Rajiv Gandhi University
Department of Economics
Tentative Course Structure for Four-year UG in Economics

Course Structure for Four Years UG Degree with Honours and Research (ECONOMICS)

NCrF Credit Level	Semester	Major		Minor		Multidisciplinary Course		Ability Enhancement Course		Skill Enhancement Course		Value-Added Course		Internship/ Dissertation/ Seminar		Total Credit
		Course	Credit	Course	Credit	Course	Credit	Course	Credit	Course	Credit	Course	Credit	Course	Credit	
4.5	1st	Major 1 (ECO-CC-1110)	4	Minor 1 (ECO-MC-1110)	4	MDC 1 (ECO-MD-1110)	3	AEC 1 (ENG-AE-1110)	4	SEC 0010	3	VAC 0010	2			20
	2nd	Major 2 (ECO-CC-1210)	4	Minor 2 (ECO-MC-1210)	4	MDC 2 (ECO-MD-1210)	3	AEC 2 (HIN-AE-1210)	4	SEC 0020	3	VAC 0020	2			20
		Students exiting the Programme after securing 40 credits will be awarded UG Certificate in the relevant Discipline /Subject provided they secure 4 credits in work-based vocational courses offered during the summer term or internship / Apprenticeship in addition to 6 credits from skill-based courses earned during the first and second semester.														
5.0	3rd	Major 3 (ECO-CC-2310)	4	Minor 3 (ECO-MC-2310)	4	(ECO-MD-2310)	3			SEC 3*	3	VAC 3**	2			20
		Major 4 (ECO-CC-2320)	4													
	4th	Major 5 (ECO-CC-2410)	4	Minor 4 (ECO-MC-2410)	4											20
		Major 6 (ECO-CC-2420)	4													
		Major 7 (ECO-CC-2430)	4													
		Major 8 (ECO-CC-2440)	4													
		Students exiting the programme after securing 80 credits will be awarded UG Diploma in the relevant Discipline /Subject provided they secure additional 4 credits in skill-based vocational courses offered during the first year or second year summer term.														

5.5	5th	Major 9 (ECO-CC-3510)	4	Minor 5 (ECO-MC-3510)	4											Internship (INT-CO-0010)	2	20
		Major 10 (ECO-CC-3520)	4															
		Major 11 (ECO-CC-3530)	4															
		Major 12 (ECO-CC-3540)	2															
	6th	Major 13 (ECO-CC-3610)	4	Minor 6 (ECO-MC-3610)	4													20
		Major 14 (ECO-CC-3620)	4															
		Major 15 (ECO-CC-3630)	4															
		Major 16 (ECO-CC-3640)	4															
<td colspan="20">Students who want to undertake a 3-year UG Programme will be awarded UG Degree in the relevant Discipline /Subject upon securing 120 credits.</td>
6.0	7th	Major 17 (ECO-CC-4710)	4	Minor 7 (Research Methodology) (ECO-MC-4710)	4													20
		Major 18 (ECO-CC-4720)	4															
		Major 19 (ECO-CC-4730)	4															
		Major 20 (ECO-CC-4740)	4															
	8th	Major 21 (ECO-CC-4810)	4	Minor 8 (Research Publication Ethics) (ECO-MC-4810)	4													20
		Major 22 – elective (ECO-DE-4810)	4															

2

		Major 23 - elective (ECO-DE-4820)	4													
		Major 24 - elective (ECO-DE-4830)	4													
			94		**32**		**9**		**8**		**9**		**6**		**2**	**160**

19|06|2023
संयुक्त कुलसचिव (शैक्षणिक एवं सम्मेलन)
राजीव गांधी विश्वविद्यालय
Jt. Registrar (Acad. & Conf.)
Rajiv Gandhi University
Rono Hills, Doimukh (A.P.)

