COURSE STRUCTURE FOR 4 YEAR UG HONOURS IN ECONOMICS WITHOUT RESEARCH

Semester	Paper code	Course code	Name of the paper	Credits
7th semester	C -16	EC7.CC16	Advanced MicroEconomics	4
	C -17	EC7.CC17	Political Economy II	4
	C-18	EC7.CC18	Advanced Mathematical Economics	4
	C- 19	EC7.CC19	Research Methodology	4
Total				16
8th Semester	C-20	EC8.CC20	Advanced Statistical Methods	4
	C-21	EC8.CC21	Advanced Macro Economics	4
	C-22	EC8.CC22	Development Economics II	4
	C-23	EC8.CC23	Demography	4
Total				16

COURSE STRUCTURE FOR 4 YEARS UG HONOURS IN ECONOMICS WITH RESEARCH

Semester	Paper code	Course code	Name of the paper	Credits
7th semester	C -16	EC7.CC16	Advanced Micro Economics	4
	C -17	EC7.CC17	Political Economy II	4
	C-18	EC7.CC18	Advanced Mathematical Economics	4
	C- 19	EC7.CC19	Research Methodology	4
Total				16
8th Semester	C-20	EC8.CC20	Advanced Statistical Methods	4
	C-24	EC8.CC24	Research Project	12
Total				16

ADVANCED MICROECONOMICS

Paper Code: C - 16   **Course Code: EC7.CC16**

Credits: 4

Unit I: Pricing Theories

Oligopoly: Stackelberg, Cartel and Merger, Price leaderships and Basing point price system models. Input market: Monopsony and Discriminating Monopsony, Bilateral Monopoly.

Unit II: Managerial and Behavioural Theories.

Critical evaluation of managerial analysis, Baumols sales revenue maximization model. Williamsons model of managerial discretion, Marris model of managerial enterprises, Cyert and March behavioural model of the firm. Hall and Hitch full cost pricing principle, Limit Pricing Principle: Contribution of Bain. Sylos- Labini and Modigliani.

Unit III: Theories of Distribution.

Marginal Productivity theory, Product Exhaustion Theory-Euler and Clark-Wicksteed-Walrus. Macro Theories of Distribution: Ricardo, Marx, Kalecki, Kaldor and Pasinetti

Unit IV: Welfare Economics

Pigovian welfare economics, Pareto optimal conditions, Value judgment, Samuelson - Bergson social Welfare function, Kaldor and Hicks compensation principle, Theory of second best, Arrow impossibility theorem, Rawl's Theory of Social Justice.

Unit V: General Equilibrium.

Partial and General equilibrium, Features of Market Equilibrium: Existence, Stability (Marshall and Walrasian conditions), Uniqueness, General equilibrium under uncertainty, Cob-Web models, Walras excess demand approach, Input-Output and Linear Programming approach to general equilibrium.

POLITICAL ECONOMY -II

Paper Code: C- 17   **Course code: EC7.CC17**
                                                                           Credit: 4

Unit – I: Social Change in Historical Perspective

Analyzing Social Change in Historical Perspective, The method of historical materialism; the transition from feudalism to capitalism; capitalism as a historical process – alternative perspectives.

Unit – II: Perspectives of Capitalism

Capitalism as an Evolving Economic System- Basic features, accumulation and crisis; the modern corporation; monopoly capitalism— alternative perspectives.

Unit – III: The State and the Economy

The State in Capitalism, the state and the economy – contestation and mutual interdependence; the state as an arena of conflict; imperialism – the basic foundations.

Unit – IV: Role of Finance

The Changing Role of Finance, the changing role of finance in capital accumulation and corporate structure; finance and globalisation - financialisation, financial liberalisation and financial crisis.

