

College with potential for Excellence

(Affiliated to University of Calicut)





M.A. DEGREE PROGRAMME IN ECONOMICS (Choice Based Credit and Semester System-VCCBCSS)

**SYLLABUS and SCHEME** 

(2018 ADMISSION ONWARDS)

VIMALA COLLEGE ENGINEERING COLLEGE P O, THRISSUR KERALA-680009 INDIA



No. 4933/GA - IV - B - SO/2012/CU (I)

Calicut University.P.O Dated: 19.12.2018

From

The Registrar

То

The Principal, Vimala College, Ramavarmapuram Road, Adiyara, Mannumkad, Ramavarmapuram, THRISSUR (District). PIN: 680009.

Sir,

- Sub:- Syllabus of M.A. Economics submitted by the Principal, Vimala College (Autonomous), Thrissur for the approval of Academic bodies of University of Calicut-information forwarding of-reg.
- Ref:- 1) Syllabus of M.A. Economics submitted by the Principal, Vimala College (Autonomous), Thrissur for Approval of Academic Bodies of University of Calicut.
  2) Minutes of the meeting of the Board of Studies in Economics PG held on 17-10-2018, Item No. 02.

With reference to the above, I am to inform you that the Board of Studies in Economics PG has considered the Syllabus of M.A. Economics submitted from your college and has resolved to approve the same with some changes/modifications as shown below.

The Board suggested two modifications. In the paper VPECICO4 Quantitative Methods for Economic Analysis - 1 at the end of Module V, it is decided to add joint probability distribution of two random variables. In paper VPEC2CO7: Public Finance and Theory and Practice: some contents of module 5 with respect to case for public setter is converted to Module I and the rest portions in Module 5 is treated as Module 6.

<u>The changes/modifications stated above has been incorporated in the Syllabus and attached</u> <u>herewith.</u>

Yours faithfully

**Ajitha P.P** Joint Registrar (For The Registrar)

#### **DEPARTMENT OF ECONOMICS**

#### VIMALA COLLEGE (AUTONOMOUS), THRISSUR

# Changes made in the existing syllabus as per the suggestions from the BoS held on $29_{\rm th}$ Jan 2018

#### **MA Economics**

- Core course III. Indian Economy: Problems and Policies (VPEC1CO3)- Resolved to add sustainable development goals in module I after the topic "Millennium development goals".
- Core course VII . Public Finance: Theory and Practice (VPEC2C07)- Resolved to add GST in module V after the topic " Reforms in direct and indirect taxes".
- Core course X. Growth and Development (VPEC3C10)- Resolved to add Paris Agreement 2015 to module V after the topic "Kyoto Protocol"
- 4. Elective Course II. Research Methodology and Computer Applications (VPEC4E02)-Resolved to add MLA, APA, ethics in research, plagiarism and how to prepare research paper after the topic "Report writing procedures" in module III. Also resolved to add "Exercises in the application of SPSS and EXCEL" in module IV after the topic "Introduction to EXCEL, SPSS".

Resolved that for all other courses, the existing MA Economics syllabus of Vimala College (autonomous) will be followed.

## MA ECONOMICS (CUCSS) 2015-16ADMISSION-SCHEME OF THE COURSE

Semester	Name of the Paper	Credit	Hours/Week	Total Weight	
				External	Interna
	CoreCourseI-VPEC1C01				
	Micro economics : Theory and Applications I	4	7	36	5
	CoreCourseII-VPEC1C02				
	Macroeconomics : Theories and	4	6	36	5
	Policies I				
T	Core Course III- VPEC1C03				
1	Indian Economy : Problems and Policies	4	6	36	5
	CoreCourseIV-VPEC1CO4				
	Quantitative Methods for Economic	4	6	36	5
	Analysis-I				
	CoreCourseV-VPEC2C05				
п	Micro economics : Theory and Applications II	4	6	36	5
	CoreCourseVI-VPEC2C06				
	Macro economics : Theories and Policies II	4	6	36	5
	CoreCourseVII-VPEC2C07				
	Public Finance: Theory and Practice	4	7	36	5
	CoreCourseVIII-VPEC2C08				
	Quantitative Methods for	4	6	36	5
	Economic Analysis-II				
	CoreCourseIX-VPEC3C09				
	International Trade	4	6	36	5
III	CoreCourseX-VPEC3C10				
	Growth and Development	4	6	36	5
	CoreCourseXI-VPEC3C11				
	Banking : Theory and Practice	4	6	36	5
	CoreCourseXII-VPEC3C12 Basic				
	Econometrics	4	7	36	5
IV	CoreCourseXIII-VPEC4C13				
	International Finance	4	6	36	5
	CoreCourseXIV-VPEC4C14				
	Financial Markets	4	6	36	5
	Electives*				
	VPEC4E01( Advanced	4	6	36	5
1		1	1		1

Econometrics) VPEC4E02 (Research	4	6	36	5
Methodology and				
Computer				
Applications)				
	4	1		
VPEC4PR Dissertation	4	1		
VPEC4V Viva Voce (a+b)				
a. Dissertation Viva(2				
Credits)	4			
b. Theory				
Viva(2credits)				
CCredits) <b>Total</b>	72			

#20 hours are allotted for seminars for each paper per semester. \*Two elective papers selected from the list of 13 elective papers appended.

## **Core Course-I**

## MA ECONOMICS (CSS) SEMESTER: I

#### VPEC1C01: MICRO ECONOMICS: THEORY AND APPLICATIONS - I Credit 4

Total Hours: 100 Lecture Hours: 80 Seminar Hours: 20

## Module I: Consumer Behaviour under Uncertainty and Risk (20 Hours)

Choice under uncertainty-Bernoulli hypothesis- St. Petersburg paradox-Neumann-Morgenstern hypothesis-Choice under risk- Probability and variability in measuring risk- Risk aversion-Economics of insurance-Risk pooling and risk spreading-Friedman Savage hypothesis-Markowitz hypothesis.

## Module II: Recent Developments in Demand Theory (20 Hours)

Bandwagon effect-Snob effect and Veblen effect- Characteristic approach of Kelvin Lancaster-Demand for durable and nondurable goods-Constant elasticity demand function-Dynamic versions of demand functions- Nerlove, Houthakker and Taylor-Linear expenditure system.

## Module III: Theory of Production and Costs (30 Hours)

Homogeneous production function- Linearly homogeneous production function-Cobb-Douglas production function and CES production function, Trans log Production function and their properties-Technological progress and production function-Economies of scale-Cost functions-Modern theories of costs-Short run costs- Long run costs-Engineering costs-Economies of scope-Learning curve.

#### Module IV: Theory of Oligopoly Markets (30 Hours)

Oligopoly- Characteristics- Collusive versus non collusive oligopoly- Non collusive models-Cournot model- Bertrand's model- Chamberlin's model-Kinked demand curve model of Sweezy- Stackelberg's model- Collusive models- Cartels- Price leadership-Mergers- Theory of Games - Basic concepts-Cooperative versus non cooperative game- Zero sum versus non- zero sum game- Prisoner's dilemma- Dominant strategies- Mixed strategies- Repeated games- Sequential games- Nash equilibrium.

