



YBN UNIVERSITY

Established by the Act of Government of Jharkhand Act 15, 2017
Gazette Notification No. 505, Dated 17th July 2017
As per Section 2(f) of UGC Act. 1956

M.A. ECONOMICS PROGRAMME



Syllabus for Two Years Master's Degree

SUBJECT CODE = 1Y2ECO_PG

RAJAULATU, NAMKUM, RANCHI, JHARKHAND

SCHOOL OF ARTS AND HUMANITIES

ECONOMICS HONOURS PROGRAMME

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Implemented from the
Academic Year 2021 onwards

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YBN UNIVERSITY

Vision

YBN University envisions to be a global university for Center of Excellence with set standards in education, research, creativity, entrepreneurship and ethical values, overcoming challenges in the service of mankind encompassing equity and productivity.

Mission

With strong belief in the astounding future of our students, YBN University looks forward for the set goals and the actions it undertakes. The following are its key prepositions:

- To disseminate knowledge that transform students into leaders who possess the intellect, aptitude, skill and confidence to succeed in all pursuits of life.
- Develop academic programs that meet the needs of regional, state, national and global communities.
- To create a collaborative environment open to free exchange of ideas, where education, research, creativity and entrepreneurship can flourish.
- Collaborate with other educational and non-educational institutions to achieve mutual goals and expand student opportunities through internship and placements.
- Provide students/faculties with the richest possible journey of educational development in a supportive and congenial environment.

Values

- **Excellence**: We aim to achieve excellence in all our work, always being principled, considerate and respectful.
- **Diversity**: We value the opportunity to work, learn and develop in a community that embraces the diversity of individuals enhancing multicultural learning junctures.
- **Integrity**: Having a strong belief to act with honesty, courage and trustworthiness, we support an environment of respect among students/faculties/staffs.
- **Ethical**: Having commitment to ethical and responsible behavior in our own actions, we look forward to develop the same in our students.
- **Innovation**: We build strength through innovation into our curriculum, culture, workplace and campus creating an environment with opportunities for growth and change.
- **Resilience**: We change, adapt and transform, also are creative to meet the ever-changing needs of the University and the Society.
- **Commitment**: We sustain a deep allegiance and commitment to the interests of the region and state in which we are based, alongside our national and international efforts, ensuring relevance to all.

School of Arts & Humanities

To provide quality education the School of Arts & Humanities of YBN University creates and disseminates knowledge of human experience, thought and expression that cultivates intellectual breadth, promotes ethical understanding, builds identity and embraces difference. Deeply engaged with the vibrant cultural life of the country and with the citizens of the state of Jharkhand and beyond, we provide unparalleled opportunities for global and civic engagement. Students of this school gain specialized and interdisciplinary knowledge of people and their cultures through a diverse and vigorous curriculum, developing skills required for life in civil society and leadership in an emerging global community besides aesthetic and intellectual development.

Fundamental concepts

The learning associated with School of Arts & Humanities shall lead to close understanding of the fundamental concepts of the YBN University.

- Holistic Learning: The curriculum encourages students to establish links between subjects, cultures and other areas of experience and develop wide range of skills.
- Intellectual Awareness: It develops intellectual awareness by exposing students to broader and global context in their studies.
- Communication: School of Arts & Humanities provides students with opportunities to develop their abilities in different forms of communication. To communicate these skills effectively, students develop oral and written communication techniques simultaneously. These techniques include speech writing and presentation, information gathering, document production (essays, reports etc), representation using maps, models, diagrams, tables and graphs, and techniques required to work effectively in group situation.

Strategic Goals

- Produce students whose knowledge and skills prepare them to lead their fields and equip them for local and global citizenship. Students will be able to employ concepts and terminology of the discipline in appropriate contexts.
- Illustrate how the Arts & Humanities are critical to a knowledgeable democratic citizen and problem solving in a diverse society.
- Expand and enhance both physical and virtual spaces to promote robust and collaborative intellectual communities and facilitate increased interaction between faculties, students and staff across the campus and beyond.

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COURSE STRUCTURE FOR M.A. ECONOMICS

Table AI-1: Distribution of 80 Credits [*wherever there is a practical there will be no tutorial and vice –versa.]

| Course | Papers | Credits (Sc) Theory + Practical | Credits (Arts/Comm) Theory + Tutorial |
|--|---|------------------------------------|--|
| I. Foundation Course (FC) | | | |
| 1. Foundation Course Compulsory Foundation/ Elective Foundation | (FC) 1 Paper | 1X5=5 | 1X5=5 |
| II. Core Course (CC) | | | |
| Theory | (CC 1 to 10/11) 7 Papers/11 Papers | 7X5=35 | 11X5=55 |
| Practical/ Tutorial* | 3 Papers/----- | 3X5=15 | |
| Project | 1 Paper | 1X5=5 | 1X5=5 |
| III. Elective Course (EC) | | | |
| A. Ability Enhancement Course of the Core Course opted | (AE/EC 1) 1 Paper | 1X5=5 | 1X5=5 |
| B. Discipline Centric Elective Theory + Practical | (DC/EC 2&3) 2 Papers 1 Paper | 2X5=10 1x5=5 | |
| OR Theory/Practical/Tutorial* | 1Paper + 1 Practical/Dissertation | | 2X5=10 |
| OR Generic Elective/ Interdisciplinary Theory OR Theory/Practical/Tutorial* | (GE/EC 2&3) 2 Papers 1 Paper + 1 Practical/Dissertation | | |
| | | Total Credit = 80 | = 80 |

Table AI-1.1: Course structure for M.A. Programme

| Semester | Subject (Core Courses) 12 Papers | Allied (Elective Courses) 3 Papers | Foundation Course (Compulsory Course) 1 Paper | Total Credits |
|----------|---|--|---|---------------|
| Sem-I | C-1, C-2, C-3 (5+5+5=15 Credits) | | Foundation Course FC (05 Credits) | 20 Credits |
| Sem-II | C-4, C-5, C-6, C-7 (5+5+5+5=20 Credits) | | | 20 Credits |
| Sem-III | C-8, C-9, C-10 (5+5+5=15 Credits) | EC1 (05 Credits) | | 20 Credits |
| Sem-IV | C-11, (05 Credits) C-12 (Project) (05 Credits) | EC2, EC3 (5+5=10 Credits) | | 20 Credits |

Total = 80 Credits

COURSES OF STUDY FOR POSTGRADUATE, M.A., ECONOMICS PROGRAMME

Table AI-2 Subject Combinations allowed for M. A. Programme (80 Credits)

| | | | |
|--|---|---|---|
| Foundation Course FC 1 Paper | Core Subject CC 12 Papers | Ability Enhancement Course AE 1 Paper | Discipline Centric Elective/ Generic Elective Course DC/ GE 2 Papers |
|--|---|---|---|

Table AI-2.1 Semester wise Examination Structure for Mid Sem & End Sem Examinations:

| Sem | Core, AE/ GE/ DC/ EC & Compulsory FC Courses | | | | Examination Structure | | |
|------------|--|-------------|--------|--|--------------------------------|--------------------------------|-------------------------------------|
| | Paper | Paper Code | Credit | Name of Paper | Mid Semester Evaluation (F.M.) | End Semester Evaluation (F.M.) | End Semester Practical/ Viva (F.M.) |
| I | Foundation Course | 1Y2ECFC(C1) | 5 | Foundation of Quantitative Economics | 30 | 70 | |
| | Core Course | 1Y2ECO(C2) | 5 | Micro Economic Analysis – I | 30 | 70 | |
| | Core Course | 1Y2ECO(C3) | 5 | Macro Economic Analysis | 30 | 70 | |
| | Core Course | 1Y2ECO(C4) | 5 | Environmental Economics & Economics of Social Sectors | 30 | 70 | |
| II | Core Course | 1Y2ECO(C5) | 5 | Theory of Statistics | 30 | 70 | |
| | Core Course | 1Y2ECO(C6) | 5 | Money and Financial Markets | 30 | 70 | |
| | Core Course | 1Y2ECO(C7) | 5 | Indian Economic Policy | 30 | 70 | |
| | Core Course | 1Y2ECO(C8) | 5 | Economics of Growth and Development | 30 | 70 | |
| III | Ability Enhancement Course | 1Y2ECOAE | 5 | Choice Base (Elective) | 30 | 70 | |
| | Core Course | 1Y2ECO(C9) | 5 | Micro Economic Analysis – II | 30 | 70 | |
| | Core Course | 1Y2ECO(C10) | 5 | Public Finance | 30 | 70 | |
| | Core Course | 1Y2ECO(C11) | 5 | International Economics | 30 | 70 | |
| IV | Elective | 1Y2ECO(EC1) | 5 | A. MATHEMATICAL ECONOMICS & ECONOMETRICS B. AGRICULTURE & LABOUR C. POPULATION | 30 | 70 | |
| | Elective | 1Y2ECO(EC2) | 5 | A. Women Studies B. Energy, Resource & Environmental Economics C. Demography | 30 | 70 | |
| | Core Course | 1Y2ECO(C12) | 5 | Indian Economics | 30 | 70 | |
| | PROJECT/ Dissertation | 1Y2ECOPR | 5 | Research & Project work Or Computer and Skill Development | ---- | ---- | 70 + 30 |

SEMESTER – I

1Y2ECFC(C1)

FOUNDATION OF QUANTITATIVE ECONOMICS

Full Marks – 70

Time - 3 Hrs.

Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain 7 short answer questions carrying 2 marks each.

Module – I Elementary Analytical Geometry

Solution of Equation in one Variable and Simultaneous equation in two variables
Equation of Straight line and parabola
Set Theory and its operations.

Module – II Introduction to Differential Calculus

26.1 Functions and graphs, Exponential and logarithmic function,
Limit and Continuity 2.2 Derivatives, Partial Differentiation and their
application in Economics
2.3 Elasticity of Economic Functions, Relation Between AR, MR and Elasticity of
Demand 2.4 Production function, Young's Theorem, Homogenous function and
Euler's Theorem

Module – III Differential Calculus and Extreme Values (Optimization)

Maxima and Minima, Point of Inflexion & their uses in Economics
Pricing under Perfect Competition, Monopoly, Duopoly, Taxation in Monopoly Market
Unconstrained Optimization of a function of several variables
Constrained Optimization: Equality Constrained Optimization

Module- IV Integral Calculus and Economic Dynamics

Indefinite integrals and inverse differentiation
Technique of integration, Integration by substitution - integration by parts, definite integration
Integration and Application to Economic Dynamics (Consumer Surplus, Producer's Surplus)
Definite integrals and approximate integration

Module – V Determinant & Matrix Algebra

Determinant and its properties,
Matrix Operations
Inverse and Solution of Equation by determinant
Rank of Matrix

BASIC READING LIST

- Allen, R.G.D. (1974) Mathematical analysis for Economics, Macmillan press & ELBS London. (Chapters: 2,3,4, 5,6, 7, 8,9, 10,11, 12,13,14, 15, 18)
- Chiang, A.C. (1986) Fundamental Methods of Mathematical Economics, McGraw Hill Co. Ltd., New York.
- Handry A.T. (1999) Operations Research, Prentice Hall of India, New Delhi.
- Taha, H.A. (1997) Operations Research: An Introduction (6th Edition) Prentice Hall of India (p) Ltd., New Delhi.
- Yamane, Taro (1975) Mathematics for Economics Prentice Hall of India, New Delhi
- A. C Chiang & K Wainwright (2013) Fundamental Method of Mathematical Economics, McGraw Hill
- E. T. Dowling (2001) Introduction to Mathemeetical economics, McGraw Hill
- K Sydaster & P J Hammond (2015) Mathematics for economic Analysis, Pearson.



