Moving Average Methods; Trend; Cyclical, Seasonal and Irregular Variations; Least Squares Method of Curve Fitting; Deseasonalising Time Series.

4. Report Writing (10 lectures)

Preparation of Synopsis; Explaining the Research Problem and Preparation of References (distinction between Bibliography); Techniques for Referencing; Methods of Review of Literature; Preparation of Articles for Journals; Books; Preparation of Abstracts; Research Report Writing.

Main text

Kumar, Ranjit (2011). *Research Methodology*. Sage Publications, New Delhi.

References

Adams John and Khan Hafiz (2014). *Research Methods for Business and Social Science Students*. Sage Publications, New Delhi.

Bell, J. (1999). *Doing your Research Project*. Viva Books, New Delhi.

Bordens, Kenneth (2006). *Research Design and Methods*. Tata McGraw Hill, New Delhi.

- Bryman, Alan (2004). *Social Research Methods*. Oxford University Press, Oxford.
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- Flick, Uwe (2011). *Introducing Research Methodology*. Sage Publications, New Delhi.
- Gupta, Mukul and Gupta, Deepa (2011). *Research Methodology*. Prentice Hall of India, New Delhi.
- Guthrie, Gerard (2010). *Basic Research Methods*. Sage Publications Pvt. Ltd, New Delhi.
- Henn, Matt and Weinstein, Mark (2009). *A Critical Introduction to Social Research*. Sage Publications, New Delhi.
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- Mukherjee, Pratha (2000). *Methodology in Social Research*. Sage Publications, New Delhi
- Neuman, W. Lawrence (2000). *Social Research Methods*. Allyn and Bacon, Boston.
- Saunders, Mark and Lewis Philip (2011). *Research Methods for Business Students*. Pearson, New Delhi.
- Somekh, Bridget and Lewin Cathy (2011). *Theory and Methods in Social Research*. Sage Publications, New Delhi.
- Silverman, David (2011). *Qualitative Research*. Sage Publications. New Delhi.

B.A. (HONOURS) ECONOMICS (Semester V)

Environmental Economics- I

[Course Code: ECD115]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To understand the environment-economy inter-linkages and the consequences of economic processes on the environment.*

1) Economy and Environment

(15 lectures)

Environmental Economics (concept); Inter-linkages between Economy and Environment, Markets and the Environment – The Power of Markets, Market Failure, Markets for the Environment, Biological Diversity as a Resource, Types of Pollutants, Environmental damages not related to emissions, Fundamental balance in economic activity.

2) Valuing the Environment: Concepts

(15 lectures)

Meaning of Economic Value, Economic Value of the Environment, Cost Benefit Analysis, Uses of Environmental CBA, Other Uses of Environmental Valuation, Environment Impact Assessment and Economic Impact Assessment

3) Valuing the Environment: Methods

(15 lectures)

Stated Preference Methods, Contingent Valuation and Choice Experiments, Revealed Preference Methods, Hedonic Pricing method, Travel Cost Models, Production Function Approaches, Benefits Transfer.

4) Economic Growth, Environment and Sustainable Development (15 lectures)

Economic Growth and Development – Predictions from the past, Growth and the Environment: The Environmental Kuznets Curve, Broadening the Issue: The Economics of Sustainable Development, Measuring Sustainability.

Main text

Field, Barry (2010). *Environmental Economics - An Introduction*, McGraw Hill.

References

Berck, Peter and Helfand, Gloria (2010). *Economics of the Environment*, Prentice Hall, U.S.A.

Bhattacharya, Rabindra (2014). *Environmental Economics. An Indian Perspective* Oxford, New Delhi

Hanley, N; Shogren, J. and Ben White (2013). *Introduction to Environmental Economics*, Oxford University Press, U.K.

Katar Singh, Anil Shishodia (2015). *Environmental Economics: Theory and Applications*. Sage Publications, New Delhi

Kolstad, Charles (2010). *Intermediate Environmental Economics*, 2ndEd. Oxford University Press.

Perman, Roger, MaYue, Common Michael, Maddison David and Mcgilvray James (2011). *Natural Resource and Environmental Economics*, 4th Edition

B.A. (HONOURS) ECONOMICS (Semester VI)

Environmental Economics - II

[Course Code: ECD116]

Credits: 04

Lectures: 60 (I hour each)

Objective: *To understand the environment-economy inter-linkages and the consequences of economic processes on the environment.*

1. Trade and the Environment (12 lectures)

Gains from Trade, Extending the Basic Trade Model to include the Environment, Empirical Evidence on the Trade Effects of Environment Regulation, International Trade Agreements and the Environment

2. The Economics of Climate Change (12 lectures)

International Environmental Problems, The Challenge of International Co-ordination, The Benefits and Costs of International Co-operation, The Nature of Environmental Problems in Developing Countries, Contribution of Industrialized Countries to Emissions, Recent Global Initiatives to address Climate Change Concerns

3. Forests (12 lectures)

Benefits of Forests, Forest Distribution and Losses, Economic Theories of Deforestation, Tropical Deforestation and Poverty, Forestry Managements, Preservation of Natural Forests; Policies for Rainforest Conservation.