Structure of Major Course

Semester 1	Semester 2
• **ECO-CC-1110: Microeconomics-I**	• **ECO-CC-1210: Macroeconomics-I**
Semester 3 • **ECO-CC-2310: Microeconomics-II** • **ECO-CC-2320: Mathematical Economics -I**	Semester 4 • ECO-CC-2410: Money and Banking • ECO-CC-2420: International Economics-I • ECO-CC-2430: Growth and Development Economics • ECO-CC-2440: Statistics-I
Semester 5 • **ECO-CC-3510: Mathematical Economics-II** • **ECO-CC-3520: Public Economics-I** • **ECO-CC-3530: Development Economics** • **ECO-CC-3540: History of Economic Thought**	Semester 6 • ECO-CC-3610: Econometrics-I • ECO-CC-3620: Environmental Economics • ECO-CC-3630: Public Economics-II • ECO-CC-3640: Indian Economy

Semester 7
• **ECO-CC-4710: Microeconomics-III**
• **ECO-CC-4720: Macroeconomics-II**
• **ECO-CC-4730: Statistics-II**
• **ECO-CC-4740: Econometrics-II**
	Semester 8
	• ECO-CC-4810: International Economics-II
	• Elective-1
	  o ECO-DE-4810: Advance Econometrics
	  o ECO-DE-4820: Financial Economics
	  o ECO-DE-4830: Growth Economics
	• Elective-2
	  o ECO-DE-4840: Advance Mathematics
	  o ECO-DE-4850: Agricultural Economics
	  o ECO-DE-4860: Economics of Gender
	• Elective-3
	  o ECO-DE-4870: Population Economics
	  o ECO-DE-4880: Infrastructure Economics
	  o ECO-DE-4890: Regional Economics

Structure of Minor Course	
Semester 1 **Minor 1:** *ECO-MC-1110: Elementary Microeconomics*	**Semester 2** **Minor 2:** *ECO-MC-1210: Elementary Macroeconomics*
Structure of Multidisciplinary Course	
Semester 1 ECO-MD- 1110: Economic Theory-I	**Semester 2** ECO-MD-1210: Economic Theory-II
Structure of Skill Enhancement Course	
Semester 1 ECO-SE-0010: Entrepreneurship Development	**Semester 2** SEC 0020: Introduction to Data Analysis
Structure of Value-Added Course	
Semester 1 ECO-VA-0010: Computer Application	**Semester 2** ECO-VA-0020: Ecotourism

19|06|2023
संयुक्त कुलसचिव (शैक्षणिक एवं सम्मेलन)
राजीव गांधी विश्वविद्यालय
Jt. Registrar (Acad. & Conf.)
Rajiv Gandhi University
Rono Hills, Doimukh (A.P.)

Core Course (CC)

ECO-CC-1110: Microeconomics-I

Minimum number of lecture hours: 44 hours
Total Credit: 4
Internal Assessment: 20 marks
End Semester Exam: 80 marks

Objective*: This course has been designed to impart knowledge of the basic concepts and theories of microeconomics to the learners.*
Outcome:
(1) The learners will learn about the definition, nature and scope of Economics, central problem of economy
(2) The learners will also know about the concept of utility, demand and supply analysis.
(3) They will acquire knowledge about the theories of production, concepts of cost and revenue.
(4) The learners will have a better understanding of the distribution theory and factor pricing.

Module I: Introduction
Definition, Nature and Scope of Economics; what is Microeconomics? scarcity and choice; ; the question of what to produce, how to produce and how to distribute output; Types of Microeconomic Analysis: Positive and Normative, Static, Comparative Statics and Dynamics, Goal of Microeconomic Policy: Efficiency and Equity;

Module II: Demand, Supply Analysis and Consumer Behaviour
Concept of Demand and Supply: individual and market Demand &Supply, changes in supply and demand, market equilibrium and the impact of changes in demand and supply; Elasticity of Demand and Supply- Types, Measurement and Factors affecting elasticity of demand and Supply.
Concept of utility; Cardinal and ordinal measures, total utility and marginal utility, consumer equilibrium, indifference curve analysis and revealed preference theory.