SEMESTER - I

1Y2ECO(C2)

MICRO ECONOMIC ANALYSIS-I

Full Marks – 70

Time - 3 Hrs.

Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.

Module – I Fundamentals of Consumption & Production

Economic models : Basics of model building, Characteristics of equilibrium System
Approaches to Consumer Behaviour; Indifference Curve Analysis, Derivation of Demand Curve from Indifference Curve Analysis; Revealed Preference approach , Revision of Demand Theory by Hicks

Iso-quant, Marginal Rate of technical substitution, Elasticity of substitution – Least cost combination of inputs

Return to scale, change in scale and factors proportion.

Module – II Production & Distribution

Production function: Cobb-Douglas Production Function and Its Properties

Marginal productivity theory under different Market condition and Modern theory of distribution; Product exhaustion theorem;

Factor pricing in perfect and imperfect factor markets; Classical and Modern theories of Wage, Keynesian and modern theory of Interest, Risk, uncertainty & innovation theory of profit

Macro theories of distribution – Ricardian and Marxian, Neo - Classical theories of Micro-distribution (Kaldor)

Module – III Advance Theories (Theory of Demand an Alternative Approach)

Consumer Choice involving Risk,

Indirect Utility function and Duality theorem

Modern Theory of Consumer Surplus

Module – IV Welfare Economics - I

Definition, scope and purpose of Welfare Economics, Concept of Social welfare;
Measurement of Welfare;

Role of Value Judgments in Welfare Economics, Pigou's Welfare Economics; 4.3 Pareto optimality – Optimum exchange conditions; The production optimum;

4.4 The consumption optimum; Concept of contract curve;

Module – V Welfare Economics - II

Compensation criteria - Contributions of Kaldor and Hicks

Scitovsky double criterion,

Bergson's, Samuelson social welfare function,

Arrow's possibility theorem, A. K. Sen's contribution in welfare economics

BASIC READING LIST

- Kreps, David M. (1990), A Course in Microeconomic Theory. Princeton University Press, Princeton.
- Koutsoyiannis, A. (1979), Modern Microeconomic (second edition) Macmillan Press, London.
- Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- Sen, A. (1999), Microeconomics Theory and Applications Oxford University Press, New Delhi.
- Stigler, G. (1996), Theory of Price (4th edition) Prentice Hall of India, New Delhi.
- Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.
- Case KE, Fair R C Osters, (2009) Principles of Economics (9th edition), Pearson
- Myint, H. (1948), Theories of Welfare Economics, Longmans, London.
- Ng Y.K. (1979), Welfare Economics, Macmillan, London.
- Nicholas, B. (Ed.) (2001), Economic Theory and the Welfare State, Edward Elgar Publishing Ltd., U.K.
- Pigou, A.C. (1962), The Economics of Welfare (4th Edition), Macmillan.
- Quirk, J. and R. Saposnik (1968), Introduction to General Equilibrium Theory and Welfare Economics, McGraw Hill, New York.
- Samuelson, P.A. (1947), Foundations of Economic Analysis, Harvard University Press, Cambridge, Mass.
- N Gregory Mankiw (2007) Economics: Principles and Applications, Learning India private limited.
- Joseph's Stiglitz and C. E Walsh (2007) Economics, W.W Norton and Co.

SEMESTER - I

1Y2ECO(C3)

MACRO ECONOMIC ANALYSIS

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I , Consumption Function

Keynes Psychological law of consumption, Income- Consumption relationship, Absolute income, Relative income, Life Cycle and Permanent income Hypothesis.
Consumption and Asset Price
Consumption under Uncertainty - Modern Approach

Module –II Investment Function

Marginal Efficiency of capital and investment - long run and short run, Factors affecting Investment Function, Derivation of MEC
Investment Multiplier,
Acceleration Principle, Investment Behaviour,
Super Multiplier, Tobin's 'q' of Investment

Module – III Macro Economic models

Classical Macro Economic Model
Neo - Classical Macro Economic Model
Keynesian Macro Economic Model
Post Keynesian Macro Economic Model - Rational and Adaptive Expectation Model,
Mundell Fleming Model

Module – IV Theories of Inflation

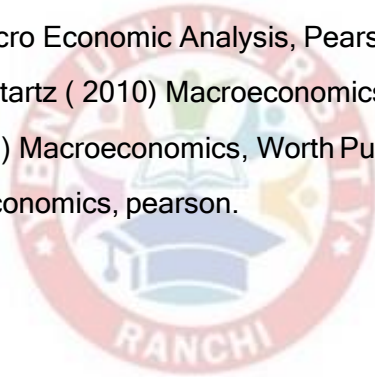
Classical, Keynesian and Monetarist approaches to Inflation; Structuralist theory of inflation, Inflationary Gap, Measures to remove the gap, Demand Pull and Cost Push theory of inflation. Phillips curve analysis –Short-run and long-run; The Natural rate of Unemployment Hypothesis; Tobin's modified Philips Curve.
Control of Inflation by Monetary, Non Monetary and fiscal measures

Module – V Economic Fluctuation

Business cycle- Nature Scope, Phases, Monetary and Non Monetary Theory
Traditional Theories of business Cycle (Schumpeter's and Kaldor)
Business Cycle Theories of Hicks and Samuelson

BASIC READING LIST

- Ackley, G. (1997), Macroeconomics, Theory and policy Macmillan, New York.
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World; (2 volumes) Oxford University Press, London.
- Branson, W.A. (1989), Macroeconomics Theory and Policy (3rd edition) Harper & Row, New York.
- Hall, R.E. and J.B. Taylor (1986), Macroeconomics W.E. Norton, New York.
- Heijdra, B.J. and V.P. Fredrick (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 Co. Ltd., New York.
- Scarfe, B.L. (1997) Cycles Growth and Inflation McGraw Hill, New York.
- Shapiro, E (1996) Macroeconomics Analysis, Ggotia Publications, New Delhi
- Errol Desuza (2009) : Macro Economic Analysis, Pearson
- Dornbuseh Fischer and Startz (2010) Macroeconomics, McGrawHiall
- N Gregory mankiw (2010) Macroeconomics, Worth Publisher
- Oliver Blanchard (2009) Macroeconomics, pearson.



SEMESTER - I

1Y2ECO(C4)

ECONOMICS OF ENVIRONMENT AND SOCIAL SECTOR

Full Marks – 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Basics of Environmental Economics

Economic Development and Environment- Inter-relationship between Economic Development and Environment

Sustainable Development - Concept, Characteristics and Sustainable Development Goals (SDGs)

Concept of Externalities, Types and Measures to control Negative Environmental

Externalities- Pigovian tax, Property Rights and Coase theorem, Carbon tax.

Properties of Environmental goods - Public goods/ private goods.

Module – II Environmental Issues

Environmental Management- Concept, Types and Methods of Environmental Management; Environmental management and people's participation (PPP).

Environmental Degradation- Land forest and natural resource degradation.

Problems of Pollution- Air Pollution and Water Pollution; National Environmental Policy.

Social Forestry- Rationale and Benefits.

Module III: Environmental Valuation & Accounting

Concept of Environmental Values- Use Value, Non-use Value and Option Value. Basics of the valuation of environment- Contingent Valuation Method, Travel Cost Method, Hedonic Price Method.

Environmental Accounting: Objectives forms, functions & importance, Financial Performance and Environmental function.

Natural Resource Management, Introduction to Natural resource accounting, Salient features of System of Environment and Economic Accounting, Green Accounting, Natural Resource Policies of India.

Module – IV Economics of Social Sector – I

Social Sector - Importance of Social Sector, Education and Health,

Human Capital Vs Physical Capital, Education as Instrument of Economic Growth

Human Capital Formation- Concept and Role in Social Sector Development

Cost of Education- Expenditure on Education, Education Sector- Status, Problems, Solutions and Financing of education in India, Benefit of Education

Module – V Economics of Social Sector – II

Health Sector- Status, Problems, Determinants of health

Poverty, malnutrition and environmental issues,

Solutions and Financing of Health Sector

BASIC READING LIST

- Chenery H. and TN. Srinivasan (Eds.) (1989), Hand Book of Development Economics, Vol. 1 & 2 Elsevier, Amsterdam.
- Baumol, W.J. and W.E. Oates (1988), The Theory of Environmental Policy, (2nd Edition), Cambridge University Press, Cambridge.
- Bromely, D.W. (Ed.) (1995), Handbook of Environmental Economics, Blackwell, London.
- Fisher, A.C. (1981), Resource and Environmental Economics, Cambridge University Press, - Cambridge.
- Hanley, N., J.F. Shogern and B. White (1997), Environmental Economics in Theory and Practice, Macmillan.
- Hussien, A.M. (1999), Principles of Environmental Economics, Routledge, London.
- Sinha U.P (2007), Economics of social sector and development, Concept Publishing company, New Delhi.
- United Nations - Human Development Report (various issues)
- Blaug. M (1972) - Introduction to Economics of Education (Penguin)
- Cohen, E and T. Gaske (1989) - Economics of Education. Pergamon Press, London
- Schultz, T. W(1971) - Investment in Human Capital, Free Press, New York.
- Tilak, J.B.G. (1994) - Education for Development in Asia, Sage Publications, New Delhi.
- World Bank (1993) - The World Development Report, 1993: Investing in Health, Oxford University Press, New York.
- Bhattacharya, R.N. (2001), "Environmental Economics - An Indian Perspective", Oxford University Press, Delhi.
- Singh, K. and A. Shishodia, (2007), "Environmental Economics: Theory and Applications", Sage Publications, New Delhi
- Charles Kolstad (2010) Intermediate Environmental Economics, Oxford University Press.
- Robert N. Stavins (ed) (2005) Economics of Environment : Selected Readings
- Robert, Yue Ma, James MCGilvray and Micle C (2003) Natural Resource and Environment Economics, Pearson Education.

SEMESTER – II

1Y2ECO(C5)

THEORY OF STATISTICS

Full Marks – 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Statistical Method - I

Simple Correlation: Karl Pearson's and Product Moment Method; Rank Correlation, Standard Error of Estimates and Probable Errors estimates; Partial and Multiple Correlation
Regression Analysis: Regression Coefficients and its properties, Estimation of lines of Regression
Time series analysis: importance and components, Estimation of trend value by least square method.
Application of Statistics by Excel: Measures of Central Tendency and Measures of Dispersion

Module – II Statistical Methods – II

Classical and empirical definition of Probability; Theorem of Probability (Addition Theorem).
Conditional probability, Multiplication theorem, Extension of multiplication theorem, Bayes theorem
Random variables and distribution function, Probability density function, Marginal density function.

