

University of Mumbai



No. AAMS(UG)/68 of 2021-22

CIRCULAR:-

Attention of the Principals of the Affiliated Colleges, the Head of the University Departments and Directors of the Recognized Institutions in Faculty of Humanities is invited to the syllabus uploaded by Academic Authority Meetings and Services which was accepted by the Academic Council at its meeting held on 29th April, 2013 vide item No. 4.51 relating to the revised syllabus as per the (CBCS) (M.A. Economics) Sem . I, II, III & IV.

They are hereby informed that the recommendations made by the Board of Studies in Economics at its online meeting held on 9th June, 2021 vide Item No. 2 and subsequently passed by the Board of Deans at its online meeting held on 11th June, 2021 vide item No. 5.38 (R) have been accepted by the Academic Council at its meeting held on 29th June, 2021 vide item No. 5.38 (R) and that in accordance therewith, the revised syllabus as per the (CBCS) of M.A. (Economics) Sem I to IV has been brought into force with effect from the academic year 2021-22 accordingly. (The same is available on the University's website www.mu.ac.in).

MUMBAI - 400 032
22nd September, 2021


(Dr. B.N. Gaikwad)
I/c REGISTRAR

To

The Principals of the Affiliated Colleges the Head of the University Departments and Directors of the Recognized Institutions in Faculty of Humanities.

A.C/5.38 (R) 29/06/2021

No. AAMS(UG)/68 -A of 2021-22

MUMBAI-400 032

22nd September, 2021

Copy forwarded with Compliments for information to:-

- 1) The Dean, Faculty of Humanities.
- 2) The Chairman, Board of Studies in Economics.
- 3) The Director, Board of Examinations and Evaluation,
- 4) The Director, Board of Students Development,
- 5) The Co-ordinator, University Computerization Centre,


(Dr. B.N. Gaikwad)
I/c REGISTRAR

Copy to :-

- 1. The Deputy Registrar, Academic Authorities Meetings and Services (AAMS),**
- 2. The Deputy Registrar, College Affiliations & Development Department (CAD),**
- 3. The Deputy Registrar, (Admissions, Enrolment, Eligibility and Migration Department (AEM),**
- 4. The Deputy Registrar, Research Administration & Promotion Cell (RAPC),**
- 5. The Deputy Registrar, Executive Authorities Section (EA),**
- 6. The Deputy Registrar, PRO, Fort, (Publication Section),**
- 7. The Deputy Registrar, (Special Cell),**
- 8. The Deputy Registrar, Fort/ Vidyanagari Administration Department (FAD) (VAD), Record Section,**
- 9. The Director, Institute of Distance and Open Learning (IDOL Admin), Vidyanagari,**

They are requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to in the above circular and that on separate Action Taken Report will be sent in this connection.

- 1. P.A to Hon'ble Vice-Chancellor,**
- 2. P.A Pro-Vice-Chancellor,**
- 3. P.A to Registrar,**
- 4. All Deans of all Faculties,**
- 5. P.A to Finance & Account Officers, (F.& A.O),**
- 6. P.A to Director, Board of Examinations and Evaluation,**
- 7. P.A to Director, Innovation, Incubation and Linkages,**
- 8. P.A to Director, Board of Lifelong Learning and Extension (BLLE),**
- 9. The Director, Dept. of Information and Communication Technology (DICT) (CCF & UCC), Vidyanagari,**
- 10. The Director of Board of Student Development,**
- 11. The Director, Department of Students Welfare (DSD),**
- 12. All Deputy Registrar, Examination House,**
- 13. The Deputy Registrars, Finance & Accounts Section,**
- 14. The Assistant Registrar, Administrative sub-Campus Thane,**
- 15. The Assistant Registrar, School of Engg. & Applied Sciences, Kalyan,**
- 16. The Assistant Registrar, Ratnagiri sub-centre, Ratnagiri,**
- 17. The Assistant Registrar, Constituent Colleges Unit,**
- 18. BUCTU,**
- 19. The Receptionist,**
- 20. The Telephone Operator,**
- 21. The Secretary MUASA**

for information.