Module III. Theory of Cost and Production
Short run and long run costs; various cost curves in the short run and long run and its relation; economies of scale; increasing and decreasing cost industries; envelope curve
Production Function; Laws of Production – Law of Variable ProportionsReturn to a Factor; Law of Returns to Scale; Isoquants, marginal rate of technical substitution, iso-cost line and firm's equilibrium, elasticity of substitution; expansion path.

Module IV: Theory of Distribution and factor Pricing
Marginal Productivity theory of distribution, Ricardian and modern theory of Rent, Wage determination under collective bargaining, Loanable fund theory of Interest, Risk bearing theory of profit, Innovation theory of Profit, Dynamic theory of Profit.

Recommended Readings:

1. Gregory Mankiw, N. (2015), Principles of Micro Economics, CENGAGE Learning, Australia.
2. Koutsoyiannis, A. (1975), *Modern Microeconomics*, Palgrave Macmillan, London
3. Maddala G. S. and Ellen Miller. (2004), Microeconomics Theory and Application, TATA Mc Graw Hills.
4. Perloff, J. M. (2011). Microeconomics (The Pearson Series in Economics).
5. SalvatoreDominick. (2003),*Principles of Micro Economics*, fourth edition Oxford University Press, New York.
6. Snyder Christopher and Walter Nicholson. (2012), Fundamental of Microeconomics, Eleventh Edition, CENGAGE Learning, USA
7. Tucker, I. B. (2022). Microeconomics for today. Cengage Learning.

संयुक्त कुलसचिव (शैक्षणिक एवं सम्मेलन)
राजीव गांधी विश्वविद्यालय
Jt. Registrar (Acad. & Conf.)
Rajiv Gandhi University
Rono Hills, Doimukh (A.P.)
19/06/2023

ECO-MC-1110: Elementary Microeconomics
<u>Minimum number of lecture hours: 44 hours</u>
Total Credit: 04
Internal Assessment: 20 marks
End Semester Exam: 80 marks

Objective: *This course has been designed to impart the knowledge with regard to the concepts of elementary microeconomics. It will deal with the economic problems, production possibility curve, opportunity cost, demand and supply analysis, production, cost and revenue as well as market structure.*
Outcome:
   1. *The learners will gain knowledge about the different concepts of microeconomics, fundamental problems of economy.*
   2. *The learners will alsolearn about the concept of utility, elasticity of demand and supply.*
   3. *They will also understandabout the cost and revenue of a firm, production function analysis and about firm's equilibrium.*
   4. *The learners will learn about the and the various forms of market, its features and equilibrium.*

Module I: Introduction
Definitions of economics, nature and scope of economics, micro and macroeconomics, fundamentals economic problems, production possibility curve and opportunity cost, economic problems of a developing country: low savings, low level of technology, scarcity of human and physical capital, poverty and inequality.

Module II: Consumer Behaviour
Concept of utility, marginal and total utility, law of diminishing marginal utility, equi-marginal utility and derivation of demand curve; Indifference curve, Marginal rate of substitution; derivation of demand curve; decomposition of price effect; elasticity of demand (price, income and cross)

Module III: Production Behaviour and Cost
Production function, equilibrium of a firm, total, average and marginal product of inputs,returns to a factor, Isoquants and its characteristics, Marginal rate of technical substitution,Returns to scale.
Cost Function: Short and Long-run, relationship between short-run average and marginal cost; Derivation of supply function and elasticity of supply Total, average and marginal revenue; relationship between AR and MR.

Module IV: Market Structure

Pure and Perfect competition: its features, equilibrium of a firm; imperfect competition: Features of monopoly and monopolistic competitions; discriminating monopoly; features of duopoly and oligopoly.