Module –III Theoretical Probability Distribution

Discrete and Continuous Probability Distribution
Binomial, Poisson Distribution (Constants, Mode and fitting of distribution)
Normal Distribution, properties of Normal Distribution and equation of Normal Probability curve.
Relation between Binomial and Normal Distribution.

Module –IV Sampling Theory

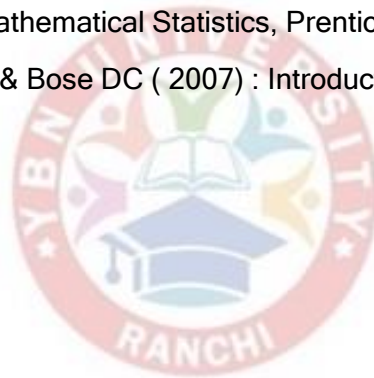
Sampling Theory, Basic Concept, Types, Census Vs Sampling
Principle of Sampling, Types, Limitation and Errors in Sampling
Sampling Distributions, Sampling Distribution of Means

Module V Statistical Decision Theory

Statistical Hypothesis, Hypothesis Testing Type - I and Type - II errors. Error in hypothesis testing
Null and Alternate Hypothesis, Formulation of Hypothesis, level of Significance
Significance of tests in small sample : Test of significance based on **t**, **F** and **z** distribution.
Definition of Chi - Square, χ^2 , χ^2 - test. Chi square test for degree of freedom, contingency Table (2x2)

BASIC READING LIST

- Spiegel, M.R. (1992), Theory and problems of Statistics, McGraw Hill Co. Ltd., New York.
- Chou, Y. (1975), Statistical Analysis, Holt, Reinhart and Winston, New York.
- Croxtion, Crowden and Klein (1971), Applied General Statistics, Prentice Hall of India, New Delhi
- Millar, J. (1996), Statistics for Advanced Level, Cambridge University Press, Cambridge.
- Nagar, A.L. and R.K. Das (1993) Basic Statistics, Oxford University Press, New Delhi.
- S. P. Gupta: Statistics
- S. C. Gupta: Fundamental of Statistics, Himalaya Publishing house
- D. N. Elhance: Fundamental of Statistics
- Spiegel M.R (2015) Theory of Statistics
- W.G. Cochran (2007) Sampling Techniques, J Willey
- Goon Am, Gupta M K and Dasgupta B (2002) Fundamental of Statistics, (Vol I & II) World press
- Jay L Devore (2010) Probability and statistics for Engineer, C Learning
- John E Freund (1992) Mathematical Statistics, Prentice Hall
- Mood, AM , Gray Bill F.A & Bose DC (2007) : Introduction to the theory of statistics , TaTa McGraw Hill.



SEMESTER - II

1Y2ECO(C6)

Money & Financial Markets

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Supply of Money

Approaches towards determination of money supply – Traditional Approach, Sukhmoy Chakarbarty Committee approach, RBI Approach to Money Supply & Recent changes
Determinants of Money supply- High Powered Money and Money Multiplier.
Control of Money Supply – Policy Rates and Reserve Ratio.

Module – II Demand for Money

Classical Approach to Demand for Money – Quantity Theory Approach (Fisher and Cash balance)
Keynes's demand for money
Post Keynesian Approach to Demand for Money – Patinkin and Real Balance Effect, Friedman
Modern Approaches of Demand for Money- Baumol and Tobin's (Introduction to Portfolio balance effect)

Module – III Money and Capital Markets

Role and structure of money market in India, Instruments of money market
Sub market - Call money market, Treasury bill market, Discount market,
Securities market – Markets for derivatives; Future and options and other derivatives;
Primary and secondary market for securities
SEBI - Its impact on working of capital market in India, IRDA and its role in financial markets.

Module – IV Foreign Exchange Markets

Exchange rates –floating exchange rates
Spot market and Forward market, Interest arbitrage,
Foreign exchange market - exposure and management

Module – V Portfolio Analysis and Mutual funds

Risk and returns of individual security (Insurance)
Portfolio risk and returns
Concept of efficient portfolio
Venture Capital and Mutual funds

BASIC READING LIST

- Ackley, G. (1978), *Macroeconomics: Theory and Policy* Macmillan, New York.
- Blackhouse, R and A. Salansi (Eds.) (2000) *Macroeconomics and the real world (Volumes)*, Oxford University Press, London.
- Branson, W.A. (1989) *Macroeconomics Theory and Policy* (3rd edition), Harper & Row, New York.
- Dornbusch R and F, Stanley (1997), *macroeconomics*, McGraw Hill Inc., New York.
- Hall, R.E. and J.B. Taylor (1986), *Macroeconomics*, W.E. Norton, New York.
- Heijdra, B.J. and V.P. Fredrick (2001) *Foundations of Modern Macroeconomics*, Oxford University Press, New Delhi.
- Jha, R. (1999), *Contemporary Macroeconomic Theory and Policy*, Wiley Eastern Ltd., New Delhi.
- Romer, D.L. (1996) *Advanced Macroeconomics*. McGraw Hill Co. Ltd., New York.
- Scarfe, B.L. (1977) *Cycles Growth and Inflation* McGraw Hill, New York.
- Shapiro, E. (1996) *Macroeconomics Analysis*, Glogtia Publications, New Delhi.
- Surrey, N.J.C. (Ed.), (1976) *Macroeconomics themes*. Oxford University Press, Oxford.
- Sinha, U.P (2010) *Monetary and Fiscal actions in India*, Concept Publishing Company ,New Delhi.
- F.S Mishkin & S G Eakins (2009) *Financial Markets and Institutions*, Pearson
- F.J Fabozzi, F Modigliani, F J Jones, M G Ferri (2009) *Foundations of Financial Market and Institutions*, Pearson
- M R Baye and D W Jansen (1996) *Money Banking and Financial Market*, AITBS
- M Y Khan (2011) *Indian Financial System*, Tata McGraw Hill

SEMESTER - II

1Y2ECO(C7)

INDIAN ECONOMIC POLICY

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Framework and Challenges of Indian Economy

Trends and Growth of Indian Economy
Indicators of Development, PCI, PQLI, HDI, GDI
Poverty: Causes, Remedies and measurement, Multi-dimensional poverty index, Deprivation index
Employment: Problems, Solutions and Government Initiatives
Gender issues: Gender discrimination and Women empowerment

Module – II Development Strategies in India

Planning in India: Objectives, strategies and evaluation,
NITI Aayog and its role in planning in India
Planning and Decentralization (Panchayati Raj Institutions)
Economic Reforms in India

Module – III Agriculture and Allied Sector

Issues and Concerns in Indian Agriculture and Allied Sector (fisheries, Horticulture, Dairy, and Poultry)
Agriculture Finance, Agricultural Marketing
Cropping pattern in India - factor determining cropping pattern, Dry land farming, Contract Farming
Agricultural holdings in India - Subdivision and fragmentation of holdings, Organic farming in India

Module – IV Sectoral Performance – II

Industrial Sector in pre - Reform Period
Industrial Sector in Post reform period with emphasis on small - scale Sector
Infrastructure: Transport, Energy and communication
Social Infrastructure, components, assessments and policies

Module – V India and Foreign Trade

India's Foreign Trade: Direction and Composition and Balance of Payment of India
New Trade policy (EXIM Policy) FERA, FEMA
India and International institutions, Regional Blocks, BRICS, SAFTA, EU
Multinational Corporations and Foreign Capital

BASIC READING LIST

- Ahluwalia, I.J. and I.M.D. Little (Eds.) (1999), Indian's Economic Reforms and Development (Essays in honour of Manmohan Singh), Oxford University Press, New Delhi.
- Bardhan, P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi.
- Bawa, R.S. and P.S. Raikhy (Ed.) (1997), Structural Changes in India Economy, Guru Nanak Dev University Press, Amritsar.
- Brahmananda, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy : Inter-State Perspectives, Bookwell, Delhi
- Chakravarty, S. (1987), Development Planning: The Indian Experience, Oxford University Press, New Delhi.
- Dantwala, M.L. (1996), Dilemmas of Growth: The Indian Experience, Sage Publications, New Delhi.
- Dutt R. and Sundram: Indian Economy
- Mishra and Puri: Indian Economics
- Goyal, Ashima (2015) A Concise Handbook of Indian Economy in the 21st Century
- Uma Kapila,(2008) Indian Economy Since Independence (latest edition)
- Bhagwati, J (2012) Reforms and Economic Transformation in India
- Kaushik Basu and A Maertens eds (2013) 'The New Oxford Companion to economics, Oxford University Press
- Himanshu (2010) Towards New Poverty Lines for India, EPW , Jan 2010
- Jean Dreze and Amartya Sen (2013) An Uncertain Glory : India and its Contradictions , Princeton University Press.
- Pulpure Balkrishnan (2010) Economic growth in India: History and Prospects, Oxford Press.

SEMESTER - II

1Y2ECO(C8)

ECONOMICS OF GROWTH AND DEVELOPMENT

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Theories of Development

Economic Growth and Development: Concept, measurement and Indicators of Economic Growth
Factor affecting Economic growth - Capital, Labour and Technology
Schumpeter and Capitalistic development, Innovation: Role of credit, Profit and degeneration of capitalism
Marxian Theory of Development

Module – II Economic Growth – I

Harrod - Domar Growth Model, Knife edge problem
Neo- Classical growth Models- Solow, Mrs. Joan Robinson's growth model, Kaldor, Lucas
Sectoral Models of Economic growth - Mahalanobis growth models
A. K. Sen Growth Model

Module – III Economic Growth – II

Technological progress-embodied and disembodied; Production function approach to economic growth
Growth models of Hicks and Golden Rule of accumulation; intellectual capital;
Explanation of cross country differentials in economic growth.