## Module V: Managerial Theories and Theories of Limit Pricing (26 Hours)

Managerial theories of the firm- Baumol's model-Marris' model-Williamson's model- Theory of limit pricing- Models of Bain-Sylos-Labini-Franco Modigliani-Bhagwati and Pashigian. **References** 

- 1. A Koutsoyiannis (1979): Modern Microeconomics- 2nd Edition, Macmillan.
- 2. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons.
- 3. Robert S Pindyck and Daniel L Rubinfeld (2009): Microeconomics- 7th Edition, Pearson India.
- 4. Dominick Salvatore (2003): Microeconomics: Theory and Applications- 4th Edition, Oxford University Press.
- 5. Christopher Snyder and Walter Nicholson (2008): Fundamentals of Microeconomics-1stEdition, Cengage Learning
- 6. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1st Edition, South Western Cengage Learning.
- 7. Andrew Schotter (2008): Microeconomics: A Modern Approach- 1st Edition, South Western College.
- 8. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1st Edition, Oxford University Press.
- 9. Edgar K Browning and Jacqueline M Browning (1986): Microeconomic Theory and Applications- 2<sub>nd</sub> Edition, Kalyani Publishers.

10. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1st Edition,

Tata McGraw-Hill.

- 11. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8 th Edition, McGraw-Hill.
- 12. Watson and Getz (2004): Price Theory and its Uses- 5th Edition, AITBS Publishers and Distributors.
- 13. Hugh Gravelle and Ray Rees (2004): Microeconomics- 3rd Edition, Pearson Education
- 14. Jeffrey M Perloff (2012): Microeconomics: Theory and Applications with Calculus- Pearson India.
- 15. Mark Blaug: Economic Theory in Retrospect- Vikas Publishing

## **Core Course-II**

## VPEC1C02: MACRO ECONOMICS: THEORY AND POLICY-I Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

## Module I: Micro Foundations of Monetary Theory (18 Hours)

Classical dichotomy- Say's identity- Say's equality-Inconsistency between Say's law and the quantity theory of money- Walrasian system- Arrow-Debreu Model-Samuelson's overlapping generations' model-Money illusion-Keynes effect and Pigou effect. Module II: Demand for and Supply of Money (25 Hours)

Demand for Money: Nominal versus real cash balances- The Neoclassical theory-Keynes liquidity preference theory- Friedman's restatement of the quantity theory of money- Baumol's inventory theory- Portfolio balance theory-Liquidity theory (Radcliff- Sayer's version and Gurley and Shaw version) - Patinkin's real balance effect- Supply of money- Measures of money supply-The H theory of money supply- Money multiplier process-Behavioral and endogenous money supply models- Fisher effect.

## Module III: Theories of Consumption and Investment (20 Hours)

Consumption function: Keynes' psychological law- Absolute income hypothesis-Permanent income hypothesis – Life cycle hypothesis and Relative income hypothesis-Kuznets's consumption puzzle- Fisher's inter-temporal choice model- Investment function- Neo-classical Theory of investment- Tobin's q-ratio-Accelerator theory of investment (simple and flexible acceleration models).

## Module IV: Macroeconomic Equilibrium (20 Hours)

Macroeconomic equilibrium analysis: One sector neo-classical model-One sector Keynesian model- Goods market and IS curve- Money market and LM curve- IS-LM general equilibrium-Neo-Classical and Keynesian versions-Neo-classical synthesis-Three sector IS-LM model **Module V: Macroeconomic Policy (25 Hours)** 

Macroeconomic policies- Objectives of macroeconomic policies-Target variable and instrument

variable- Monetary Policy- Instruments- The issue of central bank autonomy-Rules versus discretion-The Taylor rule- Time inconsistency of policy- Fiscal policy- Instruments-Policy lags- Inside and outside lags- Fiscal policy and budget deficit-Crowding out effect and government budget- Effectiveness of monetary and fiscal policy using IS-LM framework-Income policy- Stabilization policy

## References

Gregory Mankiw (2008): Macro economics-WorthPublishersNY,6thed.

- 1. Richard T Froyen (2005): Macroeconomics: Theories and Policies- Pearson (LPE), Seventhed.
- 2. Rosalind Levacic and Alexander Rebman (1982): Macro economics : An Introduction to Keynesian- Neoclassical Controversies-2nded. Macmillan.
- 3. Eric Pentacost : Macro economics-An Open Economy Approach Macmillan.
- 4. Rudiger Dornbusch, Stanley Fisher and Richard Startz (2004) : Macroeconomics- Tata Mc Graw Hill,9thed.
- 5. Errol D'Souza (2008) : Macro economics-Pearson Education.
- 6. Macro economics: Theory and Policy Harcourt Publishers, NewDelhi.
- 7. Veneries and Sebold (1977): Macro economics: Models and Policies John Wiley & Sons.
- 8. Gurley J and Shaw E S (1960): Moneyina Theory of Finance Washington: Brookings Institution.
- 9. Samuelson and Nordhaus (1998) : Macroeconomics-16thed. Irwin Mc GrawHill.
- 10. Robert J Gordon: Macro economics-Eastern Economy Edition.
- 11. Edward Shapiro: Macroeconomics- Galgotia Publications, NewDelhi.
- 12. Mervyn K.Lewis and Paul D Mizen (2000) : Monetary Economics –Oxford University Press.
- 13. Mervyn K Lewis and Paul D Mizen (2000) Monetary Economics Oxford University Press
- 14. Jagdish Handa (2000) Monetary Economics Routledge

## Core Course- III VPEC1C03: INDIAN ECONOMY: PROBLEMS AND POLICIES Credit 4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

#### Module I: Growth and Structural Changes of the Indian Economy (28 Hours)

Economic growth in India-Contribution of different sectors to GDP and employment -Trends in India's national income- Trends in savings and investment since reforms –Regional disparity in growth and development-Analysis of poverty in India-Migration-Unemployment and inequality since reforms-Environmental degradation-HDI related indicators of India-Millennium Development Goals- sustainable development goals- Inclusive growth in India. Module II: Economic Planning in India (30 Hours)

Planning and economic development-Objectives of planning-Techniques of planning-Planning in a market oriented economy-Achievements of planning-Agricultural development under the plans-Industrial development under the plans-Foreign trade under the plans -Population policy and demographic changes under the plans-Parallel economy in India-Evaluation of Five Year Plans-NITI Aayog.

#### Module III : EconomicReformsSince1991(25 Hours )

Background of economic reforms-Industrial policy reforms-Trade policy reforms-Fiscal policy reforms-Financial sector reforms-Foreign investment policy reforms-Second generation economic reforms-An appraisal of India's economic reforms.

#### Module IV: Kerala Economy (25 Hours)

Structural changes of Kerala economy-Kerala model of development-Agricultural performance-Industrial backwardness-Health and education-Migration and foreign remittances-Economic impact of Gulf emigration on Kerala Economy-Decentralization-Achievements of decentralization-Poverty and unemployment in Kerala-State finances of Kerala-Fiscal crisis of Kerala-Causes and consequences.

## References

- 1. Vijay Joshi and IMD Little: India: Macro economics and Political Economy: 1964-1991 OxfordUniversityPress,NewDelhi1994.
- 2. Uma Kapila(ed): Indian Economy Since Independence- Academic Foundation, New Delhi2004.
- 3. VijayJoshiandI.M.DLittle:India'sEconomicReforms:1991-2001-OxfordUniversityPress,New Delhi,1996.
- 4. V M Dandekar and Nilakant Rath: Poverty in India-Indian School of Political Economy, Pune, 1971.
- 5. Sanjeev Kumar: Foreign Direct Investment in India-B R Publishing CompanyDelhi,1996.
- 6. Balasubramanyan: Selected Issues in Development Economics-Oxford University Press, London, 1993.7.
- 7. Jagdish Bhagwati: India in Transition- Oxford University Press, Delhi, 1994.
- 8. Dr. S Murthy: Structural Reforms of Indian Economy- Atlantic Publishers, 1995.
- 9. H W Singer, Neelambar Hatti and Rameshwar Tandon (eds): Trade Liberalisation in the 1990's- Indus Publishing Company, New Delhi, 1990.
- 10. Jagdish Bhagwati and TN Srinivasn: Foreign Trade Regimes and Economic Development: India- NBER, New York, 1986.