Unit – V: Global Economic Instability and Crisis

The 2008 global economic crisis – Prelude, Immediate and Long-term structure and causes

Readings List:

J. Gurley, "The Materialist Conception of History", Ch.2.1 in R. Edwards, M. Reich and T. Weisskopf (ed.), The Capitalist System, 2nd edition, 1978.
O. Lange, Political Economy, vol. 1, 1963, Chapters 1 and 2.
E.K. Hunt, History of Economic Thought, M.E. Sharpe, Indian edn, Shilpi Publications, 2004.
Irfan Habib, 1995, "Capitalism in History", Social Scientist, Vol. 23: 15-31.
R.L. Heilbroner, "Capitalism", in The New Palgrave Dictionary of Modern Economics, Macmillan, 1987. Also reprinted as Chapter 2 in Behind the Veil of Economics by R.L. Heilbroner, W.W. Norton, 1988.
P. Sweezy, The Theory of Capitalist Development, Monthly Review Press, 1942.

ADVANCED MATHEMATICAL ECONOMICS

Paper Code: C-18   **Course Code: EC7.CC18**
Credit: 4.

Unit I: Financial Mathematics   8 Lectures

Financial Mathematics: Interest rate (simple and compound). Net Present Value. Loan Repayment. Annuities and Sinking Fund. Relationship between Interest Rate and Price of Bonds.

Unit II: Simultaneous Equations

Goods and Labour Market equilibrium. Price control and government intervention in various markets. Market equilibrium for substitute and complementary goods. Taxes, subsidies and their distribution. National income model – IS-LM.
Labour

Unit III: Differentiation and its Application.

MR, AR, TR, MC, AC, TC. Elasticity of demand; point and Constant. Tax Yield. Production function (Law of diminishing returns). Returns to Scale. Profit Maximization. Comparative static effects of taxes. Unconstrained optimization with two variables.

Unit IV: Matrix and Difference equation.

Application of matrix arithmetic, cramers rule in market equilibrium and income determination. Input-Output analysis. Application of difference equation – homogeneous and non-homogeneous determination. Lagged income model. Cobweb and Harrod-Domar.

Unit V: Linear Programming and Game Theory

Linear programming - Basic concept; Formulation of linear programming problem - Its structure and variables; Solution of linear programming through graphic and simplex method. Formulation of the dual of a programme and its interpretation; Shadow prices and their uses; Concept of duality and statement of duality theorems; Concept of game; Strategies- Saddle point solution, mixed and value of game.

References
Mathematics for Economics by Michael Hoy etal, PHI, New Delhi, 2004.
Basic Mathematics for Economist, Mike Rosser, Routledge, New York 2003.
Essential Mathematics for Economics and Business, Teresa Bradley and Paul Patton, John Wiley and Sons, West Sussex 2002.
Quantitative Methods for Business and Economics by Adil H. Mouhammed, PHI, New Delhi, 2003.
Taro Yamane, Mathematics for Economists, PHI, 1973.
Quantitative Techniques in Management by N.D. Vohra, TMH.
Allen R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press, London.
Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics (3rd Edition), McGraw Hill, New Delhi.
Croxton, F.E., D.J. Cowden and S. Klein (1973), Applied General Statistics, Prentice Hall, New Delhi.
Gupta, S.C. and V.K. Kapoor (1983), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.
Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London.

RESEARCH METHODOLOGY

Paper Code: C-19   **Course Code: EC7.CC19**
Credit: 4.

Unit I: Research:

Meaning of research, Objectives and Types of Research, Significance of research, Research Process, Criteria of Good Research

Unit II: Research Problem:

Meaning of Research Problem. Selecting the Problem, Necessity of Defining the Problem, Technique involved.

Unit III: Research Design:

Meaning, Need for Research Design, Features of a good design, Important Concepts relating to Research Design, Different Research Designs.

Unit IV: Data Collection and Sample Design:

Primary and Secondary data. Sample design, sampling and non-sampling errors, types of sampling designs.

Unit V: Research and publication Ethics and publication .misconduct.

Ethics. Ethics with respect to research. Publication ethics; definition and importance. Data manipulation and research Fraud: falsification, fabrication and plagiarism.

References

Kothari and Garg: Research Methodology; Methods and Techniques, Third Additions. New Age International Publishers 1990.
Bird, A. (2006). *Philosophy of Science.* Routledge.
MacIrityre, Alasdair (1967) *A Short History of Ethics.* London.
P. Chaddah, (2018) Ethics in Competitive Research: Do not get scooped; do not get plagiarized, ISBN:978-9387480865
National Academy of Sciences, National Academy of Engineering and Institute of Medicine. (2009). *On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition.* National Academies Press.