Module – IV Social and Institutional Aspects of Development

Development and Underdevelopment - perpetuation of underdevelopment
Poverty – Absolute and Relative; Measurement, Causes and alleviation of poverty,
Dependency Theory
Inequality and development inter-linkages: Kuznets

Module – V Partial theories of Growth and Development

Vicious circle of poverty; Circular Causation
Unlimited supply of labour; Ranis and Fei model, Big push Theory
Balanced and unbalance growth, Critical minimum-effort thesis
Harris Todaro model, Stiglitz labour turnover model

BASIC READING LIST

- Adelman, I. (1961), Theories of Economic growth and Development, Stanford University Press, Stanford.
- Behrman, S. and T.N. Srinivasan (1995) Hand book of Development Economics, Vol. 3, Elsevier, Amsterdam
- Brown M. (1966) On the Theory and Measurement of Technical change Cambridge University Press, Cambridge Mass.
- Chenery, H.B. and TN Srinivasan (Eds) (1989) Hand Book of Development Economics, Vol. I and II Elsevier, Amsterdam.
- Ghatak, S. (1986) An Introduction to Development Economics, George Alien & Unwin, London.
- Todaro, M and Smith (2011) Economic Development, Pearson. Economic Development
- Ray, Debraj, Development Economics, Oxford University Press
- Meir, G.M. - Leading Issues in Economic Development
- Thirlwall, A.P.- Growth and Development
- Basu, K. - Analytical Development Economics
- Bhattacharya, Debesh - Political Economy of Development
- World Bank - World Development Report (various issues)
- Anand, S. and R. Kanbur (1993) - "The Kuznets Process and the Inequality-Development Relationship", Journal of Development Economics, Vol. 40
- Anand, S. and R. Kanbur (1993a) - "Inequality and Development: A Critique", Journal of Development Economics, Vol. 41
- Kuznets, S. (1955) - "Economic Growth and Economic Inequality, American Economic Review, Vol. 45,
- Kuznets, S. (1963) - "Quantitative Aspects of Economic Growth of Nations: VIII, Distribution of Income by Size", Economic Development and Cultural Change, Vol. 12.
- Ranis, G. and J. Fei - 'A Theory of Economic Development', American Economic Review, Vol. 51, 1961, Reprinted in Eicher and Witt (ed.) Agriculture in Economic Development

Semester III

Choice Base

1Y2ECOAE

Open Elective For Other Than Economics Students

Candidates will have to answer five questions out of total of nine questions. At least one question from each module will be set. Question No.1 will be compulsory, which will contain 7 short answer questions carrying 2 marks each.

Full Marks - 70

Time 3 hrs.

Module – I Micro Economics

Law of demand and supply, Elasticity of demand, Consumer's equilibrium, Indifference curve Income, Substitution and price effect, Derivation of demand curve from indifference curves, Consumers Surplus.

Module – II Macro Economics

Concept and measurement of national income, Keynesian psychological law of consumption, investment function and its determinants, Theory of the multiplier Inflation and its control.

Module – III Public Finance

Theory of maximum social advantage, Ability to pay approach, Incidence of taxation, Wagner's law of increasing state activities, effects of taxation and public expenditure, Taxable capacity types of taxation, GST, 14th finance commission.

Module – IV International Trade

Classical theory of international trade, - Theories of comparative cost Theory meaning and components of BOP, equilibrium and disequilibrium in balance of payment, Factors causing disequilibrium in balance of payment and its correction, Fixed and flexible exchange rates, demand and supply theory of exchange rate determination, Functions of IMF and World Bank.

Module – V Basic Concept of Economic Development and Growth

Definition Concept and Determinants of Development, Recent Trends of Economic development in India Sustainable Development indicators of economic development and Distribution Development indices in India, HDI, GDI, MPI, HPI(I), HPI(II)

BASIC READINGS

1. H.L. Ahuja Advance Economic Theory
2. H.L. Ahuja Macro Economic Theory
3. Vais MC Money Banking and International Trade
4. R.A. Musgrave Public Finance in Theory & Planning
5. B.P. Tyagi Public Finance
6. M.L. Jhingan Economic Development & Planning

SEMESTER- III

1Y2ECO(C9)

MICRO ECONOMIC ANALYSIS – II

Full Marks - 70

Time - 3 Hrs.

Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain 7 short answer questions carrying 2 marks each.

Module – I Theory of Market – I

Equilibrium of firm & industry under perfect competition
Monopoly: Monopoly Power, Profit Maximization and output choice, Monopoly and product quality, Price Discrimination
Monopolistic Competition: General and Chamberlin Approach of equilibrium, Product differentiation, selling cost
Bilateral Monopoly

Module – II Theory of Market -II

Oligopoly with fixed number of firms, Traditional model of oligopoly - Cournot, Edgeworth
Kinked Demand curve and Collusive - Cartels and Mengers, Price Rigidity
Price leadership at basin point price system

Module – III Alternative Theory of Firms – I

Critical evaluation of marginal Analysis, Baumol's Sales revenue Maximization Model
Williamson's Model of Managerial Discretion
Marris Model of Managerial Enterprise, full cost pricing rule behavior model
Bains limit pricing theory

Module – IV Alternative Theory of Firms – II

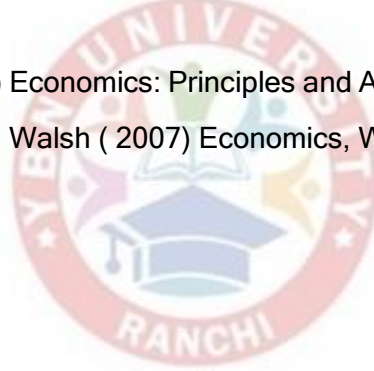
Behavioural Model of Cyert and March
Goals of firm: Sacrificing Behaviour, Process of Decision Making
Simple Model of Behaviourism
Game Theory Model

Module – II Market Equilibrium

Partial and general equilibrium,
Walrasian excess demand and input-output approaches to general equilibrium, existence, stability and uniqueness of equilibrium;

BASIC READING LIST

- Amartya Sen: Collective Choice and Social Welfare
- Arrow, K.J. (1951), Social Choice and Individual Values, Yale University Press, New Haven.
- Duesenberry, J.S. (1949), Income, Saving and the Theory of Consumer Behaviour, Harvard University Press, Cambridge, Mass.
- Marshall, A. (1946), Principles of Economics, Macmillan, London.
- Kreps, David M. (1990), A Course in Microeconomic Theory. Princeton University Press, Princeton.
- Koutsoyiannis, A. (1979), Modern Microeconomic (second edition) Macmillan Press, London.
- Layard, P.R.G. and A.W. Walters (1978), Microeconomic Theory, McGraw Hill, New York.
- Sen, A. (1999), Microeconomics Theory and Applications Oxford University Press, New Delhi.
- Stigler, G. (1996), Theory of Price (4th edition) Printice Hall of India, New Delhi.
- Varian, H. (2000), Microeconomic Analysis, W.W. Norton, New York.
- Case KE, Fair R C Osters, (2009) Principles of Economics (9th edition), Pearson
- Samuelson, P.A. (1947), Foundations of Economic Analysis, Harvard University Press, Cambridge, Mass.
- N Gregory Mankiw (2007) Economics: Principles and Applications, Learning India private limited.
- Joseph's Stiglitz and C. E Walsh (2007) Economics, W.W Norton and Co.



SEMESTER - III

1Y2ECO(C10)

PUBLIC FINANCE

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Public Expenditure

Theories of the Growth of Public Expenditure- Wagner's law of increasing state activities and Wiseman Peacock hypothesis,

Structure and Growth of Public expenditure in India, Effects of public expenditure on Production, Distribution and Economic Stability.

Budgeting Systems- Performance Budgeting, PPBS and Zero based budgeting.

Module – II Taxation

Theory of Incidence; Dalton's and Musgrave's concepts of incidence- Taxable Capacity Benefit and Ability to pay approaches, theory of optimal taxation

Indian Tax system, revenue of the Union, States and Local bodies; Major taxes in India

Reforms in direct taxes, taxes on services, GST, Non tax revenue of Central, State and Local Bodies

Module – III Public Debt and Public Sector Pricing

Classical View of Public Debt: Compensatory aspect of debt policy

Sources; effect and burden of public debt; Public debt and economic growth

Public debt and inflation, Public debt as a means of regulating economy

Principles of debt management and repayment.

Module – IV Fiscal and Monetary Policies

Objectives of Fiscal Policy- full employment, anti- inflation, economic growth, redistribution of income and wealth

Interdependence of Fiscal and Monetary policies,

Budgetary deficits, fiscal deficit, Revenue deficit and Monetary deficit its implications

Fiscal policy for stabilization- automatic V/s discretionary stabilization

Module – V Fiscal Federalism in India

State financial relation in Indian union budget, Expenditure pattern

Analysis of Union budget, Lack of flexibility in budget

Resource transfer from union to state and role of Finance commission

Fiscal crisis and fiscal sector reform in India

BASIC READING LIST

- Atkinson, A.B. and J.E. Stiglitz (1980), Lectures on Public Economics, Tata McGraw Hill, New York.
- Allen & Browale: Theory of Public Finance
- Auerbach, A.J. and M. Feldstern (Eds) (1985) Handbook of Public Economics, Vol. Im North Holland Amsterdam.
- Huchanan, J.M. (1970) The public Finance, Richard D. Irwin, Homewood Goode, R. (1860), Lectures on Public Economics, Tata McGraw Hill, New Delhi.
- Menutt, P. (1996), The Economics of Public Choice, Edward Elgar, U.K.
- Musgrave, R.C. (1959), The Theory of Public Finance, McGraw Hill Kogakhusa, Tokyo.
- Suoup, C.S. (1970), Public Finance, Aldine, Chicago.
- Shome, P. (Ed.) Tax policy: Handbook, Tax Division, Fiscal Affair Development International Monetary Fund. Washington, D.C.
- Dalton H: Public Finance
- Taylor: Public Finance
- Musgrave and Musgrave (1989) Public Finance Theory and practice, MCGrawHill
- J Hindricks, G Myles (2006) Intermediate Public Economics, MIT Press
- H Rosen T. Gayer (2009) Public Finance, McGRaw Hill
- Rangrajan and D K Srivastava (2005) Fiscal Deficit and Govt. Debt, EPW
- M Govind rao (2011) : A Study of Budgets, RBI (Latest)

SEMESTER - III

1Y2ECO(C11)

INTERNATIONAL ECONOMICS

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Theory of International Trade

The theory of International trade – theories of comparative cost advantage and opportunity costs.

Heckscher -Ohlin theory of trade, Leontief Paradox.

Samuelson Factor Price equalization Theorem, Stolper Samuelson's Theorem

Modern Theories of Trade: Strategic trade theory, N. N Trade Theory

Module – II Theory of Interventions and Gains from Trade

Economic effects of tariffs and quotas on national income, output, employment, Nominal, effective and optimum rates of tariffs - their measurement and impact.

Concept of Terms of trade, Theory of reciprocal demand, Factors affecting terms of trade

Nature of Gains, Sources of gains, Factor determining Gains

Criteria for measuring Gains from International Trade.

Module – III Monetary aspects of International Trade

Meaning and Components of Balance of Payments; Equilibrium and disequilibrium of Balance of Payments

Theory of Balance of Payment: Monetary and Absorption Theory, Elasticity Approach

Factors causing disequilibrium in balance of payments and its correction

Foreign Trade Multiplier

Module – IV Exchange Rate

Concept of Foreign exchange rate, fixed and flexible exchange rates, Convertibility of currency

Devaluation -Devaluation of Indian Rupee and its impact on our economy

Theories of exchange rate determination.

Module - V — International Economic Co-operation & Organisation

Forms of economic cooperation; Static and dynamic effects of a custom union and free trade areas
Rationale and economic progress of SAARC regions, Asian Development bank – their achievements and shortcomings.