4. The Economics of Water Pollution (12 lectures)

Introduction, The Costs of Water Pollution Control, Non-point source Water Pollution, Measuring Water Quality Benefits, Problems for Cost Benefit Analysis of water quality improvements.

5. Non-Renewable Natural Resources and Energy (12 lectures)

Natural Resources, Types, The Extraction of Non-renewable Resources, Measuring Resource Scarcity, Methods of Resource Conservation, Global Energy Demand and Supply, Global Issues in Energy Policy.

Main text

Field, Barry (2010). *Environmental Economics - An Introduction*, McGraw Hill.

References

Berck, Peter and Helfand, Gloria (2010). *Economics of the Environment*, Prentice Hall, U.S.A.

Bhattacharya, Rabindra (2014). *Environmental Economics. An Indian Perspective* Oxford, New Delhi

Hanley, N; Shogren, J. and Ben White (2013). *Introduction to Environmental Economics*, Oxford University Press, U.K.

Katar Singh, Anil Shishodia (2015). *Environmental Economics: Theory and Applications*. Sage Publications, New Delhi

Kolstad, Charles(2010). *Intermediate Environmental Economics*, 2ndEd.Oxford University Press.

Perman, Roger, MaYue, Common Michael, Maddison David and Mcgilvray James(2011).
Natural Resource and Environmental Economics, 4th Edition.

B.A. (HONOURS) ECONOMICS (Semester V)
Mathematical Economics – I

[Course Code: ECD117]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To enable students to apply the Mathematical and Operational Research Techniques to understand economic principles and problems for policy formulation.*

1. Basic concepts in Mathematics **(lectures 20)**

Importance of Mathematical Methods in Economic Analysis; Review of basic concepts; Compute simple and compound rates of interest; Algebraic Expressions; Equations; Exponents; Graphs of Lines and Non-Linear Equations; System of Simultaneous Equations; Sets and Set operations; Relations; Functions and their properties; Number systems.

2. Functions, Limits and Continuity **(lectures 10)**

Concept of Function and Types; Limit and Continuity.

3. Differential Calculus **(lectures 20)**

Derivatives: Rules of Differentiation; Partial and Total Differentiation and applications; second and higher order derivatives. Cost function, Revenue Function, Profit maximization under perfect competition and Imperfect competition.

4. Integral Calculus **(lectures 10)**

Integration: Definite and indefinite integrals; Simple rules of Integration and applications in Economics.

Main text

Chiang, A.C. (1995) *Fundamental Methods in Mathematical Economics*, McGraw Hill, New York.

References

Anderson, David R. et. al. (2013). *Statistics for Business and Economics*. Cengage Learning India Edition

Arora, P.N. et. al. (2007). *Comprehensive Statistical Methods*; S. Chand & Sons, New Delhi.

Chiang, A.C. (1995) *Fundamental Methods in Mathematical Economics*, McGraw Hill, New York.

Henderson, J.M. & R.E. Quandt (1995) *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New York.

Kanti, Swarup et. al. (1980). *Operations Research*; S. Chand & Sons, New Delhi.
Sydsaeter, K. and P. Hammond (2002). *Mathematics for Economic Analysis*, Pearson Educational Asia: Delhi.
Tulsian, P.C. and Pandey Vishal (2006). *Quantitative Techniques: Theory & Problems*. Pearson Practice Series, Pearson Education.

B.A. (HONOURS) ECONOMICS (Semester VI)

Mathematical Economics – II

[Course Code: ECD118]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To enable students to apply the Mathematical and Operational Research Techniques to understand economic principles and problems for policy formulation.*

1. Determinants and Matrices (lectures 20)

Determinants and their Basic Properties; Laplace expansion; Solution of Simultaneous Equations through Cramer's Rule; Concept of Matrix and Types; Matrix Inverse and Rank of a Matrix; Introduction to Input-Output Analysis.

2. Optimization Techniques (lectures 20)

Problems of Maxima and Minima in Single and Multivariable Functions; Unconstrained and Constrained; Optimization in Simple Economic Problems; Introduction to Linear Programming; Its structure; Variables; Feasible, basic and optional solutions; Graphical methods of solving a Linear Programming Problem; Formulation of the Dual Linear Programming and its interpretation.