RECOMMENDED READINGS:

1. Gregory Mankiw, N. (2015), Principles of Micro Economics, CENGAGE Learning, Australia.
2. Koutsoyiannis, A. (1975), *Modern Microeconomics*, Palgrave Macmillan, London
3. Maddala G. S. and Ellen Miller. (2004), Microeconomics Theory and Application, TATA Mc Graw Hills.
4. Perloff, J. M. (2011). Microeconomics (The Pearson Series in Economics).
5. SalvatoreDominick. (2003),*Principles of Micro Economics*, fourth edition Oxford University Press, New York.
6. Snyder Christopher and Walter Nicholson. (2012), Fundamental of Microeconomics, Eleventh Edition, CENGAGE Learning, USA
7. Tucker, I. B. (2022). Microeconomics for today. Cengage Learning.

ECO-MD- 1110: Economic Theory-I

Objective: *This course has been designed to impart knowledge with regard to the various concepts of economics such as supply and demand; cost of production and revenue and different market structure.*
Outcome:
1. *The learners will acquire the knowledge about the basics concept of economics, definition nature and scope of economics, factor of production.*
2. *The learners will acquire the knowledge about the demand and supply analysis.*
3. *The learners will have a clear idea about production and costs.*

Module I: Introduction
Definitions of economics, nature and scope of economics, micro and macroeconomics, fundamentals economic problems, Factors of Production: Land, labour, capital and organization; Concepts of wage, rent, interest and profit.

Module II: Demand and Supply
Concept of Utility, marginal and total utility, law of diminishing marginal utility, utility maximization; demand and its determinants, law of demand, elasticity of demand (price, income and cross) law of supply and elasticity of supply.

Module III: Production Analysis
Cost of Production: fixed and variable costs, Short-run and Long-run cost, Relationship between short-run average and marginal cost; Production possibility curve and opportunity cost,
Total, average and marginal revenue; relationship between AR and MR. Law of variable proportion and returns to scale.

RECOMMENDED READINGS:
1. Ahuja H.L. (2019)*Principles o*f *Micro economics,* S. Chand Limited, Delhi
2. Gregory Mankiw, N. (2015), Principles of Micro Economics, CENGAGE Learning, Australia.
3. Koutsoyiannis, A. (1975), *Modern Microeconomics*, Palgrave Macmillan, London
4. Maddala G. S. and Ellen Miller. (2004), Microeconomics Theory and Application, TATA Mc Graw Hills.
5. Perloff, J. M. (2011). Microeconomics (The Pearson Series in Economics).
6. SalvatoreDominick. (2003),*Principles of Micro Economics*, fourth edition Oxford University Press, New York.

19/06/2023
संयुक्त कुलसचिव (शैक्षणिक एवं सम्मेलन)
राजीव गांधी विश्वविद्यालय
Jt. Registrar (Acad. & Conf.)
Rajiv Gandhi University
Rono Hills, Doimukh (A.P.)

7. Snyder Christopher and Walter Nicholson. (2012), Fundamental of Microeconomics, Eleventh Edition, CENGAGE Learning, USA
8. Tucker, I. B. (2022). Microeconomics for today. Cengage Learning.

ECO-SE-0010: Entrepreneurship Development

<u>Minimum number of lecture hours: 33 hours</u>
Total Credit: 03
Internal Assessment: 15 marks
End Semester Exam: 60 marks

Objective:This course has been designed to impart to the learners the knowledge related to theimportance of entrepreneurship. Further, it aims to enhance their understanding with regard to entrepreneurial skills and competencies which are necessary for the creation of new ventures.
Outcome:
1. *The learners will learn about the concepts of entrepreneur and entrepreneurship.*
2. *They willalso gain knowledge about the procedure forestablishingof a new enterprise, various licensing and partnership acts and about the tax laws.*
3. *Thelearners will acquire a betterunderstanding about the different institutional support and services available in India for the entrepreneurs.*

Module I: Entrepreneur and Entrepreneurship
Entrepreneur: Definition and characteristics, Entrepreneurial and managerial functions, and types of entrepreneurs; role of entrepreneurship in economic development, factors affecting entrepreneurial growth, motivation, competencies and mobility.