Reforms of the International monetary system, India and developing countries

Functions of WTO, IMF, World Bank

BASIC REDING LIST

- Bhagwati, J.N. (ed), International Trade : Selected Readings. Cambridge University Press, Cambridge.
- Carbough, R.J. (1999), International Economics, International Thomson Publishing, New York.
- Chacholiades, M. (1990), International Trade Theory and Policy, McGraw Hill, Kohakusha, Tokyo, Japan.
- Dana, M/s (2000), International Economics: Study, Guide and Workbook (5th Ed) Routledge Pub. London.
- Dunn, R.M. and J.H. Mutto (2000), International Economics, Routledge, London.
- Kenen, P.B. (1994), International Economy; Cambridge University Press, London.
- King, P.O. (1995), International Economics and International Economic Policy: A Reader McGraw Hill International, Singapore.
- Salvatore, D. (1997), International Economics, Prentice Gall, Upper Saddle River, N.J. New York.
- D Salvatore (2011) International Economics : Trade and Finance John Wiley
- Soderston, Bo (1991), International Economics, Macmillan Press, London.
- R.Findlay in Jones, R.W. and Kenen (ed)-"Handbook of International Economics", vol. I and vol. II, North Holland, 1984.
- Amrita Narlikar (2005): The World Trade Organization-A very shortintroduction.
- Krugman, P - Rethinking International Trade. MIT Press, 1990
- Paul Krugman, Maurice Obetfeld and Mare Melitz (2012) International economics: Theory and policy, Addison- Wesley

SEMESTER- IV

GROUP- 'A'

1Y2ECO(EC1A1)

MATHEMATICAL ECONOMICS & OPERATION RESEARCH

Full Marks - 70

Time - 3 Hrs.

Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain 7 short answer questions carrying 2 marks each.

Module – I Micro Economics Application

Utility Maximization: Cardinal and Ordinal utility maximization, Indirect Utility Function and Duality theorem, Substitution Effect and Slutsky equation

Compensated and normal demand function; Revealed preference theory

Homogeneous production function; Properties of Cobb-Douglas production function, Euler's Theorem, Production possibility curve; Technical progress through production function.

Cobweb model: (Supply lag and Demand Lag) Simple Continuous Cob-web Model and Model with stocks, Single market equilibrium – Marshallian and Walrasian equilibrium conditions

Module – II Macro Economic Application

Difference Equations: Distributed and Lagged, First and second order difference equation.

Differential Equations: First order and second order differential equation (general and particular solution) with economic application;

Dynamic monetary model; Static and dynamic multiplier; Determinants of investment; Accelerator,

Harrod Problem, Harrod- Domar growth model.

Module – III Theory of Matrix and Linear Programming

Matrix: Symmetric and Skew - Symmetric; Orthogonal matrix, Characteristics roots and vectors; Idempotent matrix; Quadratic forms, Solution of equations by matrix method

Linear Programming, Primal and Dual; Steps in construction of dual duality theorem

Solution of linear programming by graphical method.

Module – IV Game Theory and Input Output Analysis

Concept of Game theory; Pure and Mixed strategies; Maximum and Mini - max solution;

Saddle point; Solution of Games by pure and mixed strategy

Graphical solution of Games 2x2 Pay off matrix.

Input Output Analysis – Open and Closed systems; Hawkins - Simon Conditions; Solution under three industries.

BASIC READING LIST

- Allen R.G.D. (1976) Mathematical, Economics, Macmillan
- Arrow, K.J. and M. Intriligator (Eds.) (1982) Hand book of Mathematical Economics, Vol. 1, 2 and 3 North Holland, Amsterdam.
- Henderson, J.M. and R.E. Quandt (1980) Micro Economic Theory : A Mathematical approach McGraw Hill, New Delhi.
- A. C Chiang & K Wainwright (2013) Fundamental Method of Mathematical Economics, McGraw Hill
- E. T. Dowling (2001) Introduction to Mathemeatical economics, McGraw Hill
- K Sydaster & P J Hammond (2015) Mathematics for economic Analysis, Pearson.



SEMESTER - IV

GROUP - 'A'

1Y2ECO(EC1A2)

**ADVANCED
ECONOMETRICS – I**

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Introduction to Econometrics

Nature, Meaning scope and importance of econometrics
Stochastic term and its importance, Assumptions of error terms
Simple Regression Model, Estimation of Parameters and properties of Least square estimates
Gauss Markov theorem; Concept and derivation of R^2 and Adjusted R^2 ;

Module – II Econometric Problems in Regression Analysis

Nature, Test, Consequences, Reasons of Multicollinearity and Heteroscedasticity and their corrections, Transformation of Heteroscedasticity into Homoscedasticity
Transformation of non-linear into linear ones; logarithmic, reciprocal and logarithmic reciprocal.
Auto correlation, First order Auto regressive scheme, Mean, variance and co-variance of auto co- related U's, Durbin Watson test and graphical test.
Problems of Auto-correlation - Application, Almond Approach to distributive lag model.

Module – III Regression with Qualitative Independent variables

Dummy variable technique testing structural stability of regression models, Seasonal analysis, Piece- wise linear regression, Use of dummy variables;
Regression with dummy dependent variable; LMP, LOGIT, PROBIT and TOBIT model & its applications
Autoregressive and distributed lag models – Koyck model

Module – IV Dynamic Econometric model

Partial adjustment model (PAM)
Error correction mechanism, causality test, Granger test

BASIC READING LIST

- Chung, J.W. (1993) Utility and production: Theory and applications, Basil Blackwell, London.
- Ferguson, H. (1976) Neo Classical Production and distribution.
- Amemiya, T. (1985), Advanced Econometrics, Harvard Univ. Press, Cambridge, Mass.
- Baltagi, B.H. (1998) Econometrics, Springer, N.Y.
- Dongherty, C. (1992) Introduction to Econometrics, Oxford University Press, New York.
- Goldberger, A.S. (1998), Introductory Econometrics, Harvard University Press, Cambridge Mass.
- Gujarati, D.N. (1995) Basic Econometrics (2nd Edn.) McGraw Hill, New Delhi.
- Hill, R.C., E.G. William and G.G. Judge (1997), Undergraduate Econometrics, Wiley, New York.
- Kennedy, P. (1998), A Guide to Econometrics (4th Edn), MIT Press, New York.
- Kmenta, J. (2008), Elements of Econometrics (Reprint Ed) Khosla Publishing House, New York.
- Koutsoyiannis, A. (1977), Theory of Econometrics (2nd ed.) The Macmillan Press Ltd., London.
- Krishna, K.L. (Ed) (1977) Econometrics Applications in India O.U.P. New Delhi.
- Maddala, G.S. (Ed.) (1993), Econometrics Methods and Applications (2 Vols) Aldershot, U.K.
- Theil, H. (1981), Introduction to Econometrics, Prentice Hall of India, New Delhi.
- Stock, James H. and Mark W. Watson (2007), Introduction to Econometrics, 2/E, Pearson
- J. Jhonston 2016 Econometric model
- D.N Gujrati & d C Porter (2009) Essential of econometrics McGraw hill
- Christopher Dougherty (2007) Introduction to Econometrics, Oxford University Press
- Nachanee econometrics

SEMESTER IV

GROUP- 'A'

1Y2ECO(EC1A3)

**ADVANCED
ECONOMETRICS - II**

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Simultaneous Equation Model

The Simultaneous equation – Bias and inconsistency of OLS estimators; Structural form and reduced form models;

The identification problem; Rules of identification; Order and rank conditions.

Methods of estimating simultaneous equation system, recursive methods of OLS;

Indirect least squares (ILS); Two-stage least square (2SLS);

Module – II Time Series Analysis

Stationary and Non-stationary Time series and Unit roots co-integration- Spurious regression,

Dickey Fuller Test, Engle Garner test, Random Walk Model

AR, MA and ARIMA, Estimation of ARIMA and forecasting with ARIMA,

Vector Auto Regression (VAR), Problem with VAR Modeling, Box - Jenkins (BJ) Method

Module – III Multivariate Analysis

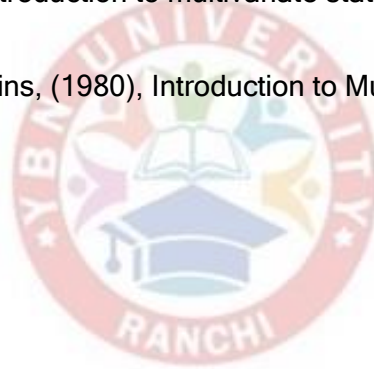
Maximum Likelihood (M-L) method,

General linear model (GLM), Generalised Least Square (GLS)

Multivariate probability distribution: Multivariate normal distribution and its properties, Marginal and Conditional probability distribution, Discriminant analysis.

BASIC READING LIST:

- Amemiya, T. (1985), Advanced Econometrics, Harvard Univ. Press, Cambridge, Mass.
- Baltagi, B.H. (1998) Econometrics, Springer, New York.
- Goldberger, A.S. (1998), Introductory Econometrics, Harvard University Press, Cambridge Mass.
- Gujarati, D.N. (1995) Basic Econometrics (2nd Edn.) McGraw Hill, New Delhi.
- Gujarati D.N., Dawn C Porter, Sangeetha Gunasekar (2012) Basic Econometrics (5th Edn.) McGraw Hill, New Delhi
- Kmenta, J. (1997), Elements of Econometrics (Reprint Ed) University of Michigan Press, New York.
- Koutsoyiannis, A. (1977), Theory of Econometrics (2nd ed.) The Macmillan Press Ltd., London.
- Maddala, G.S. (Ed.) (1993), Econometrics Methods and Applications (2 Vols) Aldershot, U.K.
- Franses, P.H. (1998), Time series models for business and Economic Forecasting, Cambridge Unit Press, Cambridge.
- Intriligator, M.D. (1978), Econometric Methods techniques and application Prentice Hall, Englewood cliffs, New Jersey.
- Anderson, T.W. (1958) Introduction to multivariate statistical Analysis, Chapman and Hall, London.
- Chatfield, C and A.J. Collins, (1980), Introduction to Multivariate Analysis, Chapman and Hall, London.
- Nachana Econometrics



**SEMESTER- IV
GROUP- B**

1Y2ECO(EC1B1)

AGRICULTURE & LABOUR ECONOMICS

AGRICULTURE ECONOMICS - I

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Agriculture and Economic Development

Nature and scope of agriculture and rural economics: Traditional agriculture and its modernization; Role of Agriculture in Economic Development; Sustainable Agriculture.
Problems of Inputs in Indian Agriculture: Irrigation, Power, Seeds, Fertilizer
Agricultural Development in India, Recent trends in agriculture growth in India

Module – II Diversification of Rural Economic Activities

Livestock economics - livestock resources and their productivity; Problems of marketing; White revolution; Fishery and poverty development; Forestry, horticulture;
Rural Non-Farm Sector (RNFS) uses and challenges

Module – III Agricultural Productivity and Marketing

Agricultural production: Resource use and efficiency production function analyses in agriculture.
Factor combination and resources substitution cost and supply curve size of farm and Productivity debate in India, laws of returns
Resource use efficiency in traditional agriculture; Technical change, labor absorption, Feminization of Agriculture
Marketing and state policy, Agricultural Markets and marketing efficiency - marketing functions and costs

Module – IV Land Reform, Land Policy & Co-operation in India

Land Reform measures and performance; Recent Changes in Land Policies
Land utilization; Land distribution structure and trends; Rent; Land tenures and Farming systems – collective and state farming; Tenancy and crop sharing – forms, with special reference to India.
Co-operative movement in India; Genesis and growth of co-operative sector; agricultural cooperation in India;
Problem and prospect of cooperative institutions.