3. Elementary Probability Theory (Lectures 20)

Sample spaces and events; Probability axioms and properties; Counting techniques; Conditional probability and Bayes' rule; Independence; Permutation and Combination.

Main text

Chiang, A.C. (1995) *Fundamental Methods in Mathematical Economics*, McGraw Hill, New York.

References:

Anderson, David R. et. al. (2013). *Statistics for Business and Economics*. Cengage Learning India Edition

Arora, P.N. et. al. (2007). *Comprehensive Statistical Methods*; S. Chand & Sons, New Delhi.

Chiang, A.C. (1995) *Fundamental Methods in Mathematical Economics*, McGraw Hill, New York.

Henderson, J.M. & R.E. Quandt (1995) *Microeconomic Theory: A Mathematical Approach*, McGraw Hill, New York.

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

Tulsian, P.C. and Pandey Vishal (2006). *Quantitative Techniques: Theory & Problems*. Pearson Practice Series, Pearson Education.

B.A. (HONOURS) ECONOMICS (Semester V)

Statistics and Econometrics - I

[Course Code: ECD119]

Objective: To develop in students the data analysis and interpretation skill with a theoretical background

Credits: 04

Lectures: 60 (1 hour each)

1. Basic Concepts in Statistics

(lectures 12)

Distinction between population and samples, and between population parameters and sample statistics; Measures of central tendency and deviations; dispersion; uses of measures of location and variation to describe and summarize data; population moments and their sample counterparts.

2. Random Variables and Probability Distributions

(lectures 25)

Basic concepts in probability; Defining random variables; Probability distributions; Expected values of random variables and of functions of random variables; Properties of commonly used discrete and Continuous distributions (uniform, binomial, normal, Poisson, t-distribution, chi-square and f-distribution); Density and distribution functions for jointly distributed random variables; Computing expected values; Covariance and correlation coefficients

3. Hypothesis Testing

(lectures 13)

Properties of estimators; Testing of hypotheses: defining statistical hypotheses; Distributions of test statistics; Testing hypotheses related to population parameters; Type I and Type errors; Power of a test; Tests for comparing parameters from two samples.

4. Introduction to Econometrics

(lectures 10)

Meaning; Functions and Assumptions (Gaussian Model) and steps in Econometric model building; nature and scope of Econometrics; Types of data (cross-sectional, panel, pooled and time series).

Main text

S.C. Gupta (2016). *Fundamentals of Statistics*, Himalaya Publishing House Pvt. Ltd, 7th Edition.

Gujarati, D.N. and D.C. Porter (2009). *Essentials of Econometrics*. McGraw Hill, 4th Ed., International Edition.

References

Devore, Jay L. (2010). *Probability and Statistics for Engineers*. Cengage Learning.

Freund, John E. (1992). *Mathematical Statistics*. Prentice Hall.

- Larsen, Richard J. and Morris L. Marx (2011). *An Introduction to Mathematical Statistics and its Applications*. Prentice Hall.
- Dougherty, Christopher (2007). *Introduction to Econometrics*, Oxford University Press, 3rd Ed., Indian edition.
- Ramanathan, Ramu (2002) *Introductory Econometrics with Applications*, Pearson Education, Singapore
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B.A. (HONOURS) ECONOMICS (Semester VI)

Statistics and Econometrics - II

[Course Code: ECD120]

Objective: To develop in students the data analysis and interpretation skill with a theoretical background

Credits: 04

Lectures: 60 (1 hour each)

1. Simple Linear Regression Model: Two Variable Case (lectures 15)

Estimation of model by method of ordinary least squares; Properties of estimators; Goodness of fit; Tests of hypotheses; Scaling and units of measurement; Confidence intervals; Gauss-Markov theorem; Forecasting.

2. Multiple Linear Regression Model (lectures 20)

Estimation of parameters; Properties of OLS estimators; Goodness of fit - R² and adjusted R²; Partial regression coefficients; Testing hypotheses – individual and joint; Functional forms of regression models; Qualitative (dummy) independent variables; Misspecification; Model selection (criteria).

3. Violations of Classical Assumptions (lectures 15)

Multicollinearity; Heteroskedasticity; Serial Correlation (consequences, detection and remedies).

4. Introduction to Econometric Software Package (lectures 10)

Importing data set, running OLS (single and multiple regression), interpreting results.

Main text

Gujarati, D.N. and D.C. Porter (2009). *Essentials of Econometrics*. McGraw Hill, 4th Ed., International Edition.