Module II: Establishment and Licensing
Project identification, selection and formulation; project appraisal: concept and method; Financing of enterprise; ownership structure: types and forms of ownership; licensing – meaning and objective; Income tax, and goods and services tax (GST).

Module III: Institutional Support
Institutional Finance to entrepreneurs- Industrial Finance Corporation of India, NEDFi, Industrial Development Banks of India, Small Industries Development Bank of India and MUDRA Bank; Institutional support to industries- National Small Industries Corporation Limited, Small Industries Development Corporation, Small Scale Industries Board, State Small Industries Development Corporations, Small Industries Service Institutes, District industrial centers and industrial estate; Make in India and Startup India.

RECOMMENDED READINGS:
1. Janakiram, B. and M. Rizwana (2011): *Entrepreneurship Development: Text &cases*, Excel Books publication.
2. Janakiram, B., P.V. Raveendra and V.K. Srirama (2010): Role and Challenges of Entrepreneurship Development, Excel Books publication.
3. Khanka, S. S. (2008): *Entrepreneurial Development*, S. Chand Publications, New Delhi
4. Kumar, S. A., S. C. Poornima, Mini K. Abraham, K. Jayashree (2003): *Entrepreneurship Development*, New Age International Publishers, Delhi

19|06|2023
संयुक्त कुलसचिव (शैक्षणिक एवं सम्मेलन)
राजीव गांधी विश्वविद्यालय
Jt. Registrar (Acad. & Conf.)
Rajiv Gandhi University
Rono Hills, Doimukh (A.P.)

5. Lakhanpal, Ajay (1990): *Entrepreneurial Development: An Institutional Approach*, Commonwealth Publishers.
6. Ramachandran, K. (2010): *Entrepreneurship Development: Indian Cases on Change Agents*, Tata McGraw Hill.
7. Tiwari, Sanjay and Anshuja Tiwari (2007): *Entrepreneurship Development in India*, Sarup and Sons, New Delhi.

Value Added Course (VAC)

ECO-VA-0010: Computer Application

Objective:*This course has been designed to impart to the learners the basic knowledge of computer application and use of internet.*

Outcome:
1. *The learner will acquire knowledge about the features of MS Office and creation of documents.*
2. *The learners will also learn about the internet, creating an email account, concept of cloud computing, micro-blogging and vlogging.*

Module I: Basics Computing tools
MS Word-creating a new document, size and style of front, inserting table and diagram, page margin and layout, saving a file in different formats; Excel-data entry, graphs, diagrams, calculating mean, median, mode and standard deviation; PPT-creating a new ppt, inserting table, graph, diagram, date, time, header, footer and page number, designing, inserting hyperlink, audio and video clips.

Module II: Internet, Email, Cloud Computing and Micro-Blogging
Internet; E-mail; Opening an email account; cloud computing; online form and documents sharing through different platform
Content creation and Micro Blogging and vlogging (Educational contents)

RECOMMENDED READINGS:

1. Goel, Anita. (2010)*Computer Fundamentals Publisher*. Pearson, New Delhi
2. Johnson, Steve, (2011)*Microsoft Office 2010 on Demand*. Pearson.
3. Rajaraman, V. and NiharikaAdabala. (2014), *Fundamentals of Computers*. PHI. Delhi

ECO-CC-1210: Macroeconomics-I

<u>Minimum number of lecture hours: 44 hours</u>
Total Credit: 4
Internal Assessment: 20 marks
End Semester Exam: 80 marks

Objective*: This course has been designed to impart knowledge with regard to the various concepts of national income and the theories of macroeconomics to the learners.*

Outcome*:*
1. *The learners will acquire the knowledge about the different concepts of national income and its estimation.*
2. *The learners will have a clear idea about the Classical economics and the Keynesian critique to classical economics.*
3. *The learners will be apprised as to how the Keynesian theory determine the income and employment, saving and consumption.*
4. *They will also be able to analyze the synthesis of Classical and Keynesian economics.*

Module I: National Income Accounting
Different concepts of National Income: GDP, GNP, NDP, NNP, per capita income; Personal income; Personal disposable Income; Measurement of National Income
: Product, Income, Expenditure method and value-added method, Problems of national income accounting in LDCs, National income and welfare – a debate.