11. Isher Judge Ahluwalia and IMD Little (ed): India's Economic Reforms and Development: Essays for Manmohan Singh- Oxford University Press, Delhi, 1998.

12. KR Gupta (Ed): Liberalization and Globalization of Indian Economy- Atlantic Publishers, New Delhi 1995.

13. Deepak Lal: India in the World Economy- Oxford University Press, 1999.

14. Datt. R. (2001): Second Generation Economic Reforms in India- Deep and Deep Publications, New Delhi.

15. Mahendra K Premi (2009): India's Changing Population Profile- National Book Trust, New Delhi.

16. B A Prakash (Ed): Indian Economy Since 1991-Pearson Education.

17. Shanker Acharya and Rakesh Mohan (Eds) (2011): India's Economy: Performance and Challenges- Oxford University Press, New Delhi.

18. Jayaraj D and Subramanian S (2010): Poverty, Inequality and Population- Oxford University Press, New Delhi.

Mahendradev S (2010): Inclusive Growth in India- Oxford University Press, New Delhi.
 CT Kurien: Poverty, Planning and Social Transformation in India- Allied Publishers, Delhi, 1978.

21. BA Prakash (Ed): Kerala's Economic Development: Issues and Problems- Sage publishers, New Delhi, 1999.

22. ET Mathew (1997): Employment and Unemployment in Kerala- Sage publishers, New Delhi.

23. George K K (1999): Limits to Kerala Model of Development- CDS, Trivandrum.

24. Sunil Mani, Anjii Kochar, Arun M Kumar: Crouching Tiger Sacred Cows- D C Books, Kottayam.

25. K Rajan: Kerala Economy: Trends during the Post-reform Period-Serial Publishers, New Delhi.

26. CDS (1975): Poverty Unemployment and Development Policy: A Case Study of Selected Issues with Reference to Kerala- CDS, Trivandrum.

27. K.K. George and K.K. Krishnakumar (2012): Trends in Kerala State Finances-1991-92 to 2012-13: A Study in the Backdrop of Economic Reforms in India-Working Paper N0.28-

Centre for Socio-economic & Environmental Studies-Kochi (available online).

28. RBI Annual Reports.

29. Ministry of Finance: Economic Survey-Various Issues.

30. RBI: Handbook of Statistics on Indian Economy- Various Issues.

## **Core Course-IV**

## VPEC1C04: QUANTITATIVE METHODS FOR ECONOMIANALYSIS I Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

## Module I : Matrices & Determinants (24 Hours )

Types of Matrices- Operations of matrices- Determinants- Properties of determinants-Minors and cofactors- Ad joint of a matrix- Inverse of a matrix- Rank of a matrix-Solution of a system of linear equations using matrices- Crammer's rule – Characteristic equations – Characteristic Roots – Applications in Economics

## Module II: Applications of Differential Calculus (26 Hours )

Applications- Rate of change and the derivative- Derivative and slope of a curve-Rules of differentiation involving functions of different variables- Partial and total differentiation-Differentials and derivative- Differentials and point elasticity- Total derivatives- Economic applications of partial and total differentiation and differentials.

## Module III: Optimisation (20 Hours )

Unconstrained maxima and minima with single and several variables (problems up to 2 variables) and its applications-Optimization with equality constraints –Lagrange multiplier method-**Application in Economics** 

## Module IV: Integration (14 Hours )

Methods of integration- Integration by parts- Simple applications in Economics.

## Module V: Probability Theory (24 Hours )

Concept- Permutations - Combinations- Definition classical, empirical-Axiomatic approaches-

Addition and multiplication laws- Conditional probability- Bayesian probability-Baye's theorem - random variable- Probability functions- Mathematical expectation-Moments.

- 1. Taro Yamane (1973): Statistics: An Introductory Analysis- Harper & Row.
- 2. Hoel P G(1971):Introduction to Mathematical Statistics- John Wiley & Sons.
- 3. RGD Allen: Mathematical Analysis for Economics.
- 4. Simpson & Kafka: Basic Statistics.
- 5. Dowling E.T(1992):Introduction to Mathematical Economics- Schaum's Outline Series, Mc Graw Hill, NewYork.
- 6. Tulsian P.Cand Vishal Pandey: Quantitative Techniques- Pearson Education, NewDelhi.
- 7. S.P.Gupta: Statistical Methods- S Chand and Sons, NewDelhi.
- 8. Hooda R.P: Statistics for Business and Economics- Macmillan, NewDelhi.
- Alpha C Chiang: Fundamental Methods of Mathematical Economics- 2ndEd.-Inter National Student Edition, McGraw-Hill.
- 10. Sreenath Baruah : Basic Mathematics and its applications in Economics MacMillanIndia

## Core Course-V II SEMESTER VPEC2C05: MICRO ECONOMICS: THEORY AND APPLICATIONS-II Credit 4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

#### Module I: General Equilibrium and Welfare Economics (20 Hours)

Elements of general equilibrium analysis-General equilibrium of exchange- General Equilibrium of production- Welfare economics-Pareto optimality-Kaldor-Hicks compensation criterion- Social welfare function-Scitovsky criterion - Theory of second best-Arrow's impossibility theorem-Rawls theory of justice-Sen's theory of welfare.

#### Module II: Externalities and Public Goods (24 Hours)

Externalities- Negative and positive externalities in consumption and production – Externalities and inefficiency - Ways of correcting market failure-Externalities and property rights-Coase theorem-Tragedy of commons-Public goods-Characteristics-Provision of public goods-Public goods and market failure.

#### Module III-Macro Theories of Distribution (20 Hours)

Theories of Ricardo, Marx, Kalecki and Kaldor-Euler's theorem and adding up problem **Module IV-Economics of Information (24 Hours)** 

Search cost-Searching for the lowest price-Search and advertising- Asymmetric information: Market for lemons- Implications of asymmetric information - Adverse selection- Insurance markets- Market signalling- Moral hazard- Principal-agent problem-The efficiency wage theory.

#### Module V - Input Output Analysis and Linear Programming (20 Hours )

Input-output analysis-Technical coefficients- Hawkin-Simon condition-Leontief's open systemclosed system-Linear Programming-Statement of the linear programming problem-Graphical solution-Simplex method.

- 1. A Koutsoyiannis (1979): Modern Microeconomics- 2<sub>nd</sub> Edition, Macmillan.
- 2. Robert Y Awh (1976): Microeconomics: Theory and Applications- John Wiley & Sons.
- Robert S Pindyck and Daniel L Rubinfeld (2009): Microeconomics- 7th Edition, Pearson India.
- 4. Dominick Salvatore (2003): Microeconomics: Theory and Applications- 4<sup>th</sup> Edition, Oxford University Press.
- 5. Christopher Snyder and Walter Nicholson (2008): Fundamentals of Microeconomics- 1<sub>st</sub> Edition, Cengage Learning.
- 6. Thomas J Nechyba (2010): Microeconomics: An Intuitive Approach with Calculus- 1<sub>st</sub> Edition, South Western Cengage Learning.
- Andrew Schotter (2008): Microeconomics: A Modern Approach- 1<sub>st</sub> Edition, South Western College.
- 8. Andreu Mas-Colell, Michael D Whinston and Jerry R Greene (1995): Microeconomic Theory- 1<sub>st</sub> Edition, Oxford University Press.
- 9. Edgar K Browning and Jacqueline M Browning (1986): Microeconomic Theory and Applications- 2<sub>nd</sub> Edition, Kalyani Publishers.
- 10. G S Madalla and Ellen Miller (1989): Microeconomics: Theory and Applications- 1<sub>st</sub>Edition, Tata McGraw-Hill.
- 11. James H Henderson and Richard E Quandt (1980): Microeconomic Theory: A Mathematical Approach- 8th Edition, McGraw-Hill.
- 12. Watson and Getz (2004): Price Theory and its Uses- 5<sup>th</sup> Edition, AITBS Publishers and Distributors.
- 13. Hugh Gravelle and Ray Rees (2004): Microeconomics- 3<sub>rd</sub> Edition, Pearson Education.
- 14. Jeffrey M Perloff (2012): Microeconomics: Theory and Applications with Calculus- Pearson India.