References

- Devore, Jay L. (2010). *Probability and Statistics for Engineers*. Cengage Learning.
- Freund, John E. (1992). *Mathematical Statistics*. Prentice Hall.

Larsen, Richard J. and Morris L. Marx (2011). *An Introduction to Mathematical Statistics and its Applications*. Prentice Hall.

Dougherty, Christopher (2007). *Introduction to Econometrics*, Oxford University Press, 3rd Ed., Indian edition.

Ramanathan, Ramu (2002) *Introductory Econometrics with Applications*, Pearson Education, Singapore

B. A. (GENERAL/HONOURS) ECONOMICS (Semster-III)

Data Analysis - I [Course Code : ECS101]

Credits: 04

Lectures: 60 (1 hour each)

Objectives:

1. To make students aware of the process involved in data analysis which will enable them to undertake research projects
2. To expose the students to the practical aspect of data analysis in conducting research

1. Introduction to Spreadsheet

(15 lectures)

Data entry and formatting, Operations and functions, Row and column transformations, Data sorting and filters, Formats for saving files.

2. Processing and Displaying Data

(15 Lectures)

Types of data, Data Processing in Quantitative Studies: Editing, Coding; Methods of Communicating and Data representation: Tables and Graphs.

3. Descriptive Statistics using Spreadsheet

(15 Lectures)

Measures of Central Tendency: Mean, Median and Mode; Measures of Dispersion: Range, Inter Quartile Range, Semi Quartile Range, Mean Deviation, Standard Deviation.

4. Correlation and Causality Among variables

(15 Lectures)

Finding relations among the variables-Correlation Analysis, Rank Correlation, understanding causality, Introduction to regression Analysis-Applications of regression analysis in economics and business.

Main Text:

Gupta S.C. (2016): *Fundamentals of Statistics*, 7th Edition, Himalaya Publishing House Pvt. Ltd, Mumbai

References:

G.C. Beri (2005): *Business Statistics*, 2nd Edition, Tata McGraw Hill Publishing Company Ltd, Delhi
Ron C. Mittelhammer (2013): *Mathematical Statistics for Economics and Business*, 2nd Edition, Springer
Gerald Keller (2017): *Statistics for Management and Economics*, 11th Edition, Cengage Learning, USA.

B. A. (GENERAL/HONOURS) ECONOMICS (Semester-IV)

Data Analysis - II [Course Code : ECS102]

Credits:04

Lectures: 60 (1 hour each)

Objective:

To train the students in basic statistical tools and techniques using softwares

1. Index Numbers (15 Lectures)

Introduction, Uses, Types, Methods of Construction: (Simple aggregate method, Weighted aggregate method, simple Average of price relatives and Weighted average of price relatives); Tests of Consistency (Unit, Time reversal, Factor reversal and Circular); Base shifting, Splicing and Deflating of Index numbers; and Limitations.

2. Parametric and Non Parametric Tests (15 Lectures)

Introduction to Hypothesis Testing. Parametric and Non Parametric tests: t test, chi-square tests ; Fisher Exact Probability test ; Mann-Whitney Test; Wilcoxon Signed-Rank Test; Kruskal-Wallis Test and Friedman Test.

3. Analysis of Variance (ANOVA) (15 Lectures)

Introduction, Assumptions, One-way classification, construction of ANOVA table, hypothesis testing for more than two means.

4. Multivariate Analysis (15 Lectures)

Multivariate One-Way Analysis of Variance Model (MANOVA); Multivariate Regression; Principal Component Analysis; and Factor Analysis.

Main Text:

Gupta S.C. (2016): *Fundamentals of Statistics*, 7th Edition, Himalaya Publishing House Pvt. Ltd, Mumbai

Joseph F. Hair, William C. Black, Barry J. Babin and Rolph E. Anderson (2014): *Multivariate Data Analysis*, 7th edition; Pearson Education India

References:

G.C. Beri (2005): *Business Statistics*, 2nd Edition, Tata McGraw Hill Publishing Company Ltd, Delhi

Ron C. Mittelhammer (2013): *Mathematical Statistics for Economics and Business*, 2nd Edition, Springer

Gerald Keller (2017): *Statistics for Management and Economics*, 11th Edition, Cengage Learning, USA.

B. A. (GENERAL/HONOURS) ECONOMICS (Semster-III)

Financial Economics - I [Course Code : ECS103]

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To equip students with basics of investment and working of financial ratios..*

1.Introduction to Investment (8 Lectures)

Nature, meaning and importance of Investments; Investments in financial and non-financial assets.

2. Forms of Financial Investments (16 Lectures)

Money market securities; common and preferred stock; Corporate, government and public sector bonds; alternative forms of investment; Characteristics and importance.