Module – V Rural Labour Market

Rural Labour Supply, Interlocking of factor markets; Mobility and Productivity of labour
Wage Determination: Classical, Neo-classical and bargaining theories of wage determination; Concept of minimum wage, leaving wage and fair wage in theory and practice; National wage policy; Bonus systems and profit sharing.
Nature extend and trends in rural unemployment, Agricultural wages in India, Male-female wage differences
Non-Agricultural rural employment - trends and determinants.

BASIC READING LIST

- Bhaduri, A. (1984), The Economic Structure of Backward agriculture, Macmillan, Delhi
- Bilgrami, S.A.R. (1996), Agriculture Economics, Himalaya Publishing House, Delhi.
- Dantwala, M.L. et al. (1991), Indian agricultural Development since Independence, Oxford and IBH, New Delhi.
- Deogharia, P.C. (2008) Rural Credit In India, Satyam Publication, New Delhi.
- Government of India (1976), Report of to National Commission on agriculture, New Delhi.
- Government of India, Economic survey (Annual)
- Gulati, A and T. Kelly (1999), Trade Liberalization and Indian agriculture, O.U.P. New Delhi
- Joshi, P.C. (1975) Land Reforms in India: Trends and prospects. Allied Publishers, Bombay
- Kahlon, A.S. and D.S. Tyagi (1983), Agriculture price Policy in India, Allied Publishers, Bombay
- Barbara Harriss-White -Rural Commercial Capital -Agricultural Markets in West Bengal
- Agricultural Markets From Theory To Practice: Field Experience In Developing Countries by Barbara Harriss-White
- Terence J. Byres Paths of capitalist Agrarian transition in the past and in the contemporary world.
- V.K. Ramachandran and Madhura Swaminathan Agrarian Studies: Essays on Agrarian Relations in Less-Developed Countries Edited, New Delhi: Tulika Books. 2002. ISBN 81-85229-57-0
- Utsa Pattnaik ,Indian agriculture in the world economy

SEMESTER-IV

GROUP-B

1Y2ECO(EC1B2)

AGRICULTURE ECONOMICS & RURAL LABOUR - II

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Economic of Rural Infrastructure

Problems of Rural Economy - Economic, social and others, Modes and problems of rural electrification

Use of Land, water and energy; rural transport, communication

Problems of Rural finance; Rural credit, Financial inclusion

Rural social infrastructure - education and health and information dissemination

Module – II Agricultural & Rural Finance

Need of agriculture finance, Role of capital and rural credit; rural saving and capital formation

Characteristics and sources of rural credit - Institutional and non institutional; reorganization of rural credit - cooperatives, commercial banks, Regional rural banks

Role of NABARD

Module – III Agricultural Prices

Marketing and State Policy: Agricultural markets and marketing efficiency, Regulated marketed and marketable surplus, Behaviour of agricultural price – Cobweb model

Price and income stability; State policy with respect to agricultural marketing, warehousing; Prices, Taxation and crop insurance;

Terms of trade between agriculture and non agricultural Prices; Need for state intervention

Objectives of agricultural Price policy; instruments, Food security in India and public distribution system.

Module – IV Agricultural Growth in India

4.4 Cropping patterns, Crops shifting

Pricing of inputs and role of subsidies

Distribution of gains from technological change, Role of public investment and capital formation in Indian agriculture strategy of agricultural development and technological progress

Sustainable agriculture - indigenous practices; Bio-technological practices and growth potential, Need of Second Green Revolution, Climate change and its impacts

Module – V Agriculture and External Sector

International Trade in agricultural commodities

Commodity agreements - Role of World Trade Organization

International Trade in agriculture, Role of MNCs.

Globalization of Indian Economy and problems and prospects of Indian agriculture, Impact of World Trade Organization on Indian Agriculture

BASIC READING LIST

- Bhaduri, A.(1984) The Economic Structure of backward Agriculture, Macmillan, Delhi
- Bilgrami, S.A.R. (1996), Agricultural Economics, Himalaya Publishing House, Delhi.
- Dantwala, M.L. et. al (1991), Indian Agricultural Development Since Independence, Oxford & IBH, New Delhi.
- Deogharia P.C. (2008) Rural credit in India, Satyam Publication, New Delhi.
- Government of India (1976), Report of the National Commission on Agriculture, New Delhi.
- Government of India, Economic Survey (Annual), New Delhi.
- Gulati, A. and T. Kelly (1999), Trade Liberalisation and Indian Agriculture, Oxford University Press, New Delhi.
- Joshi, P.C. (1975) Land Reforms in India: Trends and prospects, Allied Publishers, Bombay.
- Kahlon, A.S. and Tyagi d.S. (1983), Agriculture price Policy in India, Allied Publishers, New Delhi.
- Rao, C.H. Hanumantha (1975), Agricultural Growth, Rural Poverty and Environmental Degradation in India, Oxford University Press, New Delhi.
- Reserve bank of India, Report on Currency and Finance (Annual), Mumbai.
- Rudra, A. (1982), Indian Agricultural Economics : Myths and Reality, Allied Publishers, New Delhi.
- Saini, G.R. (1979), Farm Size, Resource Use Efficiency and Income Distribution, Allied Publishers, New Delhi.
- Datt, G. (1996), Bargaining Power, Wages and Employment : An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.
- Hajela, P.d. (1998), Labour Restructuring in India : A Critique of the New Economic Policies, Commonwealth Publishers, New Delhi.
- Jhabvala, R and R.K. Subramanya (Eds) (2000). The Unorganized Sector : Work Security And Social Protection, Sage Publication, New Delhi.
- Lester, R.A. (1960), Economics of Labour (2nd Edition), Macmillan, New Delhi.
- Papola T.S., P.S. Ghosh and A.N. Sharma (Eds) (1993), Labour Employment and Industrial Relations in India, B.R. Publishing Corporation, New Delhi.
- Rosenberg, M.R. (1988), Labour Markets in Low Income Countries in Chenery, H.B. and T.N. Srinivasan (Eds), The handbook of Development Economics, North - Holland, New York.
- Venkata Ratnam, C.S. (2001), Globalization and Labor-Management Relations: Dynamics of Change, Sage Publication/Response Books, New Delhi.

**SEMESTER - IV
GROUP - B**

1Y2ECO(EC1B3)

**INDUSTRIAL & LABOUR
ECONOMICS - III**

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Framework and Problems of Industrial Economics

Concept and organization of a firm, Classification of firm on the basis of Ownership structure (Public, Private, Joint and Cooperative Sectors); Objectives of firm, behavioral model of firm

Location of Industries – Weber, Sargent Florence, Factors Influencing Location of Industries
Industrial Sickness – Symptoms, Causes and Remedial Measures.

Module – II State of labour

Static and social security of labour – Concepts of Social Security, Social assistance and social insurance; Policies with special respect to social security
labour welfare in India- Special Problems of labour, female labour, Child labour, need for safety nets.
Labour Reforms- Second National Commission on labour; labour market reforms; exit policy.
Labour Market Policies: Mobility of Labour

Module – III Industrial Relations

Theories of Labour movement growth; pattern and structure of labour unions in India.
Causes of industrial disputes and their settlement and prevention.
Current trends in collective bargaining.
Labour legislation in India.

Module – IV Industrial Productivity and Finance

Productivity – Measurement, Factors affecting Productivity, Importance of Productivity in the Competitive Environment
National Production Movement in India.
Industrial Finance- Owned, external and other components of funds, Major funding agencies IDBI, IFCI, SFCs, SIDBI and Commercial banks.
Role of FDIs in Industrial development.

Module – V Indian Industrial Growth and Pattern

Industrial Policy in India – Role of Public and Private Sector.
Problems of MSME in India, Role of MNC's in India.
Recent trends in Indian Industrial growth, Regional Industrial growth in India.
Industrial Development and Environmental Preservation- Pollution control policies of industries.

BASIC READING LIST

- Ahluwalia, I.J. (1985), *Industrial Growth in India*, Oxford University Press, New Delhi.
- Barthwal, R.R. (1985), *Industrial Economics*, Wiley Eastern Ltd., New Delhi.
- Cherunilam, F. (1994), *Industrial Economics: Indian Perspective (3rd Edition)* Himalaya Publishing House, Mumbai.
- Desai, B. (1999), *Industrial Economy in India (3rd Edition)*, Himalaya Publishing House, Mumbai.
- Divine, P.J. and R.M. Jones et. Al. (1976) *An Introduction to Industrial Economics*, George Allen and Unwin Ltd., London.
- Government of India, *Economics Survey (Annual)*
- Hay, D. and D.J. Morris (1979) *Industrial Economics: Theory and Evidence*, Oxford University Press, New Delhi.
- Kuchhal, S.S. (1980), *Industrial Economy of India (5th Edition)*, Chaitanya Publishing House, Allahabad.
- Reserve Bank of India, *Report on Currency and Finance (annual)*.
- Singh, A. and A.N. Sadhu (1988), *Industrial Economics* Himalaya Publishing House, Bombay.
- Weber, Alfred. 1929. (translated by Carl J. Friedrich from Weber's 1909 book). *Theory of the Location of Industries*. Chicago: The University of Chicago Press
- Isard, Walter. 1956. *Location and Space-economy; a General Theory Relating to Industrial Location, Market Areas, Land Use, Trade, and Urban Structure*. Cambridge:



SEMESTER - IV

GROUP- 'C'

1Y2ECO(EC1C1)

POPULATION STUDIES -I

Full Marks – 70

Time: 3 Hrs.

Candidates will have to answer five questions out of total of nine questions. At least one question from each module will be set. Question no. 1 will be compulsory, which will contain 7 short questions carrying 2 marks each.

Module I: Population and Development

Meaning and scope of Demography
Components of Population growth and their interdependence
Measure of Population change; structure, distribution and sources of population data
Theories of Population - Malthus, Optimum Theory of
Population Theory of demographic transition, view of Meadows,
Enke and Simon
Population and development

Module II: 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 more developed and less developed countries
Determinants of age and sex structure, demographic effect of sex and age structure,
economic and social implications of age structure, pyramids and projections.
Individual ageing and population ageing

Module III: Fertility, Nuptuality and Mortality

Importance of study of fertility - Total Fertility Rate, Gross Reproduction rate and Net
Reproduction Rate, Levels and trends of fertility in more and less developed countries
Factor effecting fertility - Socio- economic factors, economic status, health, education,
Nutrition, caste, religion, race, region, rural-urban status of husband and wife
Nuptuality concept and analysis of marital status, single mean age at marriage, synthetic
cohort methods, trends in age at marriage.
Mortality- Death rate crude and age specific mortality at birth and infant mortality rate,
Factors for decline in mortality in recent past.