## Core Course-VI VPEC2C06: MACRO ECONOMICS: THEORY AND POLICY-II Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

## Module I: Theories of Inflation and Unemployment (30 Hours )

Keynesian and monetarist approach to inflation- Structuralist theory of inflation-Phillips Curve-Short run and long run Phillips curve-The natural rate of unemployment hypothesis-Modified Phillips curve- Adaptive expectation hypothesis- Augmented Phillips curve- NAIRU-Okun's Law- Costs of Inflation- Inflation targeting- Anti-inflationary measures-Unemployment and labour market- Demand for and supply of labour- Neoclassical labour market equilibrium-Keynesian labour market- Underemployment equilibrium-Wage rigidity versus wage flexibility-Search theory- DMP (Diamond, Mortenson, Pissarides) model.

#### Module II: Theories of Business Cycles (20 Hours)

Business cycles- Monetary theory of Hawtrey- Over investment theory of Hayek-Innovation theory of Schumpeter- Models of Samuelson, Hicks and Kaldor-Keynesian theory of business cycle- The real business cycle theory- Political business cycle theory-Current global recession

#### Module III: Modern Developments in Macroeconomics (30 Hours)

A. Classical School

The new classical macroeconomics- An overview of major themes in Monetarism-Rational expectations hypothesis- Lucas' surprise supply function- The inter-temporal substitution model- Policy ineffectiveness argument- The Lucas critique- Supply-side macroeconomics-Supply shocks and stagflation- Laffer curve- Policy implications-The Dynamically Stochastic General Equilibrium model(DSGE).

B. Keynesian School

Disequilibrium Keynesians: Re-interpretation of Keynes by Clower and Leijonhufvud-The dual decision hypothesis- Rationing model of Malinvaud-Post Keynesians: Kalecki's pricing theory-Financial instability theory of Minsky- The New Keynesians: Nominal Rigidities-Real Rigidities-Small menu cost model- Implicit wage contract model- Efficiency wage theories-Insider-outsider model and hysteresis- Coordination failure- Policy implications

## Module IV: Monetary and Fiscal Policy in the Open Economy (28 Hours )

Mundell-Fleming model- The case of imperfect capital mobility-Monetary policy under fixed exchange rates- Fiscal policy under fixed exchange rates-Monetary policy under flexible exchange rates- Fiscal policy under flexible exchange rates-The case of perfect capital mobility-Policy effects under fixed exchange rates- Policy effects under flexible exchange rates.

- 1. Gregory Mankiw (2008): Macro economics-WorthPublishersNY,6<sub>th</sub>ed.
- 2. Richard T Froyen(2005):Macro economics: Theories and Policies-Pearson(LPE),Seventhed.
- Brian Snowdown and Howard Vane(2005):Modern Macro economics: Its Origin, Development and Current State-Edward Elgarpub. ,Cheltenham ,UK .Northampton, MA,USA.
- 4. Levacic, Rosalind and Rebman, Alexander (1982): Macro economics: An Introduction to Keynesian-Neo classical Controversies-2<sub>nd</sub>ed. Macmillan.
- 5. Eric Pentacost: Macroeconomics-An Open Economy Approach-Macmillan.
- Rudiger Dornbusch: Stanley Fisher and Richard Startz (2004) Macro economics-TataMc Graw Hill, 9<sub>th</sub>ed.
- 7. Hargreaves Heap S.P (1992): The New Keynesian Macroeconomics: Time, Belief and Social Independence Edward Elgar Publishing.
- 8. D'Souza, Errol(2008):Macroeconomics-Pearson Education.
- 9. Fred R Glahe, (1985): Macro economics: Theory and Policy-Harcourt Publishers, New Delhi.
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- 12. Robert J Gordon: Macroeconomics-Eastern Economy Edition.
- 13. Edward Shapiro: Macro economics-Golgotha Publications, New Delhi.
- 14. Brian Showdown, Howard Vane and Peter Wynarczyk (2001):A Modern Guide to Macro economics: An Introduction to Competing Schools of Thought-Edward Elgar

- 15. Brian Showdown, Howard Vane and Peter Wynarczyk (2001): A Modern Guide to Macroeconomics: An Introduction to Competing Schools of Thought- Edward Elgar.
- 16. Mervyn K.Lewis and Paul D Mizen (2000): Monetary Economics- Oxford University Press.
- 17. Jagdish Handa (2000): Monetary Economics- Routledge.

## **Core Course-VII**

## VPEC2C07: PUBLIC FINANCE: THEORY AND PRACTICE Credit4

Total Hours: 100 Lecture Hours: 80 Seminar Hours: 20

#### Module I: Budgeting (23 Hours)

Performance, programme and zero based budgeting-Stages involved in the preparation, presentation and execution of government budget-Budget deficit concepts and its measures-Problem of fiscal deficit-Corrective measures-FRBM Act

#### Module II: Public Revenue (23 Hours)

Theory of tax – Partial and general equilibrium analysis –Shifting and incidence of tax-Musgraves approach-Elasticity and buoyancy-Taxable capacity –Theory of optimal taxation-Distributional considerations in public finance-Compensatory finance-Functional finance-Balanced budget multiplier

## Module III: Public Expenditure and Debt (30 Hours)

Theories of public expenditure -Wagner's law-Wiseman-Peacock hypothesis-Critical limit hypothesis –Structure and growth of public expenditure of centre and states-Developmental and non developmental – Plan and non- plan expenditure - Control and management of public expenditure. Concept of subsidy-Financing social infrastructure and human development-Public debt-Sources, burden and its management-Macro economic impacts of deficits-Debt burden and inter-generational equity- Sustainability of public debt-Domar stability condition

#### Module IV: Fiscal Federalism (20 Hours)

Theory of fiscal federalism- Theory of intergovernmental transfers-Fiscal decentralization-Center state financial relations –Problems of center-state financial relations in India-Vertical and horizontal imbalance in inter governmental transfers in India.

#### Module V: Case for Public Sector And Indian public finance (30 Hours)

The role of government in economic activity-Allocation, distribution and stabilization functions-Market failure and rationale for government intervention-Concepts of private, public and merit goods - Club goods-Externalities-Tiebout hypothesis-merit goods-Pigovian tax-Property rights and Coase theorem Indian tax system: Revenue of the union, states and local bodies-Major taxes in India-Non tax revenue of center, state and local bodies- Reforms in direct and indirect taxes-**GST-** Trends in revenue, expenditure and public debt in the post reform period-Fiscal crisis--Reports of finance commissions in India-Analysis of the latest union and Kerala budgets.

## References

- 1. Robin. W. Boadway : Public Sector Economics.
- 2. Due and Fridlander : Government Finance.
- 3. P.H.Jackson and C.V. Brown: Public Sector Economics.
- 4. David Hyman (2005): Public Finance-Thomson South western.