3. Investment and Returns (16 Lectures)

Interest rates, Dividends, Capital Gains; Time value of money; Inflation and returns; Measuring investment returns; Risk and risk factors; Measuring investment risks.

4. Financial Ratios (20 Lectures)

Types, Importance, Calculations, Interpretations and Limitations.

Main text

Pandey I. M. (2015) *Financial Management*, 11th Edition, Vikas Publishing House Pvt. Ltd. New Delhi

References

Bodie Zvi, Alex Kane, Alan J. Marcus and Pitabas Mohanty (2015), *Investments*, 10th Edition, Tata McGraw Hill Education Pvt. Ltd. New Delhi

Khatri Kumar Dhanesh (2012), *Investment Management and Security Analysis-Text & Case*, 2nd Edition, MacMillan India Ltd.

Maheshwari S. N. (2015), *Management Accounting and Financial Control*, Sultan Chand & Sons, New Delhi.

Bhole, L.M. (2009): *Financial Institutions and Markets*, Tata McGraw Hill, New Delhi

Bhole, L.M. (2000): *Indian Financial System*, Chugh Publications, Allahabad.

Edwards, F.R. and Ma, C.W. (1992): *Futures and Options*, McGraw Hill, New York.

Francis J C & R.W. Taylor (2004): *Theory and Problems of Investments*, McGraw Hill, Schaum's Outline Series, Singapore.

Keith Redhead,(1998): *Financial Derivatives*, Prentice- Hall of India, New Delhi.

Kohn, Meir (2009): *Financial Institutions and Markets*, Oxford University Press, Indian Edition.

Ohlson, J.A. (1987): *Theory of Financial Markets and Institutions*, North Holland, Amsterdam.

Pilbeam Keith (1998): *Finance and Financial Markets*, Palgrave, New Delhi.

Vijay Baskar P and Mahapatra, B. (2002): *Derivatives Simplified*, Sage publications, New Delhi

B. A. (GENERAL/HONOURS) ECONOMICS (Semester-IV)

Financial Economics - II

[Course Code : ECS104]

Credits: 04

Lectures: 60 (1 hour each)

Objective: To understand security market and its regulatory framework in the context of its functioning.

1. Security Market (8 Lectures)
Primary and secondary; Composition and organizations; Security market indexes; Security Markets in India; Nature and Composition of Regulatory Framework in India.

2. Valuation (16 Lectures)
Valuation of bonds and common stock; Fundamental analysis; Technical analysis; Efficient markets theory.

3. Derivatives (20 Lectures)
Hedging and arbitrage; Arbitrage pricing theory; Futures and Options, and Swaps.

4. Portfolio Analysis (16 Lectures)
Portfolio diversification and performance evaluation.

Main text

Bodie Zvi, Alex Kane, Alan J. Marcus and Pitabas Mohanty (2015), *Investments*, 10th Edition, Tata McGraw Hill Education Pvt. Ltd. New Delhi

References

Pandey I. M. (2015) *Financial Management*, 8th Edition, Vikas Publishing House Pvt. Ltd. New Delhi
Khatri Kumar Dhanesh (2012), *Investment Management and Security Analysis-Text & Case*, 2nd Edition, MacMillan India Ltd.

Maheshwari S. N. (2015), *Management Accounting and Financial Control*, Sultan Chand & Sons, New Delhi.

Bhole, L.M. (2009): *Financial Institutions and Markets*, Tata McGraw Hill, New Delhi

Bhole, L.M. (2000): *Indian Financial System*, Chugh Publications, Allahabad.

Edwards, F.R. and Ma, C.W. (1992): *Futures and Options*, McGraw Hill, New York.

Francis J C & R.W. Taylor (2004): *Theory and Problems of Investments*, McGraw Hill, Schaum's Outline Series, Singapore.

Keith Redhead,(1998): *Financial Derivatives*, Prentice- Hall of India, New Delhi.

Kohn, Meir (2009): *Financial Institutions and Markets*, Oxford University Press, Indian Edition.

Ohlson, J.A. (1987): *Theory of Financial Markets and Institutions*, North Holland, Amsterdam.

Pilbeam Keith (1998): *Finance and Financial Markets*, Palgrave, New Delhi.

Singh, Preeti (2000): *Investment Management*, Himalaya Publishing House, Mumbai.