Module II: Classical Economic Theory
Classical Theory: Say's law of market; classical production function, Determination of Output, wage Rate and prices
Keynesian critique of classical theory.

Module III: Keynesian Theory of Income and Employment
Theory of Effective Demand; Determination of Income and output; Underemployment Equilibrium; consumption and saving functions (APS, MPS, APC and MPC),Psychological Law of consumption; Investment Multiplier andAccelerator

Module IV: Keynesian and Classical Synthesis
Equilibrium in the Real and Monetary sectors, IS-LM Framework, Shifts in IS-LM curves; Relative effectiveness of monetary and fiscal policies.

Recommended Readings:
1. Ackley, G. (1978), Macro *Economics: Theory and Policy*, Macmillan publication.
2. Branson, William H. *Macro-Economic Theory and Policy*, New Delhi Universal BoomStall
3. Dornbush, R and S.Fischer (2018) - *Macro Economics*, 13th Editions Mc Graw Hill, New York
4. Dwivedi, D. N. *Macroeconomics*, Tata McGraw Hill Pvt. Ltd., (Latest edition).
5. Gupta, S. B. (2003) Monetary *Economics*, S.Chand & Co. Ltd. Delhi

6. Mankiw, N. Gregory (2020) *Macroeconomics,* Worth Publications, Macmillan, New York, (10th edition).
7. Mankiw, N. Gregory,(2015)*Macro Economics* (Fourth Edition), Worth Publishers.
8. Rana and Verma, (2000)*Macro-Economic Analysis*, Vishal Publications.
9. Sarkel, Jaydev, (2015)*Macro Economic Theory*, Book Syndicate Publishers, Kolkata.
10. Shapiro, Edward (1987) *Macro Economics Analysis*, Galgotia Publication, New Delhi,

ECO-MC-1210: Elementary Macroeconomics

<u>Minimum number of lecture hours: 44 hours</u>
Total Credit: 04
Internal Assessment: 20 marks
End Semester Exam: 80 marks

Objective: *This course has been designed to impart the knowledge with regard to the concepts of macroeconomics. It will deal with the national income accounting, classical and Keynesian economics, and concepts of consumption and investment.*

Outcome:
1. *The learners will gain knowledge about the different concepts of national income accounting*
2. *The learners will alsolearn about the determination of income, employment and output in classical and Keynesian system.*
3. *They will also understandabout the concepts of consumption and investment, their relationship and Keynes law of consumption.*
4. *The learners will get an idea of investment function of Keynes, concept of multiplier and accelerator.*

Module I: National Income Accounting

Nature, scope and limitations of macroeconomics; Concepts of national income: GDP, GNP, NNP, Personal Income, disposable personal income and per capita income; Estimation of national income: Final product method, value added method, Income method and expenditure method

Module II: Classical and Keynesian Economics

Classical economics: basic assumptions, says law of market, determination of income employment and output.
Keynesian economics: assumptions, effective demand, aggregate demand and aggregate supply; determination of income and output.

Module III: Consumption and Saving Function
Consumption and Savings function; Average propensity to consume (APC) and marginal propensity to consume (MPC), Average Propensity to Save (APS) and Marginal Propensity to Save (MPS),Relations between APC and MPC, Keynes' psychological law of consumption.

Module IV: Investment Function
Investment function, Keynesian theory of investment; MEI and MEC, concept of multiplier and accelerator.