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- 6. Richard.A. Musgrave: Theory of Public Finance.
- 7. Mankar: Public Finance in Theory and Practice.

8. Browning, J.M and Browning E.K (2004): Public Finance and the Price System- Pearson Education.

- 9. Sudipto Mundle: Public Finance: Policy Issues for India- OUP, 1997.
- 10. Divedi. D.N: Readings in Public Finance.
- 11. Duff L. (1997): Government and Markets- Orient Longman- New Delhi.
- 12. R.Goode (1986): Government Finance in Developing countries- Tata McGraw Hill.
- 13. Atkinson A and J Stiglitz (1980): Lectures in Public Economics- McGraw Hill.
- 14. Bailey S.J (2004): Public Sector Economics- Macmillan.
- 15. Ragabendara Jha (1999): Modern Public Economics- Routledge, London.
- 16. Singh S K (1986): Public Finance in Developed and Developing Countries- S. Chand and Company Ltd, New Delhi.
- 17. Rosan S Harve: Public Finance- Irwin Publications in Economics, USA.
- 18. John Cullis and Philip Jones (2010): Public Finance and Public Choice- Oxford.
- 19. S K Singh: Public Finance in Theory and Practice-S Chand Publishing.
- 20. Harvey Rosen and Ted Gayer (2012): Public Finance-Tata McGraw Hill.
- 21. Holley Ulbrich (2011): Public Finance in Theory and Practice-Routledge.
- 22. RBI Bulletin

## **Core Course-VIII**

## VPEC2C08 : QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS-II Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

#### Module I: Probability Distributions (28 Hours)

Discrete distribution- Distribution function- Properties of distribution functions-Mathematical expectation- Binomial distribution- Mean of binomial distribution-Variance of binomial distribution- Skewness and kurtosis of binomial distribution-Fitting of binomial distribution-Poisson distribution- Mean of Poisson distribution-Variance of Poisson distribution-Fitting of Poisson distribution (concept and applications only).

#### Module II: Continuous and Normal Distributions (20 Hours)

Concept of continuous distribution- Normal distribution- Properties of normal distribution-Importance of normal distribution- Area under normal distribution- Problems in normal distribution using normal distribution tables- Lognormal distribution (concept and applications only).

#### Module III: Sampling Distributions (20 Hours)

Sample- Theory of sampling distributions- Standard error-Sampling distribution of Sample mean- Chi square distribution- Student distribution- F distribution-Central limit theorem.

#### Module IV: Estimation Theory (20 Hours)

Point estimation- Properties of point estimation- Interval estimation- Confidence intervals-Test of hypothesis- Null and alternative hypothesis- Type I and Type II errors-Critical region-Level of significance-*P Value*- Power of a test- Critical value- Neymann Pearson Lemma.

#### Module V: Testing (20 Hours)

Testing Mean of a population- Testing equality of means of two populations-Test of proportion of success of a population- Testing of equality of two population proportions-t test for the population mean- t test for the equality of two population means- Paired t test- $\chi_2$  test for independence and goodness of fit-ANOVA.

- 1. Taro Yamane: Statistics: An Introduction.
- 2. Hoel P G: Introduction to Mathematical Statistics.
- 3. YPAgarwal: Basic Statistics, Statistics for Behavior Sciences.
- 4. K X Joseph: Quantitative Techniques.
- 5. Tulsian P. Cand Vishal Pandey: Quantitative Techniques-Pearson Education, NewDelhi.
- 6. S.P.Gupta: Statistical Methods-S Chand and Sons, NewDelhi.
- 7. Hooda R.P: Statistics for Business and Economics- Macmillan, NewDelhi.
- 8. Simpson & Kafka: Basic Statistics.

## Core Course-IX SEMESTER: III

## VPEC3C09: INTERNATIONAL TRADE Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

#### Module I: International Trade and Economic Development (20 Hours)

Importance of trade to development-Trade as an engine of growth-Contributions of trade to development -Terms of trade-Types-Terms of trade and economic development.

#### Module II: Developments in Trade Theories (28 Hours)

Offer Curves-Reciprocal demand theory-Opportunity cost analysis-Factor intensity Factor abundance- Heckscher- Ohlin Theory- Leontief Paradox- Factor intensity reversal-Factor Price Equalization Theorem- Stopler Samuelson theorem- Metzler Paradox-Economies of scale and international trade- Imperfect competition and international trade-Product differentiation and international trade- Technological gap and product cycle models-Transportation cost and international trade.

#### Module III: Economic Growth and International Trade (20 Hours)

Growth of labour and capital- Rybcyznski theorem-Technical progress (neutral ,labour saving and capital saving)- The effect of growth on trade- Immiserising growth-Dutch disease-Prebisch-Singer Thesis-Myrdal's views-Two gap analysis-Foreign trade multiplier.

#### Module IV: International Trade Policies (20 Hours)

Import substitution versus export orientation-Export instability and economic development-Trade restrictions- Tariffs-Partial and general equilibrium analysis-Optimum tariff -Effective rate of protection-Non tariff barriers and new protectionism-Import quotas-Effects of an import quota-Comparison of quota and tariff-International cartels-Dumping and anti dumping duties-Exchange control-Export subsidies - Countervailing tariff-Voluntary export restraints-Technical standards-Administrative and other regulations-Strategic trade policy.

#### **Module V: Economic Integration (20 Hours)**

Economic Integration - Theories of customs union-Trade creating customs union-Trade diverting customs union-Static welfare effects of customs union-Dynamic benefits from customs

union –European union -NAFTA-WTO-South Asian Association of Regional Co-operation (SAARC)-Association of South East Asian Nations (ASEAN).

- Dominick Salvatore: International Economics-11<sup>th</sup> Edition John Wiley & Sons (2014).Cengage Learning.
- 2. Giancarlo Gandolfo : International Trade-SpingerInternationalEdition-2006.
- 3. Kindleberger, C.P: International Economics- R.D. Irwin, Homewood.
- 4. Bhagwati, J.N(Ed): International Trade: Selected Readings- MIT Press, 1987.
- 5. Robert J Carbaugh (2011): Global Economics- Cengage Learning.
- 6. Giancarlo Gandolfo: International Trade- Spinger International Edition- 2006.
- 7. Dennis R Appleyard and Alfred J Field: International Economics- McGraw Hill.
- 8. Appleyard and Field: International Trade: Theory and Policy.
- 9. Richard .E. Caves and Harry G. Johnson: Readings in International Economics.
- 10. Corden .W.M: Recent Developments in the Theory of International Trade- Princeton University Press.
- 11. Thomas A. Pugel: International Economics-McGraw Hill.
- 12. James C Ingram and Robert M Dunn: International Economics-John Wiley and Sons.
- 13. Richard Caves, Jeffrey Frankel and Ronald Jones: World Trade and Payments-Pearson Education.
- 14. Theo Eicher, John Mutti and Michelle Turnovsky (2009): International Economics-Routledge.

## Core Course-X VPEC3C10: GROWTH AND DEVELOPMENT

## Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

## Module I: Concept and Measurement of Economic Growth and Development (24 Hours)

Concepts of growth and development-Indicators of economic development-National income-Per capita income-PQLI-Human development index-Gender related development index-Gender empowerment index- Human poverty index and deprivation index - Inequality in income distribution-Kuznets inverted U hypothesis-Lorenz Curve and Gini-coefficient-Development gap-Development as freedom-Perpetuation of under development-Structural view of under development-Vicious circle of poverty.