Vijay Baskar P and Mahapatra, B. (2002): *Derivatives Simplified*, Sage Publications, New Delhi

GNEREALELECTIVE COURSES

**B.A. in Economics (Semester-1)
(General/Honours)**

**Entrepreneurship Development – I
(Course Code- ECG 101)**

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To expose students to entrepreneurship and to develop skills to be an effective businessmen and to identify areas of utmost importance in the starting and managing of the business.*

- 1. Entrepreneur** (Lectures 7)
Entrepreneurship and Enterprise; Achievement Motive; Need for and Characteristics of Entrepreneurship; Role and functions of Entrepreneurs.
- 2. Types of Businesses and Industries** (Lectures 5)
Extraction, Manufacturing and Services; Demand-based and Resources-based; Import-substitution and Export-promotion Businesses.
- 3. Identification and Evaluation of Business Opportunities** (Lectures 10)
Porter's Five Forces Analysis (Market Structure Analysis); The SWOT Technique: Analysis of Strengths, Weaknesses, Opportunities and Threats.
- 4. Market Surveys and Feasibility Studies** (Lectures 8)
Choice of Technology, Plant and Equipment.
- 5. Venturing Methods** (Lectures 10)
Ownership Patterns; Legal Requirements Pertaining to the Setting up of Business.
- 6. Financial Incentives and Promotional Schemes of the Government of India and Government of Goa.** (Lectures 5)
- 7. Financial Procedures** (Lectures 8)
Funds and Funding; Institutions and Entrepreneurship Support Systems.
- 8. Purpose and Components of a Business Plan / Project Report** (Lectures 7)

References:

1. Adam, Everette (1997), Production and Operations Management, Prentice Hall India, New Delhi
2. Baker, Michael J. (1996), Marketing: An Introductory Text, Macmillan, London.
3. Colombo Plan Staff College for Technical Education, Manila (1999): Entrepreneurship Development, Tata McGraw Hill, New Delhi.
4. Chandra, Prasana (1995), Projects: Planning, Analysis, Selection, Implementation & Review, Tata McGraw Hill, New Delhi.
5. Davies, M. M.; Aquilano N. J.; Chase R. B. (1999), Fundamentals of Operations Management, Irwin-McGraw Hill, Boston.
6. Dessai, Vasant (1996), Dynamics of Entrepreneurial Development and Management, Himalaya, Mumbai.
7. Government of Goa, Daman and Diu (Law and Judiciary Department): The Goa, Daman and Diu Shops and Establishments Act, 1973.
8. Horngren, Charles (1997), Cost Accounting- A Managerial Emphasis, Prentice Hall India, New Delhi.

9. Kuriloff ,A. H.; Hemphill J. M. (1988), Starting and Managing the Small Business, McGraw Hill, New York.
10. Kazmi, Azhar (1997), Business Policy, Tata McGraw Hill, New Delhi.
11. Kotler, Philip (1997), Marketing Management, Prentice Hall India, New Delhi
12. Kossek, Ellen Ernst; Block Richard N. (2000), Managing Human Resources in the 21st Century: From Core Concepts to Strategic Choice, South-Western College Publishing, USA
13. Kanka , S. S. (2005), Entrepreneurship Development, S. Chand, New Delhi
14. Mishra, S. K. (2002), Labour and Industrial Law, Allahabad Law agency, Faridabad (Haryana).
15. Patel, J. B.; Modi S. S. (1995) , A Manual on Business Opportunity Identification and Selection, Entrepreneurship Development Institute of India, Ahmedabad.
16. Pandey, I. M. (1998), Management Accounting, Vikas, New Delhi.
17. Pandey, G. N. (1995), A Complete Guide to Successful Entrepreneurship, Vikas, New Delhi

B.A. in Economics (Semester-II)
(General/Honours)

Entrepreneurship Development – II
(Course Code- ECG 102)

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To expose the students to accounting, marketing and financial system for starting, managing and running of the business.*

- 1. Costs, Price, Profits and Book of Accounts (Lectures 12)**
Analysis of Costs and Costing Strategies; Market structures and Pricing Strategies; Cost-Volume-Profit Analysis. Financial Statements and Funds Flow Analysis.
- 2. Elements of Marketing and Sales Management: (Lectures 10)**
Marketing Channels; Marketing Mix and Role of Advertising; Nature of the Product/Service and Market Strategies.
- 3. Management of Plant and Equipment; Management of Materials; Inventory Control Strategies. Management of Human Resources (Lectures 15)**
Importance and Scope of Human Resources Management.
- 4. Important provisions of Shops and Establishments Act; Factories Act; Sale of Goods Act (Lectures 5)**
- 7. Taxation and Entrepreneurship (Lectures 8)**
Income Tax; Value Added Tax (Sales Tax, Central Excise); Customs Duties.
- 8. Coping with Uncertainty; Stress Management and Positive Reinforcement. Social Responsibility of Business and Business Ethics (Lectures 10)**