RECOMMENDED READINGS:

1. Ackley, G. (1978) *Macro Economics: Theory and Policy*, Macmillan Press, New York
2. Allen, R. G. D. (1967) *Macro-economic theory. A mathematical treatment*, Macmillan Press, London
3. Branson, William H. (1979) *Macro-Economic Theory and Policy*, HarperCollins Publishers, New York
4. Dornbush, R and S.Fischer. (2005)*Macro Economics*, Mc Graw Hill, New York
5. Gupta, S. B. (2003) Monetary *Economics*, S.Chand & Co. Ltd. Delhi
6. Rana and Verma. (2018) Macro Economics,Vishal Publication, New Delhi
7. Sarkel, Jaydev. (2008) *Macro Economic Theory*, Syndicate publication, Kolkata.
8. Shapiro, Edward (2007) *Macro Economics Analysis*, 5th Edition Galgotia Publication, New Delhi,
9. Vaish, M. C. (2005)*Monetary Theory*, 16th Editions Vikas Publishing House, New Delhi.

ECO-MD- 1210: Economic Theory-II

Objective: *This course has been designed to impart knowledge with regard to the various concepts of macroeconomics, public finance and international trade*
Outcome:
1. *The learners will acquire the knowledge about the different concepts of national incomeand its estimation.*
2. *The learners will acquire the knowledge about the money and banking.*
3. *The learners will have a clear idea about public economics.*

Module I: National Income Accounting
Nature, scope and limitations of macroeconomics; Concepts of national income: GDP, GNP, NNP, personal income, disposable income and per capita income; Estimation of national income: Final product method, value added method, Income method and expenditure method;

Module II: Money and Banking
Barter and money economy; Definition and functions of money.
Commercial bank and its functions, Central bank and its functions; Inflation, causes of inflation: demand pull and cost push; effects of inflation, Different measures to control inflation.

Module III: Public Finance
Public Revenue: Tax and non-tax revenue, Government expenditure: revenue and capital expenditure, Importance of government expenditure;, fiscal and revenue deficit; government Borrowing (Concept only).

RECOMMENDED READINGS:

1. Choudhry, R.K. (2022)*Public Finance and Fiscal Policy*, Kalyani Publishers, New Delhi.
2. Dwivedi, D. N. (2019), *Macroeconomics*, TataMcGraw Hill Pvt. Ltd., New Delhi.
3. Gupta, J.R. (2007), *Public Economics in India*, Atlantic Publications, New Delhi.
4. Jha, R. (2009), *Modern Public Economics*, Routledge, London.
5. Mukharjee, Sampat (2022), Macroeconomics: A global text, Aian Humanities Press, New Delhi
6. Rana and Verma, (2018)*Macroeconomic Analysis*, Vishal Publication, New Delhi
7. Salvatore, Dominick, (2017) *International Economics: Trade and Finance 11th Edition*Weily India New Delhi.
8. Vaish, M. V and Singh Sudama. (2018), International Economics, Ninth Edition, CBS Publishers, New Delhi

19|06|2023
संयुक्त कुलसचिव (शैक्षणिक एवं सम्मेलन)
राजीव गांधी विश्वविद्यालय
Jt. Registrar (Acad. & Conf.)
Rajiv Gandhi University
Rono Hills, Doimukh (A.P.)

ECO-SE-0020: Introduction to Data Analysis

Objective: *The course introduces the learners to collection, presentation and analysis of data. It also discusses how data can be summarized and analysed for drawing statistical inferences.*

Outcome:
1. *The learners will be introduced to important data sources that are available and will be trained in the use of the statistical software.*
2. *The learners would also learn about the types of sampling design and also be able to identify the different sources of data for their research.*
3. *The learners will be able to analyse data using statistical software.*

Module I: Sources and Collection of Data

Data source – Primary and Secondary, Methods of collection of Primary data, Various types of Secondary data for empirical verification, Sources of Secondary data, Precautions in the use of Secondary data

Module II: Sample Design
Sample Design – Population Census versus sample survey, Principal steps in sample survey, Types of sampling – Simple random, Systematic and Stratified sampling, Implication of Sample Design, Steps and Characteristics of Good Sample Design, Criteria of selecting a sampling procedure; sampling problems: heterogeneity and Stratification of the universe.