## Module II: Grand Theories of Economic Growth (20 Hours)

Theories of Adam Smith –David Ricardo- Thomas Malthus-Karl Marx and Joseph Schumpeter-Comparison of the theories of economic growth-Ricardo and Marx-Schumpeter and Marx-Schumpeter and Ricardo-Marx and Schumpeter.

## Module III Models of Economic Growth (24 Hours)

Harrod- Domar growth model-Knife-edge equilibrium-Neo Classical model of Solow-Growth models of Joan Robinson, Meade and Kaldor-Convergence hypothesis-Extensions of simple growth model-Vintage model-Solow-Phelps model-Dependency theory of development-Arguments against the neo-liberal propositions-Institutions and economic growth-Endogenous growth theory.-Plan Models in India

## Module IV: Partial Theories of Economic Growth and Development (20 Hours)

Critical minimum effort thesis- Balanced vs. unbalanced growth-Surplus labour and Lewis's theory- Fei-Ranis model-Theory of big push-Concept of dualism- Technological, social, geographical and financial-Myrdal-Backwash and spread effect-Circular and cumulative causation-Centre-periphery thesis- Todaro model.

## Module V: Environment and Development (20 Hours)

The limits to growth-The techno centre approach- Brudtland commission approach to suitable development-Sustainable development-International environmental issues(Trade and

environment-Rio declaration-Kyoto Protocol- **Paris Agreement 2015**)-Climate-economy interaction-Martin Weitzman's Dismal Theorem.

- 1. Thirlwal, AP (2003): Growth and Development: With Special Reference to Developing Economies- Palgrave Macmillan, Seventh Edn.
- 2. B.H. Dholakia, R.H. Dholakia: Theory of Economic Growth and Technical Progress: An Introduction –Mac millan 1998.
- 3. Michael.P.Todaro: Economic Development in the Third World- Orient Longman.
- 4. Debraj Ray (2003): Development Economics- Oxford India Paperbacks, OUP.
- **5.** Rune Skarstein (1997): Development Theory: A Guide to Some Unfashionable Perspectives-OUP.
- 6. Ahulwalia and IMD Little: India's Economic Reforms: Essays for Dr Manmohan Singh.
- 7. Benjamin Higgins (1976): Principles of Economic Development- Universal Book Stall, New Delhi.
- 8. R.T.Gill: Economic Development: Past and Present- Prentice Hall of India Pvt.Ltd, New Delhi.
- 9. Meir.G M and Riuch.J.E (2000): Leading Issues in Economic Development- Oxford.
- 10. Everette Hagen (1975): The Economics of Development.
- 11. Ghatak, S (2003): An Introduction to Development Economics- Routledge (4th edn).
- 12. Irma Adelman (1961); Theories of Economic Growth and Development- Stanford University Press.
- 13. Todaro and Smith, S.C: Economic Development- Pearson.
- 14. Amartya Sen (1970): Growth Economics: Selected Readings- Penguin Books.
- 15. Hywel Jones (1976): Introduction to Modern Theories of Economic Growth- McGraw-Hill.
- 16. Charles P Kindleberger (1958): Economic Development- Tata McGraw-Hill, New York

## Core Course-XI VPEC3C11: BANKING: THEORY AND PRACTICE Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

## Module I- Central Banking (20 Hours)

Structure and functions of central banks-Federal Reserve System-Bank of England-European Central Bank- Reserve Bank of India-Monetary policy-Objectives and instruments-Liquidity management - Autonomy of the RBI – Monetary sector reforms in India since 1991- monetary and credit policy of RBI –Impact of RBI's monetary policy on economic growth and inflation

#### Module II- Specialized Financial and Investment Institutions (20 Hours)

Development financial institutions (IFCI, IDBI, IIBI, SIDBI) Specialized financial institutions (EXIM Bank-National Housing Bank – NABARD, MUDRA bank) Specialized investment institutions (Pension funds-Hedge funds-Mutual funds-UTI)-Non Banking Financial Companies-Investment banks-Merchant banks. ICICI, Provident Fund

#### Module III- Banking Sector Reforms in India Since 1991 (20 Hours)

Context, need and objectives-Implementations of the Narsimham Committee recommendations-Priority sector lending-Asset classification-Non-performing assets-Capital adequacy norms-Regulation of the banking sector-Board for Financial Supervision-Credit Information Bureau of India Limited (CIBIL)-Banking Ombudsman.

#### **Module IV- International Banking (20 Hours)**

International banking-Reasons for the growth of international banking-Off shore banking-Multinational banking -Bank for International Settlements (BIS) –World Bank-Asian Development Bank-New Development Bank (BRICS bank).

#### Module V- Commercial and Cooperative Banks (28 Hours)

Structure of commercial banks-Public sector banks-Private sector banks-New generation banks-Foreign banks-Functions of commercial banks-Commercial banks and credit creation-Branch expansion programme and policy-Deposit mobilization and sectoral allocation of bank credits-Priority sector lending-Social banking-Lead bank scheme-Cooperative banks-Central cooperative banks-State cooperative banks- Land development banks-Regional rural banks. Financial inclusion initiatives.

## Seminars- Different Committees and Basel Norms in the Banking Sector Reforms

- 1. MH de Kock: Central Banking-Universal Book Stall, New Delhi.
- 2. Meir Kohn (1996): Financial Institutions and Markets-Tata Mc Graw Hill.
- 3. Roger Le Roy Miller and David Van Hoose(1993):ModernMoney and Banking-Mc Graw-Hill International.
- 4. Jawed Akhtar and Shabbir Alam: Banking System in India: Reforms and Performance Evaluation-NewCenturyPublications,NewDelhi.
- 5. Y.V. Reddy: Monetary and Financial Sector Reforms in India- UBSPD, New Delhi.
- 6. Suraj.B. Gupta: Monetary Planning for India.
- 7. K. Rao: Management of Commercial Banks.
- 8. Harendra Badhav (ed): Challenges to Indian Banking: Competition, Globalisation and Financial Markets- Mac millan.
- 9. N.S. Kher: Non-Perfoming Advances in Banks, Skylark, New Delhi.
- 10. Hansen and Kathuria (ed.) A Financial Sector for the 21st Century OUP.
- 11. Muraleedharan (2009) Modern Banking: Theory and Practice- PHI Learning Private Limited.
- 12. Shekhar and Shekhar: Banking Theory and Practice-Vikas Publishing House Limited.
- 13. Bharati V Pathak (2011): The Indian Financial System- Pearson Education.
- 14. RBI: Report on Trend and Progress of Banking in India.
- 15. Report of the Committee (Narsimham) on the Financial System Nov., 1991.
- 16. Raghuram Rajan Committee Report on Financial Sector Reforms- Planning Commission.

## **Core Course-XII**

## VPEC3C12: BASIC ECONOMETRICS Credit4

Total Hours: 100 Lecture Hours: 80 Seminar Hours: 20

#### **Module I: Nature and Scope of Econometrics**

Econometrics- Economic theory and mathematical economics-Methodology of econometrics-Specification-evaluation- Uses of econometrics.

#### **Module II: Regression Models**

The concept of PRF- Significance of stochastic error term- The SRF-Problem of estimation-Method of ordinary least squares- Assumptions underlying the method of least squares-Properties of estimators- Gauss Markov theorem-Coefficient of determination  $,r_2$ -Normality assumption- Hypothesis testing- t and F test procedures - Prediction- Regression through the origin- Functional forms of regression models, log-log, log-lin, lin- log and reciprocal models -The three variable model- OLS estimation of partial regression coefficients-Multiple coefficient of determination  $R_2$  and adjusted  $R_2$ - Hypothesis testing-Testing the overall significance of the regression model –F test-Testing the equality of two regression coefficients-Restricted least squares- General k variable regression model-Matrix approach to estimation and derivation of the properties of OLS estimators- Exercises on Estimation-Reporting, interpretation and evaluation.