References:

1. Adam, Everette (1997), Production and Operations Management, Prentice Hall India, New Delhi
2. Baker, Michael J. (1996), Marketing: An Introductory Text, Macmillan, London.
3. Colombo Plan Staff College for Technical Education, Manila (1999): Entrepreneurship Development, Tata McGraw Hill, New Delhi.
4. Chandra, Prasana (1995), Projects: Planning, Analysis, Selection, Implementation & Review, Tata McGraw Hill, New Delhi.
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7. Government of Goa, Daman and Diu (Law and Judiciary Department) (1973): The Goa, Daman and Diu Shops and Establishments Act
8. Horngren, Charles (1997), Cost Accounting: A Managerial Emphasis, Prentice Hall India, New Delhi.
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10. Kazmi, Azhar (1997), Business Policy, Tata McGraw Hill, New Delhi.
11. Kotler, Philip (1997), Marketing Management, Prentice Hall India, New Delhi
12. Kossek, Ellen Ernst; Block Richard N. (2000), Managing Human Resources in the 21st Century: From Core Concepts to strategic Choice, South-Western College Publishing, USA
13. Kanka, S. S. (2005), Entrepreneurship Development, S. Chand, New Delhi
14. Mishra, S. K. (2002), Labour and Industrial Law, Allahabad Law agency, Faridabad (Haryana).
15. Patel, J. B.; Modi S. S. (1995), A Manual on Business Opportunity Identification and Selection, Entrepreneurship Development Institute of India, Ahmedabad.
16. Pandey, I. M. (1998), Management Accounting, Vikas, New Delhi.
17. Pandey, G. N. (1995), A Complete Guide to Successful Entrepreneurship, Vikas, New

**B.A. in Economics
(General/Honours)**

**Demography and Population Studies I
(Course Code- ECG 103)**

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To study population dynamics at the national and international levels and also to focus on various concepts, theories related to population studies in the context of economic development of India*

1. Introduction to Demography:

(Lectures 10)

Nature, Scope and importance of Demography, relation of Demography with other social sciences, Demography and Population Studies. Demographic analysis: some basic concepts. Demographic Data - nature, methods and sources of data collection.

2. Determinants of Population Change:

(Lectures 12)

Fertility: Concepts and measures of fertility. Factors affecting fertility. Mortality: Concepts and measures of mortality, Sex and age differentials in mortality. Infant mortality. Causes of Death. Global HIV / AIDS epidemic. Migration: Terms and concepts, measures, determinants and consequences.

3. Population Structure and Characteristics: (Lectures 12)

Population structure, age and sex structure, sex ratio's in developed and developing countries, factors affecting sex ratio. Age structure, Problem of aging of populations. Factors determining age structure. Effects of migration on age structure. Marital Status - literacy and educational attainment - Religion. Population distribution by Residence: Rural - Urban Population, Concepts, terms and measures of urbanization, factors affecting rural - urban population distribution.

4. Population Growth and Economic Development: (Lectures 8)

Effects of population growth on Economic Development. Factors Promoting Economic Development. Factors Retarding Economic Development. Population and development issues in less developed economies.

5. Theories of Population: (Lectures 10)

Malthusian Theory of Population, Criticisms and applicability. Optimum Theory of Population. Its superiority over Malthusian Theory, criticisms, The Theory of Demographic Transition.

6. Population Policies: (Lectures 8)

Mortality influencing policies. Migration influencing policies. Fertility influencing policies.

References:

- Ahmad, Noina Sharma (1997), Demographic Transition, Rawat Publications, New Delhi,
Alfred Savvy (1974), General Theory of Population, Nethuen & Co Ltd, London.
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B.A. in Economics (Semester-II)
(General/Honours)
Demography and Population Studies II
(Course Code- ECG 104)

Credits: 04

Lectures: 60 (1 hour each)

Objective: *To expose students to various concepts concerning population of India and to provide an in-depth understanding of the same and also to make aware the population problems and various measures to tackle it.*

1. Demographic Studies in India:

(Lectures 10)

Development of Demography in India, Teaching of Demography, Demand for Demographers in India. Scope for population research in India. Sources of Demographic Data in India. Census, Registration, Sample Surveys. Errors in Demographic Data. Census of India- Methodology of census, concept used, improvements made and problems faced.

2. Growth and Distribution of India's Population:

(Lectures 10)

Size and growth of India's population, state wise distribution, population density, Causes of population growth, future projections, urban - rural population in India, growth of urban population, characteristics of urban population, causes of urbanization in India.

3. India's Population Structure and Characteristics:

(Lectures 8)

Sex Structure, Age structure, occupational structure, marital status – literacy- Religion in India- Qualitative aspects of India's population.