ADVANCED STATISTICAL METHODS

Paper Code: C-20   **Course Code: EC8.CC20**
Credit: 4.

Unit I: Correlation and Regression Analysis
Correlation Analysis: Meaning, Assumptions, Utility, Correlation and Causation, Properties; Methods of Studying Correlation- Graphic methods and Algebraic methods, Coefficient of determination and probable error; Partial and Multiple correlations.

Regression Analysis: Meaning, Utility, Nature of regression lines, Methods of obtaining Regression Lines; Regression Equations, Regression Coefficients, Properties of Regression Coefficients; Partial and Multiple Regression.

Unit II: Non-linear equations

Methods of estimation of non-linear equations, Parabolic Equation, Exponential Series, Geometric and Logarithmic series; Gompertz and Logistic relationships .

Unit III: Probability and Probability Distributions
Probability Theory: Classical, relative and subjective probability, Addition and Multiplication Probability models, Conditional probability and Bayes theorem.
Probability Distributions: Binomial distribution: The characteristics and applications
Poisson distribution: The characteristics and applications.
Normal distribution: The characteristics and applications.

Unit IV: Sampling and Sampling Method

Sampling and Sampling methods; Sampling and non-sampling errors, Law of large number and central limit theorem,Sampling Distributions and their characteristics.

Unit V: Statistical Estimation and Hypothesis testing
Point and Interval estimation of population mean; Standard error of Estimate; proportion and variance, Statistical testing of hypothesis and errors; Large and small sampling tests- Z, t and F tests; Non-parametric Tests: Chi-square test; Sign test, Wilcoxon Signed- rank test, Kruskal-Walis test.

References
Levin and Rubin (2007). Statistics for Management. PHI publications. 7th edition.
Monga G. S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
SC Gupta (2011). Fundamentals of Statistics. Himalaya Publishing House. ISBN 978-93-5024-595-8.
SP Gupta (2008). Statistical Methods. 31st Edition. Sultan Chand and Sons.
Veerachamy R. (2002), Quantitative Methods for Economists, New Ages international Publishers, Bangalore.

ADVANCED MACROECONOMICS

Paper Code: C-21   **Course code: EC8.CC21**
Credit: 4

Unit I: National Income and Supply of Money

Different forms of National Income Accounting - Social Accounting - Input-Output Accounting-Financial Intermediation - a mechanistic model of bank deposit determination; A behavioural model of money supply determination: A demand determined money supply process.

Unit II: Neo-Classical and Keynesian Synthesis

Classical and Keynesian views on interest; Extension of IS-LM model with government - tor (Tax and Its Multiplier and Government Expenditure and its Multiplier); Relative effectiveness of monetary and fiscal policies; Extension of IS-LM models with labour market and flexible prices.

Unit III Investment Function and Open Economy

The accelerator and investment behaviour; Kelacki theory of Investment; Impact of inflation and Influence of policy measures on investment – The open economy Mundell- fleming model- Small open economy under Floating exchange rate and fixed exchange rate, Monetary approach to balance of payments.

Unit IV: Theory of Inflation

Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation: Phillips curve analysis - Short run and long run Phillips curve; Friedman and Phelps - the natural rate of unemployment hypothesis; Non-accelerating inflation rate of unemployment (NAIRU), Tobin's modified Phillips curve; Adaptive expectations and rational expectations; Policies to control inflation

.

Unit V Post-Keynesian Demand For Money

Post-Keynesian Approaches to Demand for Money. Patinkin Real balance Effect, Approaches of Baumol and Tobin; Friedman and the modern quantity theory: Efficient Market Hypothesis , Crises in Keynesian economics and the revival of monetarism.

References
Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
Branson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
Dornbusch, R. and F. Stanley (1999), Macroeconomics, Irwin McGraw Hill, Inc. New York, 7th Edition.
Heijdra, B.J. and V.P. Fredericck (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
Romer, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications

DEVELOPMENT ECONOMICS – II

Paper Code: C-22   **Course Code: EC8.CC22**
Credit: 4.