#### **Module III: Econometric Problems**

Multicollinearity- Nature, consequences, detection and remedial measures-Autocorrelation-Nature, consequences, detection, and remedial measures- Heteroskedasticity-Nature, consequences, detection and remedial measures.

#### **Module IV: Lagged Models**

Auto regressive and distributed-lag models-Role of lag in economics-The Koyck approach-The adaptive expectations model-Stock adjustment model-Estimation of auto regressive models-The method of instrumental variable (IV) –Durbin test-Almon approach to distributed lag models.

## **Module V: Simultaneous Equation Models**

Introduction to simultaneous equation system – Identification problem –Rules of identification –Rank order conditions-Zero restriction in the non stochastic case-Recursive system-Maximum likelihood estimation-Naïve, limited information, full information approaches-Indirect least

Squares-Two stage least squares and K class estimators-Errors in variable-Instrumental variables-Three stage least squares-forecasting and policy analysis.

- 1. Damodar N Gujarati and Dawn C Porter(2009): Basic Econometrics, Fifth edition, McGraw Hill International Edition.
- 2. James H Stock and Mark W Watson (2008): Introduction to Econometrics, Pearson, Addison Wesley.
- 3. Christopher Dougherty (2007): Introduction to Econometrics, Third edition, Oxford University Press.
- 4. G S Maddala (2002): Introduction to Econometrics, Third Edition, John Wiley and Sons.
- 5. Robert S Pyndick and Daniel L Rubinfeld (1998): Econometric Models and Economic Forecasts- Fourth Edition, Mc Graw Hill international Edition.
- 6. Jeffrey M Wooldridge (2006): Introductory Econometrics: A Modern Approach, Third Edition, Thomson South Western.
- 7. Chandan Mukherjee, Howard White and Marc Wuyts (1998): Econometric and Data Analysis for Developing Countries- First Edition, Routledge.
- 8. Johnston J: Econometric Methods- McGraw Hill.
- 9. AH Studenmund: Using Econometrics: A Practical Guide- Fifth Edition, Pearson Education

## Core Course-XIII IV SEMESTER VPEC4C13: INTERNATIONAL FINANCE Credit4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

#### Module I: Balance of Payments (24 Hours)

Balance of payments – Components –Equilibrium and disequilibrium in BOP-Methods of correcting BOP deficit – Adjustment mechanisms -Automatic, price and income adjustments-Elasticity approach-Marshall-Lerner condition-Absorption approach-Monetary approach-J curve effect-Currency convertibility-Current and capital account convertibility-The Indian experience- FEMA.

## Module II : Exchange Rate and Theories of Exchange Rate (24 Hours)

Exchange rate-Nominal, Real, Effective, NEER, REER-Exchange rate systems-Relative merits and defects of fixed and flexible exchange rates-Hybrid exchange rates- Exchange rate in India-Purchasing power parity theory-Monetary approach-Asset market (portfolio balance) model-Exchange rate overshooting.

## Module III: Foreign Exchange Market (30 Hours)

Foreign exchange market-Functions-Participants-Stability of foreign exchange markets-Spot and forward market-Currency futures and options-Swap market-Foreign exchange risk-Hedging-Speculation-Stabilizing and de-stabilizing –Currency arbitrage-Policy adjustments-Expenditure changing and expenditure switching policies-Internal and external balance under alternative exchange rate regimes-Assignment problem-Swan diagram-Mundell-Fleming model-The policy mix under fixed and flexible exchange rates.

#### Module IV: International Capital Flows (24 Hours)

Portfolio investment and direct investments –Motives for capital flows- Effect of international capital flows- Multinational corporations-Advantages and disadvantages of MNCs-Foreign investment in India since1991.

#### Module V: International Monetary System (24 Hours)

International monetary system- The gold standard and its breakdown- Bretton Woods system and its breakdown- Present international monetary system- European monetary union- Euro-Optimum currency areas- Currency boards-Dollarization.

- 1. Dominick Salvatore: International Economics-JohnWileyandSons.
- 2. Keith Pilbeam: International Finance-Macmillan.
- 3. BoSoderstenandGeoffreyReed:International Economics-Macmillan ,London.
- 4. Paul R Krugman and Maurice Obstfeld:International Economics:TheoryandPractice-Pearson Education, Singapore.
- 5. Thomas A .Pugel: International Economics-TMH.
- 6. Michael Melvin : International Money and Finance-Pearson Education.
- 7. James CIngram and Robert M Dunn:International Economics-John Wiley and Sons.
- 8. Keith Pilbeam: Finance and Financial Markets-Palgrave.
- 9. Dennis R Appleyard and Alfred J Field:International Economics-McGraw Hill.
- 10. Robert J Carbaugh(2011):Global Economics-Cengage Learning.
- 11.Giancarlo Gandolfo : International Finance and Open Economy Macroeconomics-Springer.
- 12. Vanden Berg:International Finance and Open Economy Macro economics-World Scientific.
- 13. Lawrence Copel and : Exchange Rates and International Finance-Pearson Education.
- 14. M Levi : International Finance-McGraw Hill.
- 15. Richard Caves, Jeffrey Frankel and Ronald Jones:World Trade and Payments-Pearson Education.
- 17. Sumati Varma : Currency Convertibility:Indian and Global Experiences-NewCentury.
- 18. Theo Eicher , John Mutti and Michelle Turnovsky (2009): International Economics-Routledge.

**Core Course-XIV** 

## VPEC4C14: FINANCIAL MARKETS Credit 4

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

## Module I: Financial Markets (20 Hours)

Functions of financial markets-Types of financial markets-Participants in financial markets-Role of financial intermediaries – Financial innovation-Financial inclusion and inclusive growth

#### Module II: Money Market (20 Hours)

Functions of money market-Instruments of the money market-Call money-Bill of exchange-Commercial bills-Treasury bills-Commercial paper-Interbank market-Federal funds-Negotiable certificate of deposits-Banker's acceptance-Repurchase agreements-Money market mutual funds-Features of a developed money market-Structure of Indian money market- Money market reforms in India since 1991.

#### Module III: Capital Market (24 Hours)

Functions of capital market-Primary market-Instruments of the primary market-Secondary market –Functions –Instruments of the secondary market-Demutualization of stock exchanges-Trading mechanism of the stock exchanges-Liquidity products (margin trading, short sales, securities lending and borrowing)- Foreign institutional investment-Participatory notes(P-notes)-Insider trading-Investor protection-Credit rating-Capital market institutions-Depositories-Discount and Finance House of India-Stock Holding Corporation of India-Securities Trading Corporation of India-SEBI –Functions and powers-Capital market reforms in India since 1991.

#### **Module-IV Derivatives Market (24 Hours)**

Types of derivatives-Participants in the derivative markets-Uses of derivatives-Options-Types of options-Uses of options-Platforms for options trade-Trading mechanics-Option premium-Profits and losses with options-Stock options and stock index options in India-Futures-Types of futures(stock index futures-foreign currency futures-interest rate futures-commodity futures)-Uses of futures-Market mechanics-Market participants-The clearing process-Stock futures and stock index futures in India-Difference between options and futures-Swaps-Interest rate swaps-Foreign currency swaps.