Module III: Processing and Analysis of Data using Statistical software
Analysis of Data using spreadsheet and Statistical software; Creation of Graphs, Tables, Bar and Pie Diagram, Arithmetic, Mean, Median and Mode, Standard Deviation, Measures of Dispersion, Simple Regression analysis

Recommended Readings:

1. Ghosh, B N. (1987) *Scientific Methods and Social Science Research*, New Delhi.
2. Guthrie, Gerard, (2010) Basic *Research Methods: An Entry to Social Science Research*, Sage Publication, London
3. Johnston, J. (2017) Econometric *Methods*, McGraw – Hill New Delhi
4. Kothari R.C. (2008) *Research Methodology, Methods and Techniques*, New Age International Publishers, 2nd revised edition, reprint.
5. Krishnaswamy, O.R. (1993) *Methodology of Research in Social Sciences*, Himalaya Publishing House.

6. Kumar Ranjit, (2007) *Research Methodology: A Step-by-Step Guide for Beginners*, Pearson, 2nd edition, Delhi

7. Outhwaite, William & Stephen P Turner (ed.) (2007) *The Sage Handbook of Social Science Methodology*, London

8. Wilkinson and Bhandarkar, (2016) *Methodology and Techniques of Social Research*, Himalaya Publishing House.

ECO-VA-0020: Ecotourism

Objective: *The present course has been introduced to impart some basic knowledge of ecotourism and its significance for the economy and the environment to the learners, as ecotourism is fast emerging as a major segment of tourism industry.*

Outcomes:
1. *The learners will gain knowledge about the concept of ecotourism and its importance for sustainable development and for enhancing the livelihoods of local communities.*
2. *They will know about the ecotourism potentials of India and North East India, challenges of ecotourism in North East India and tourism policy of India.*

Module I: Introduction

Ecotourism: Definition and Scope, ecotourism and nature-based tourism, ecotourism products, benefits of ecotourism, challenges in developing ecotourism.
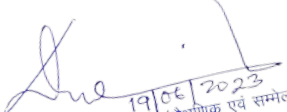
Ecotourism and sustainable development, ecotourism and local participation, employment generation, reducing poverty and inequality, foreign exchange earnings, revenue generation, infrastructure development, ecotourism and education.

Module II: Ecotourism in India and North East India

Ecotourism potentials of India and North East region of India, need for ecotourism development in North East India, Challenges of ecotourism in North East India, Measures to promote ecotourism in North East India; Tourism policy of India.

Recommended Books

1. Bhatt, Harish and B.S. Badan, *Ecotourism*, Crescent Publishing Corporation, New Delhi, 2006.
2. Buckley, R., *Ecotourism: Principles and Practices*, Cambridge University Press, Cambridge, UK, 2009.
3. Girish, Revathy, *Ecotourism of India*, Dominant Publishers and Distributors, New Delhi, 2016.
4. Lama, M., *Ecotourism in North East India*, Anshah Publishing House, New Delhi, 2014.
5. Mitra, A. et al. (2003): *Environment and Nature-Based Tourism – An Endeavour at Sustainability*, Kanishka Publishers, New Delhi.
6. Rai, Suresh C., *Ecotourism and Biodiversity Conservation*, Nova Science Publishers Inc., New Work., 2012.
7. Ryan, Chris, *Recreational Tourism-Demand and Impacts*, Viva Books Pvt. Ltd., New Delhi, 2006.
8. Sharma, Shaloo, *Indian Tourism Today-Policies and Programmes*, ABD Publishers, Jaipur, 2019.
9. Singh, Sarvjeet, *Ecotourism Development Management*, A. K. Publications, New Delhi, 2009.

23

संयुक्त कुलसचिव (शैक्षणिक एवं सम्मेलन)
राजीव गांधी विश्वविद्यालय
Jt. Registrar (Acad. & Conf.)
Rajiv Gandhi University
Rono Hills, Doimukh (A.P.)