Unit – I: Poverty, Inequality and Development
Concept and Measures of poverty: Head count ratio, Sen's Index, HPI and MPI;
Inequality measures- Gini Coefficient and Lorenz Curve;
Measure of development: PQLI, HDI, GDI, and GEM;
Connections between inequality and development, Mechanisms that generate poverty traps and dependence path of growth processes.

Unit – II: Dualism and Economic Development
Dualism – geographic, social and technological, Myrdal's theory of cumulative causation The regional inequalities in the context of economic development, Inverted U relationship between spatial inequality and economic development; the centre periphery thesis

Unit – III: Financing Economic Development
Saving, capital formation and economic development; Financial sector and economic development; Micro credit and economic development; Taxation, public borrowing and economic development

Unit – IV: Sustainable Development
Development and Environment inter-linkage, Environment-Development Kuznet's U shape relationship, Economic activity and climate change, environmental externalities and state regulations of the environment, Concept of Green GDP and concepts of Sustainable development and SDGs

Unit – V: Globalization
Globalisation in historical perspective, the economics and the politics of multilateral agreements, trade, production patterns and world inequality; financial instability in the globalised world

References
Debraj Ray, Development Economics, Oxford University Press, 2009.
Partha Dasgupta, Economics, A Very Short Introduction, Oxford University Press, 2007.
Abhijit Banerjee, Roland Benabou and Dilip Mookerjee,UnderstandingPoverty,Oxford University Press, 2006.
Thomas Schelling, Micro motives and Macro behavior, W. W. Norton, 1978.
Albert O. Hirschman, Exit, Voice and Loyalty: Responses to Decline in Firms, Organizations and States, Harvard University Press, 1970.
Raghuram Rajan, Fault Lines: How Hidden Fractures Still Threaten the World Economy, 2010.
Elinor Ostrom, Governing the Commons: The Evolution of Institutions for Collective Action, Cambridge University Press, 1990.
Dani Rodrik, The Globalization Paradox: Why Global Markets, States and Democracy Can't Coexist, Oxford University Press, 2011.
Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson (ed.), Globalization in Historical Perspective, University of Chicago Press, 2003.

DEMOGRAPHY

Paper Code: C-23   **Course Code: EC8.CC23**
Credit: 4.

Unit I: Demography

Meaning and scope of demography; Components of population growth and their inter-dependence; Measure of population change; Structure, distribution and sources of population data.

Unit II: Theories of Population

Theories of Population-Malthus, optimum theory of population; Theories of demographic transition- views of Medows, Enke and Simon; Population and development.

Unit III: Structure of Population

Population trends in the twentieth century; Population explosion-threatened or real. distant or imminent; International aspects of population growth and distribution; Pattern of age and sex structure in developed and less developed countries; Determinants of age and sex structure: Demographic effects of sex and age structure, economic and social implications.

Unit IV: Fertility and Nuptiality

Importance of study of fertility-total fertility rate, gross and net reproduction rate: Levels and trends of fertility in more and less developed countries; Factors affecting fertility-socio-economic factors (economic status, health, education, nutrition, caste, religion, race, region, rural-urban and status of husband and wife); Nuptiality-concept and analysis of marital status, single mean age at marriage, synthetic cohorts methods; Trends in age at marriage

Unit V: Mortality

Mortality-death rates, crude and age-specific rates, Mortality at birth and infant mortality rate-
Levels and trends in more and less developed countries; Sex and age pattern of mortality; Factors for decline in mortality in recent past.

References

Agarwala, S.N, India's population problem, Tata McGraw Hill Co, Mumbai.
Bogue DJ, (1971) Principles of demography, John Wiley. New York.
Bose A, India's basic demographic statistics, B.R Publishing Corporation, New Delhi.
Chenery, H and T.N Srinivasan (eds) (1989), Handbook of development economics, Vol I&II, Elsevier, Amsterdam.
Chiang, C.L (1974) Life Tables and Mortality Analysis, WHO, Geneva
Choubey, P.K, (2000), Population policy in India, Kanishka Publication, New Delhi.
Simon, J.L, (1992), Population and Development in poor countries, Princeton University Press.
Srinivasan, K and A Shariff, (1998), India: Towards population and demographic goals, Oxford University Press.
Srinivasan, K, (1998), Basic Demographic Techniques and Applications, Sage, New Delhi.