Module IV: Migration and Urbanization

Concept and types- temporary, internal and international
International migration - its effect on population growth and pattern; factors affecting migration
Theories of migration related to internal migration
Urbanization - Growth and Distribution of rural- urban population in developing countries.

Basic Reading List:

Agarwala, S.N (1972) India's Population Problem, Tata McGr Hill Co. Bombay
Bose, A (1996), India's Basic Demographic Statistics, B.Publlishing Corporation,
New Delhi Bogue, D.J (1971), Principles of Demography, John Wiley, New York
Chenery, H. and T.N.Srinivasan, (Eds) (1989), Handbook Development Economics,
Vol, 1 and 2 Choubey, P.K (2000) , Population Policy in India, Kanish Publication,
New Delhi
Coale, A.J and E.M. Hoover (1958) Population Growth and Economic development in low
income countries : A Case study of India's prospects, Princeton University Press, Princeton
Gulati, S.C (1988) Fertility in India; An Econometric Study , A Metropolis, Sage Publications,
New Delhi Simon, J.L (1992), Population and Development in PeI Countries, Princeton
University Press.
Srinivasan, K. (1988) Basic Demographic Techniques and Applications, Sage Publications,
New Delhi Srinivasan, K and A . Shariff (1988) , India; Towards Population and Demographic
Goals, Oxford University Press, New delhi
United Nations (1973) The Determinants and
Consequence Population Trends , Vol I UNO
Publications, New York



SEMESTER-IV

GROUP- 'C'

1Y2ECO(EC1C2)

**POPULATION
STUDIES- II**

Full Marks – 70

Time: 3 Hrs.

Candidates will have to answer five questions out of total of nine questions. At least one question from each module will be set. Question no. 1 will be compulsory, which will contain 7 short questions carrying 2 marks each.

Module –I Demographic data Base in India

Study of census in India – Methodology and Characteristics of Census
Nature of information collected in 1971, 1981, 1991, and 2011 census India
National Family Health Survey 1 and 2 and rapid household survey
Changing characteristics of population in India; Population growth rates, trends and regional variations in sex ratio; Age structure population, foetal , infant and child mortality rates; Life expectancy
Appraisal of Kerela Model
Pattern of Urbanization and Migration in India

Module – II Population and Development with Reference to India

2.1 Population, Economy and environment linkages- population, health, nutrition, productivity nexus, population and human development issues; Culture and Fertility, Education and Fertility; Demography and household economic behavior.

Module – III Population Policy

Population and strategies for human development of different social groups; Social impact of new productive techniques and their regulation
The New population policy
Tasks before the National Population Commission

Module –IV Population Policy in India

Evolution of Population policy in India - Shift in policy from population control to family welfare, to women empowerment
Family Planning strategies and their outcomes
Reproductive health, maternal nutrition and child health policies

Basic Reading List:

Agarwala, S.N (1972) India's Population Problem, Tata McGr Hill Co. Bombay

Bose, A (1996), India's Basic Demographic Statistics, B.Publlishing Corporation, New Delhi

Bogue, D.J (1971), Principles of Demography, John Wiley, New York

Chenery, H. and T.N.Srinivasan, (Eds) (1989), Handbook Development Economics, Vol, 1 and 2

Choubey, P.K (2000) , Population Policy in India, Kanish Publication, New Delhi

Coale, A.J and E.M. Hoover (1958) Population Growth and Economic development in low income countries : A Case study of India's prospects, Princeton University Press, Princeton

Gulati, S.C (1988) Fertility in India; An Econometric Study , A Metropolis, Sage Publications, New Delhi

Simon, J.L (1992), Population and Development in PeI Countries, Princeton University Press.

Srinivasan, K. (1988) Basic Demographic Techniques and Applications, Sage Publications, New Delhi

Srinivasan, K and A . Shariff (1988) , India; Towards Population and Demographic Goals, Oxford University Press, New delhi

United Nations (1973) The Determinants and Consequence Population Trends , Vol I UNO Publications, New York



SEMESTER - IV

GROUP - 'C'

1Y2ECO(EC1C3)

POPULATION STUDIES- III

Full Marks – 70

Time: 3 Hrs

Candidates will have to answer five questions out of total of nine questions. At least one question from each module will be set. Question no. 1 will be compulsory, which will contain 7 short questions carrying 2 marks each.

Module – I

Demographic and Futurological issues, sex, ratio, age. Consumption regional difference, rural urban, tribal, women population structure with reference to women

Module – II

Population policy and status of women, health and education policy of women in India, Population Structure of Tribal and Rural women in Chotanagpur, Comparison with other parts of the country, Problems and Remedy

Module – III

Demographic structure in developed and developing countries, Population Estimates and Projection Human Development: Measures and implications of population growth on Human Development

Module – IV

Changing characteristics of population in India: Growth rates, trend and regional variations in sex ratio; age structure of population, Factors responsible for high fertility rate in India, Population Policy since independence

Readings:

Bonar, James : Malthus and His

Works Bogue, D.J. : Principles of
Demography

Bhende, A.A. and Kanitkar T. : Principles of Population Studies

Coale A.J. and Hoover E.M. : Population Growth and Economic Development in Low Income
Countries: A Case Study of India's Prospects.

Coontz, Sydney H. : Population Theories and The Economic

Interpretation Agarwal S.N. : India's Population Problems

Thomson, Warren S. and : Population

Problems Levis, David T

Govt. of India : Census of India

Chaubey, P.K. : Population policy in India

Simon J.L. : Population and development in poor

countries Srinivasan K. : Basic Demographic techniques

and Applications Srivastava O.S. : Demography and Population

**SEMESTER - IV
GROUP - 'A'**

1Y2ECO(EC2A1)

**WOMEN
STUDIES – I
(Gender &
Development)**

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I

Demography of female population: Age structure, mortality rates, and sex ratio – Causes of declining sex ratios and fertility rates in LDCs and particularly India; Women and their access to nutrition, health, education.

Module – II

Economic status of women and its effect on work-participation, income level, health, and education in India. Impact of technological development on women's work participation in agriculture and non- agriculture rural activities, small and cottage industries.

Module – III

Fertility: Meaning, Concepts – CBR, ASBR, GFR, GRR and Factors affecting fertility.

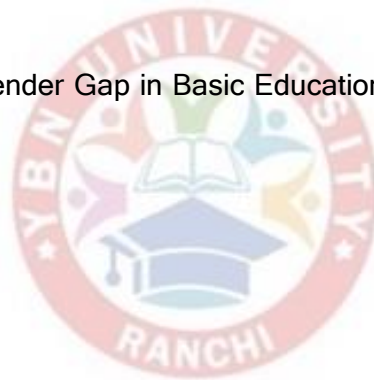
Nuptality: Meaning, Concepts – CMR, SMR, GMR, Determinants of nuptality, Marital Dissolution

Module –IV

Social security of women: entitlements, ensuring economic independence, Self help groups in providing social security; Schemes for safety net for women; Democratic decentralization (panchayats) and women's empowerment in India.

BASIC READING LIST:

- Boserup E. (1970), Women's Role in Economic Development, George Allen and Unwin, London.
- Desai, N. and M.K. Raj. (Eds.) (1979), Women and Society in India, Research Centre for Women Studies, SNDT University, Bombay.
- Government of India (1974), Towards Equality – Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi.
- Krishnaraj, M., R.M. Sudarshan and A. Shariff (1999), Gender , Population and Development, Oxford University Press, New Delhi.
- Seth, M. (2000), Women and Development : The Indian Experience, Sage Publications, New Delhi.
- Srinivasan K. and A. Shroff (1998), India: Towards Population and Development Goals, Oxford University Press, New Delhi.
- Venkateswaran, S. (1995), Environment, Development and the Gender Gap, Sage Publications, New Delhi.
- Wazir, R. (2000), The Gender Gap in Basic Education: NGOs as Change Agents, Sage Publications, New Delhi.



SEMESTER - IV

GROUP - 'A'

1Y2ECO(EC2A2)

**WOMEN STUDIES – II
(Gender &
Development)**

Full Marks – 70

Time: 3 Hrs.

Candidates will have to answer five questions out of total of nine questions. At least one question from each module will be set. Question no. 1 will be compulsory, which will contain 7 short questions carrying 2 marks each.

Module -I

Economic growth and gender equality. Globalisation of the world economy and gender status. Feminisation of poverty. Women's contribution to GDP Impact of economic growth on gender (in- equality. Impact of gender equality on economic growth and socio-economic development. Concept of the "feminisation of poverty". Basic causes of the feminisation of poverty.

Module – II

Gender inequality in the labour market, Factors affecting female entry in labour market- particularly India; female work participation in agriculture, non-agricultural rural activities, cottage and small-scale industries, and services sector, Problems of female labour.

Module – III

Women in the labour force, labour market theories, segmented labour market, determinants of women's employment, occupational pattern of women in India, inter - state comparisons of contribution of women to GNP in India, problems and working conditions of Indian women.

Module – IV

Economic of tribal and rural women in Chotanagpur, Comparison with other parts of the state and country, problems and remedy

SEMESTER - IV

GROUP - 'A'

1Y2ECO(EC2A3)

WOMEN STUDIES –III (Gender & Development)

Full Marks – 70

Time: 3 Hrs.

Candidates will have to answer five questions out of total of nine questions. At least one question from each module will be set. Question no. 1 will be compulsory, which will contain 7 short questions carrying 2 marks each.

Module -I

Distribution of resources and decision-making mechanisms, Distribution of time: work in the labour market, work in the household, leisure time. Demographic changes and gender status. The gender factor in demographic development. The gender shift and demographic development

Module – II

Global demographic changes: impact on gender status. Gender interpretation of the causes of the demographic shift in birth rates: micro- and macro-level. The concept of the gender shift: substance, stages, indicators. Demographic interpretations in the concept of the gender shift.

Module -III

Gender budgets. Gender review Gender budgets and gender budgeting. Methodology of gender budget preparation. Approaches and principles of gender budgeting. Experiences of different countries in gender budgeting. The children's budget as a type of social budget: Russian experience. Main principles of gender review of socio-economic and demographic development of countries and regions.

Module -IV

Gender policy: national, regional and global level. Gender inequality indicators Objectives and methods of gender policy. Main gender issues in socio-economic development in developed countries, developing countries. Gender issues in the Millennium Development Goals. Indicators of gender differences in socio-economic development. Incorporation of the gender factor into the Human Development Index.

Basic Reading Lists:

Boserup E. (1970), Women's Role in economic Development, George Allen and Unwin, London.

Desai, N. and M.K.Raj (Eds) (1979), Women and Society in India, Research Centre for Women Studies, SNDT University, Bombay.

Government of India (1974), Towards Equality- Report of the Committee on the Status of Women in India, Department of Social Welfare, Ministry of Education and Social Welfare, New Delhi.

Krishnaraj, M.R.m.Sudarshan and A.Shariff (1999), Gender, Population and development, Oxford University Press, New Delhi.

Seth, M. (2000), Women and Development: The Indian Experience, Sage Publications, New Delhi.