## Module V: Global Financial Markets (20 Hours)

Instruments-American Depository Receipts (ADR)-Global Depository Receipts (GDR)-Foreign Currency Convertible Bonds (FCCB) – External commercial borrowings-International bonds-Euro bonds -Euro notes-Euro commercial papers-Euro dollars-Euro currency market-Reasons for the growth-Features-Effects of the euro currency market.

- 1. Anthony Santomero and David Babbel (2001): Financial Markets, Instruments and Institutions-McGraw Hill Higher Education.
- 2. Keith Pilbeam (1998): Finance and Financial Markets-Palgrave.
- 3. Anthony Saunders and Marcia Mill on Cornett (2007): Financial Markets and Institutions : A Modern Perspective-TATA McGraw Hill.
- 4. Fabozzi, Modigliani, Jones and Ferri (2002): Foundations of Financial Markets and Institutions-Pearson Education.
- 5. Jeff Madura (2008): Financial Markets and Institutions-Cengage Learning.
- 6. Stephen Valdez and Julian Wood (2003): An Introduction to Global Financial Markets-Palgrave Macmillan.
- 7. Rober t A Strong (2002): Derivatives : An Introduction-Thomson South-Western.
- 8. John C Hull (1995): Introduction to Futures and Options Markets-Prentice Hall India.
- 9. Sunil K Parameswaran (2003): Futures Markets-Tata McGraw Hill.
- 10. Michael Durbin (2006): All About Derivatives-Tata McGraw Hill.
- 11. Giancarlo Gandolfo:International Finance and Open Economy Macro economics-Springer.
- 12. Rajesh Chakrabarti and SankarDe(2010):Capital Markets in India-Response Sage New Delhi.
- 13. S Gurusamy(2009): Financial Markets and Institutions-McGraw Hill Higher Education.
- 14. H R Machiraju(2010):Indian Financial System-Vikas Publishing House New Delhi.
- 15. Y.V.Reddy: Monetary and Financial Sector Reforms in India-UBSPD, New Delhi.
- 16. Bharati V Pathak(2011): The Indian Financial System-Pearson Education.
- 17. National Stock Exchange of India (NSE): Indian Securities Market : A Review-Various Issues.

## Elective Course I SEMESTER IV

#### **VPEC4E01- ADVANCED ECONOMETRICS**

## (Credit4)

Total Hours: 90 Lecture Hours: 70 Seminar Hours:20

## Module I: Dummy Regression Models (20 Hours)

ANOVA models- ANCOVA models- Dummy variable trap-Dummy variables and seasonal analysis-Piecewise linear regression. The linear Probability Model (LPM )- The logit Model-The Probit Model-Tobit Model.

#### Module II: Time Series Econometrics (24 Hours)

Stochastic processes, stationary versus non stationary stochastic processes-Unit roots-Trend stationary versus difference stationary stochastic processes- Spurious regression-Testing for unit roots-Dickey Fuller and Augmented Dickey Fuller tests-Co integration and error correction models- Engel Granger Test, Random Walk Model, Error Correction Mechanism.

#### Module III: Modelling Stochastic Processes (24 Hours)

The Box Jenkins methodology- AR, MA, ARMA and ARIMA models-Estimation and forecasting- Vector auto regression(VAR)- Measuring volatility-The ARCH and GARCH models.

#### Module IV: Panel Data Regression Models (20 Hours)

Fixed Effects Regression Model- The Random Effects Model, Random Coefficient Model

#### Module V: Econometric Application in India (20 Hours)

Agriculture- Industry- Monetary Economics- Macro Economic modeling- International Economics - Limitations of Econometric Approach.

- 1. Damodar N Gujarati and Dawn C Porter (2009):Basic Econometrics-Fifth Edition, McGraw Hill International Edition.
- 2. James H Stock and Mark W Watson (2008): Introduction to Econometrics-Pearson Addison Wesley.

- 3. Christopher Dougherty (2007): Introduction to Econometrics, Third Edition, Oxford University Press
- 4. Robert S Pyndick and Daniel L Rubinfeld(1998): Econometric Models and Economic Forecasts- Fourth Edition, McGraw Hill International Edition.
- 5. Jeffrey M Wooldridge(2006)-Introductory Econometrics: A Modern Approach-Third Edition, Thomson South Western
- 6. Chandan Mukherjee, Howard White and Marc Wuyts(1998): Econometric and Data Analysis for Developing Countries-First Edition ,Routledge
- 7. Gary Koop (2005): Analysis of Economic Data-Second Edition, John Wiley and Sons 8: Kerry Patterson (2000): An Introduction to Applied Econometrics: A Time Series
- 8. Approach- First Edition Palgrave.
- 9. Jack Johnston and John Dinardo (1998): Econometric Methods-Fourth Edition, The McGraw Hill Companies.
- William H Greene (2003):Econometric Analysis Fifth Edition, Pearson Education WalterEnders(2004):Applied Econometric Time Series-Second Edition, Wiley India Edition.
- 11. Richard Harris and Robert Sollis(2006): Applied Time Series Modelling and Forecasting-First Edition, Wiley Student Edition.

## Elective Course II IVSEMESTER

## VPEC4E02: RESEARCH METHODOLOGY AND COMPUTER APPLICATIONS (Credit 4)

Total Hours: 90 Lecture Hours: 70 Seminar Hours: 20

#### Module I: Fundamentals of Research Methodology (26 Hours)

Meaning of research- The relation between theory and research- Scientific and social research-Pure and applied research- Special features of social research- Different approaches in social research.

#### Module II: Formulation of Research Problem (26Hours)

Formulation of null and alternative hypothesis- Research design and methods-

Exploratory, diagnostic and experimental studies- Deductive and inductive method- Static and dynamic method- Historical and dialectical method- Case study method-Interdisciplinary research.

#### Module III: Data Collection and Data Analysis (30Hours)

Data Collection Methods-Primary Data, Secondary Data - Random, stratified, multistage, systematic, cluster, quota and judgment sampling- Formulation of Questionnaire, Qualities of a Good Questionnaire, Types of Questionnaire, Piloting the Questionnaire, Steps in Preparing Questionnaire-Interview Schedule-Data Compilation, Coding- processing of data- Data analysis techniques- Drawing inferences from analysis- Report writing procedures- MLA, APA, ethics in research, plagiarism and how to prepare research paper -Types of reports-Methods of footnotes and referencing

## Module IV: Computer Applications (26Hours)

Estimation of mean, median and mode-Standard deviation and coefficient of variation-Presentation of graphs- Line, sub divided, multiple, pie graphs- Estimation of growth rates-Estimation of trend equations- Estimation of regression equations- Introduction to EXCEL, SPSS- **Exercises in the application of SPSS and EXCEL**.

#### **References:**

1. William J Goode and Paul K Hatt (1981): Methods in Social Research- McGraw- Hill.

- 2. Pauline V Young: Scientific Social Surveys and Research- Prentice Hall India Pvt Ltd.
- 3. C R Kothari (2004) Research Methodology: Methods and Techniques- New Age International.
- 4. W Lawrence Neuman (2006): Social Research Methods: Quantitative and Qualitative Approaches- Pearson.
- 5. Wilkinson and Bhandarkar (2002) Methodology and Techniques of Social Research-Himalaya Publishing House.
- 6. Marc Blaug: The Methodology of Economics, or How Economics Explain- Cambridge University Press.
- 7. Wilkinson and Bhadarkar: Research Methodology.
- 8. Modern Language (2009) The MLA Handbook for Writers of Association of America, Research Papers.
- 9. Sarma KVS (2001): Statistics Made Simple: Do it Yourself on PC- Prentice Hall India Pvt. Ltd, New Delhi