4. Fertility and Mortality in India:

(Lectures 14)

Birth rates in India- Methods of estimation. Causes of high birth rate.

Age specific fertility rate - Fertility and family size in India - Differential fertility - Differential fertility in India -Age Specific fertility rate index- Fertility in urban-rural areas- Education and fertility - Economic status and fertility -Caste and fertility- Net Reproduction rate - Some important facts about fertility in India- Factors effecting fertility.

Mortality concept, Declining Death Rate of mothers and children in India- Expectation of life at birth- Regional variations in death rate- Age specific death rate- Infant mortality-Infant mortality rate in India- Expectation of life at birth- Expectation of life in states - Death rate by cause- Steps in checking mortality rate.

5. Migration in India:

(lectures 6)

Migration from and to other countries, Internal migration, Rural-Urban migration in India, Marriage migration, Life-time Migration, Migration by Age , Reasons for Migration.

6. Population Policy, Population and Economic Development in India: (Lectures 12)

Family planning in India, Government policy to control population growth. India's population policy, 2000 – objectives, features, critical evaluations, Effects of population growth on Indian Economy. Population change and environmental impact in India.

7. Population Policy in India (lectures 6)

References

Agarwala S.N.& U.P. Sinha (1991), India's population problems, 3rd edition, Tata McGraw Hill Publishing Company Ltd., New Delhi

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B.A. (GENERAL / HONOURS) ECONOMICS

Labour Welfare and Industrial Relations - I

[Course Code: ECG105]

Credits: 04

Lectures: 60 (1 hour each)

Objectives: *To familiarize students with different aspects of labour welfare.*

1. Introduction

(lectures 12)

Concept and definition of Labour Welfare; Theories and Principles of Labour Welfare; Need for Labour Welfare in India.

2. Labour Welfare Practices

(lectures 12)

Welfare Facilities in Western and Eastern Europe and the USA; Health and Welfare measures at place of work.

3. Labour Welfare Practices in India

(lectures 12)

Sanitary and Hygienic Facilities – Rest Facilities, Feeding Facilities, Medical Facilities, Occupational and Health Services, Family Planning, Crèche, Housing, Transport Facilities, Recreational and Cultural Facilities, Educational Facilities and Cooperative and Savings Facilities.

4. Agencies for Labour Welfare

(lectures 12)

Welfare work by Central Government; Welfare work by State Governments; Welfare work by Employers; Welfare work by Workers Organizations; Welfare work by Municipalities; Welfare work by Social Service Agencies.

5. Social Security Measures

(lectures 12)

Social Insurance and Social Assistance; ILO and Social Security; Indian Social Security System.

Main text

Punekar, S.D., Deodhar, S.B. and Saraswathi Sankaran (2014). *Labour Welfare, Trade Unionism and Industrial Relations*, 14th reprint Ed. Himalaya Publishing House, New Delhi.

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B.A. (GENERAL / HONOURS) ECONOMICS

Labour Welfare and Industrial Relations - II

[Course Code: ECG106]

Credits: 04

Lectures: 60 (1 hour each)

Objectives: *To make students understand the issues of industrial relations and the machinery for the settlement of industrial disputes.*

1. Trade Unions

(lectures 12)

Concept and definition; Trade Unionism in advanced countries (UK and USA); History of Labour Movement in India; Birth of Indian Trade Union Movement.

2. Industrial Relations (lectures 12)

Basic outline: Peculiarity of industrial work, evolution and definition of Industrial Relations; Theory of Industrial Relations; Environmental or External Theories.

3. Collective Bargaining (lectures 12)

Concept, pre-requisites and elements of the system of Collective Bargaining in the Indian context; Models of Collective Bargaining in industrialized countries.

4. Industrial Relations in India (lectures 12)

Historical perspective; Government's Role; Instructional Framework; Collective Bargaining; Legal Framework; Issues in Industrial Relations; Challenges Faced; Industrial Relations in the Informal Sector.

5. Machinery for the Settlement of Industrial Disputes (lectures 12)

Methods of Resolving Industrial Disputes: Negotiation, Code of Discipline, Workers Participation in Management (concept and goals of participation) - experience of other countries; Indian experience.

Main text

Punekar, S.D., Deodhar, S.B. and Saraswathi Sankaran (2014). *Labour Welfare, Trade Unionism and Industrial Relations*, 14th reprint Ed. Himalaya Publishing House, New Delhi.

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- Mamoria C.B., Mamoria S., S.V. Gankar (2005). *Dynamics of Industrial Relations*, Himalaya Publishing House, New Delhi.
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