**SEMESTER-IV
GROUP- 'B'**

1Y2ECO(EC2B1)

**ENERGY, RESOURCE & ENVIRONMENTAL
ECONOMICS - I**

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Basic Issues of Environment Economy Trade Off

Laws of Thermodynamics

Environmental asset as public good - Concept of externality and market failure

Pareto optimality in the presence of external effects in production.

Module – II The Theory of Environmental Policy

Pollution as negative externality - optimal pollution; The concept of property right - Coase theorem; Potential for market bargain in externality - criticism of Coase theorem.

Taxation and optimal pollution - The optimal Pigovian tax - Pollution changes and property right - Pollution changes and abatement cost.

Environmental standards - The inefficiency of standard setting - Taxes Vs Standards - Baumol and Oates least cost theorem.

Tradable pollution permits - The basic theory of TPPs - Type of permits - advantage of TPPs.

Module – III Common Pool Resources

Tragedy of the commons

Nature of dependence on common pool resources

Empirical studies on CPR in Indian context

Module – IV Environmental Accounting

Basic Theory of Environmental Accounting

A Dynamic Optimization Model on National Income - Hawtrick's rule and sustainable income

Environmentally adjusted national product and sustainable resource management -

illustrations with various types of non-renewable and renewable resources

BASIC READING LIST

- D Pearce and RK Turner: Economic of Natural Resources and the Environmen, Prentice.
- N. Hanley, J. Shogren and B. White : Environmental Economics in Theory and Practice, Macmillan.
- R.N. Bhattacharyya (Ed.) : Environmental Economics, OUP
- J.M. Conrad and C. Clark : Natural Resource Economics, CUP
- J.M. Conrad : Resource Economics, Cambridge Univ. Press
- Phillip Neter : Natural Resource Economics.
- Anthony Fisher : Environmental and Resource Economics, Edward Elgar
- Kanchan Chopra, Purnamita Dasgupta “Natural Resource Dependence on Common Pool Resources : An Empirical Study EPW Feb 23-29, 2008.
- D. Browley (Ed.) The Handbook of Environmental Economics,



SEMESTER- IV

GROUP- 'B'

1Y2ECO(EC2B2)

**ENERGY, RESOURCE & ENVIRONMENTAL
ECONOMICS - II**

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Natural Resource Scarcity & Regulation

Malthusian and Ricardian scarcity, Physical measures and economic measures

Resource scarcity mitigation , recycling and substitution

Regulation under Imperfect Market and Transaction Cost: Issues of efficiency in water transfer

Module – II Economics of Non-Renewable Resource

Basic concepts - Hotelling rule - The concept of backstop - A simple model of optimal depletion
Perfect competition and monopoly in non-renewable resource market.

Optimum extraction of exhaustible resources - General model, imperfect competition

Exploration and externality, non convexity, efficiency and equilibrium in exhaustible resource depletion

Module – III Economics of Renewable Resource – I

Economic of fishery - Growth function - logistic model

The sustained yield function - Schaefer model - Underlying assumptions - Drawbacks of MSY

Static model of fishery - Profit maximization

Comparison of MSY and open access condition

Module – IV Economics of Renewable Resource – II

Economics of forestry - The volume function and the mean annual increment - optimal
single rotation - The rotation

Timber supply in the short run and in long run - The comparative static effects

BASIC READING LIST

- D Pearce and RK Turner: Economic of Natural Resources and the Environmen, Prentice.
- N. Hanley, J. Shogren and B. White : Environmental Economics in Theory and Practice, Macmillan.
- R.N. Bhattacharyya (Ed.) : Environmental Economics, OUP
- J.M. Conrad and C. Clark : Natural Resource Economics, CUP
- J.M. Conrad : Resource Economics, Cambridge Univ. Press
- Phillip Neter : Natural Resource Economics.
- Anthony Fisher : Environmental and Resource Economics, Edward Elgar
- Kanchan Chopra, Purnamita Dasgupta “Natural Resource Dependence on Common Pool Resources : An Empirical Study EPW Feb 23-29, 2008.
- D. Browley (Ed.) The Handbook of Environmental Economics,



SEMESTER- IV

GROUP- 'B'

1Y2ECO(EC2B3)

ENERGY, RESOURCE & ENVIRONMENTAL ECONOMICS - III

Full Marks - 70

Time - 3 Hrs.

*Candidates will have to answer **five** questions out of total of **nine** questions. At least one question from each module will be set. **Question no. 1 will be compulsory**, which will contain **7** short answer questions carrying **2** marks each.*

Module – I Environmental Valuation and Impact Assessment

Environmental Valuation and Cost-benefit Analysis;
Revealed preference Approach (Household Production Function, Travel cost, Hedonic Price, Statistical value of life);
Stated Preference Approach (Contingent Valuation Method);
Environmental Impact Assessment: Case Studies in Indian Context

Module – II Economics of Climate Change

Climate Change - Scientific Evidences, Likely Impact on Economy, Adaptation & Mitigation
Economics of Climate Change - Why policies differ, Cost & Burden Sharing
UNFCCC and the Global Protocols

Module – III Energy Environment Linkage

Energy Use as the driver of Climate Change
Energy and Growth - Energy Intensity of GDP, Recent Changes in Energy Intensity,
Macroeconomic Impact of Energy Price Changes (theory), Forward & Backward Linkages
between Energy & Economy

Module – IV Energy Demand Analysis

Network Model - Reference Energy Systems (RES)
Energy Accounting Framework - Energy Balance Table, Structure, Format and
Conventions; Sankey Disgrams
Demand Forecasting - Baseline Analysis, Trend Analysis, Process Modelling Approach,
Econometric Energy Demand Modelling
Area of Interventions for Energy Demand Management - Technology, Pricing, Regulations;
Examples from Indian context

SEMESTER - IV

1Y2ECO(EC2C1)

Group - 'C'

DEMOGRAPHY

Module I: Introduction to Demography

Meaning, subject matter and Importance of demography, Source of Demographic data – Census, Sampling, Registration, Source of Demographic data in India – Census, NFHS, NSSO, Registration System in India. Trends in composition & Distribution of India Population – Sex, Age, Religion, Rural, Urban, Occupation. Demographic rate in India – Fertility, Mortality, Literacy, Poverty

Module II: Measurement of Population Growth

Meaning of Population Growth, Models of Population Growth and Population Projection. Population Pyramid.

Module III: Factor affecting Population Growth

Fertility -Meaning, Important Concepts – CBR, ASBR, TFR, GRR, NRR; Factor affecting Fertility., Mortality - Meaning, Important Concepts – CDR, ASDR, IMR, MMR, NMR, NNMR, CSDR; Factors affecting Mortality, Migration - Meaning, Type, Effects and Factors Promoting Migration. Urbanization - Meaning, Causes and Effects. Neutrality -Meaning, Important Concepts and determinants

Module IV: Theories of Population

Malthusian Theory, Optimum Theory, Theories of Demographic Transition – Views of Blackes, Marx & Cowgill, Biological Theories, Socio-Economic Theories.

Module V: Population Growth and Development

Relationship between population growth & economic development, Human development – Meaning, Index and relationship with population growth, Relationship between population growth and environment degradation, Relationship between population growth & health, nutrition & productivity.

Module VI: Migration and Urbanization

Concept and types-temporary, internal and international; International migration- its effect on population growth and pattern; factors affecting migration;-Theories of migration related to internal migration; Urbanization - growth and distribution of rural-urban population in developing countries.

Basic Reading List

- Agarwala, S.N. (1972), India's Population Problem , Tata McGr Hill Co., Bombay.
 - Bose, A. (1996), India's Basic Demographic Statistics, B. Publishing Corporation, New Delhi.
 - Bogue, D.J. (1971), Principles of Demography, John Wiley, N York.
 - Chenery, H. and T.N.Srinivasan, (Eds) (1989), Handbook Development Economics, Vol. 1 and 2, Choubey, P.K. (2000), Population Policy in India, Kanish Publication, New Delhi.
 - Coale, A. J. and E.M. Hoover (1958) Population Growth a Economic Development in Low Income Countries: A case study of India's prospects, Princeton University Press, Princeton
 - Gulati, S.C. (1988), Fertility in India; An Econometric Study A Metropolis, Sage Publications, New Delhi.
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SEMESTER-IV

INDIAN ECONOMICS

1Y2ECO(C12)

Model I : Structure of the Indian Economy

Main sectors of the Economy and subsectors within each main sector – GNP, Sectoral composition of Income and changes over time at the major sectoral level, the sub-sectoral level within each major sectors. Concepts of Economic Growth and development, Appraisal of growth and development status of Indian Economy.

Model II: Population and Human Resources

Conflicting views on role of population growth in development process, Composition of population in India, Birth and Death rates of population in India, Growth of population, Demographic transition, Role of education in Economy – Literacy levels in India, Role of Health in Economy, Health Status in India

Model III: Agriculture

Role of Agriculture in the Indian Economy – Land use Pattern, Cropping Pattern, Production and Productivity of crops – Reasons for the low crop productivity –Resource Poor farmers, small holdings limited irrigation facilities, limited access to institutional sources of credit, imbalance in the use of pesticides and fertilizers, limited access to agricultural machinery and marketing pattern.

Model IV: Industry

Role of industrialization in the economy, Importance and problems of large small scale and medium scale industries in India and their remedial measures. Financial Institutions providing short term and long term industrial credit. Industrial Policy revolution of 1991.

Model V: Service Sector

Role of service sector in the economy – Banking, Insurance, transport and Communication, trade, Hotels and Restaurants.

Model VI: External Sector

Structure and Direction of facing Trade Balance of payments. Issues in Export Import Policy & FEMA Exchange rate policy, Foreign Capital and MNC's in India, Globalisation of Indian Economy. W.T.O. and its impact in different sectors of the economy.

Basic Reading List

- Mishra & Puri : Indian Economy, Himalaya Publishers, New Delhi, 2008.
 - Rudra Dutt & Sundaram : Indian Economy, S. Chand Publication Co, New Delhi, 2008
 - Indian Development Report, Oxford University Press, New Delhi
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SEMESTER - IV

1Y2ECOPR

RESEARCH & PROJECT

Part – 1 – Research Methodology

Major concepts of Research Methodology, Steps of scientific research, Formulation and execution of research project.

Features of good research design, framing of hypothesis/research questions, schedule/questionnaire

Specification of data requirement, Sources of secondary data, Primary data collection methods 1.4

1.5

1.6

Data analysis, Writing the project report, Notes and Bibliography

A. Central tendency (Mean, Median, Mode), Dispersion, Correlation(Simple, Multiple) & Regression

B. Uses of statistics in research.

Part – 2 – Project / Dissertation

Students will have to do an individual project work as assigned by the Department under the supervision of the Department. The project work will be of 70 marks. At the end of the semester the candidate will have to present his dissertation.

Seminar and other activity in the department – 30 Marks

Basic Readings

- Blange M., Research Methodology in Economics
- Kothari, Research Methodology
- Pannerselvam R. (2004), Research Methodology, Prentice Hall, India
- Wilkinson & Bhendarkar, Methodology and Techniques of Social Research