UNIVERSITY OF MUMBAI



Revised Syllabus for the M.A. (Economics) Sem - I to IV

(As per the Choice Based Credit System with effect from the academic
year 2021-22)

UNIVERSITY OF MUMBAI



Syllabus for Approval

Sr. No.	Heading	Particulars
1	Title of the Course	M.A. (Economics)
2	Eligibility for admission	As per University Rule
3	Passing Marks	-
4	Ordinances / Regulations (if any)	-
5	No. of Years / Semesters	Two Years / Four Semesters
6	Level	P.G.
7	Pattern	Semester
8	Status	Revised
9	To be implemented from Academic Year	From Academic Year 2021-2022

Name & Signature of BOS Chairperson : _____

Name & Signature of Dean: _____

PREAMBLE:

The syllabus of MA has been revised by the Board of Studies – Economics by keeping in view of the recent trends in the subject of economics and by giving due weightage to the case study approach. The revised syllabi of MA will be made effective **from the Academic Year 2021-22**. In this revision, some of the existing optional papers have been replaced by new papers. A broad overview of the structure and other details of the course is given below.

DURATION:

The course shall be a full time course.

The duration of M.A. course shall be of Two years across Four Semesters.

MA Part I: SEMESTER – I & II (Four papers each semester)

MA Part II: SEMESTER – III (Five papers)

MA Part II: SEMESTER – IV (Three papers and Dissertation)

TOTAL CREDITS

A student enrolled for MA Program should acquire a total of 100 credits over four semesters.

CORE PAPERS

All papers taught in Semester I and II are core courses and are compulsory for all students admitted to the MA Program. A module of six credit course is taught for a period of 15 hours. So the total teaching hours needed to complete one paper is 56 hours. The core courses in toto are of 48 credits which includes papers of Semester I and Semester II.

The core papers of Semester I are : Microeconomics – I (6 credits), Macroeconomics – I (six credits), Agricultural economics (6 credits) and Economics of Labour Market. (6 credits). The core courses of Semester–II are : Microeconomics -II (6 credits), Macroeconomics-II (6 credits), Agricultural Development and Policy (6 credits) and Industrial Relations in India (6 credits). The remaining 42 credits can be acquired by a student of MA programme, by opting choices from the list of electives given or they can acquire the same in combination with other subjects, from the courses offered by other Departments.

ELECTIVES

Out of 100 credits, 42 credits will have to be scored among the optional papers. Umpteen choices are provided for the optional courses to be chosen from Semesters Three and Four. Each optional is of 6 credits.

The list of elective includes papers which enhances skills as well as the interdisciplinary courses along with others.

THE DISSERTATION COMPONENT

The topics of Dissertation will be totally oriented towards the Case Study Approach. The Dissertation component will be for a total of 100 Marks and 10 credits. The pattern of evaluation is based on the UGC guidelines and that of University of Mumbai. The Board of Studies of Economics will conduct workshop to throw light on potential areas of case studies of dissertation from time to time.

CASE STUDY APPROACH

As per the latest guidelines issued by UGC in 2021, the Board of Studies of Economics resolved that the themes of Dissertation will be based on Case Study Approach. Even for the Core Papers and electives, the relevant modules are focused on Case Study approach. From within the core as well as electives too, student will get the opportunity to get familiarized with case studies related to the relevant field.

ALLOTMENT OF LECTURES:

The allotment of lectures is as per the common guidelines stipulated by the Academic Council for Humanities of University of Mumbai.

PATTERN OF EXAMINATION

For all courses, there is an internal exam for 40 marks and external exam of 60 marks. The pattern of exam is as per the common guidelines stipulated by the Academic Council for Humanities of University of Mumbai.

DURATION:

- Two Hours for each 60 marks paper.

PATTERN OF EVALUATION

The performance of the learners shall be evaluated into two parts. For all courses, there is an internal exam for 40 marks and of 60 marks.

(I) Internal Assessment: 40 Marks

Sr. No	Evaluation method	Marks
01	One Assignment / project based on Case study	20
02	One Periodical class Test	10
03	Active participation in routine class instructional deliveries (case studies / seminars / presentation)	05
04	Overall conduct as a responsible student, mannerism & articulation and leadership qualities in organizing related academic actives.	05
	Total Marks	40

(II) Theory Examination: 60 Marks :

PAPER PATTERN:

- There shall be four questions each of 10 marks, for 60 marks paper. There will be four questions with internal choices (a or b) ie, with an internal option to choose any one question.
- Fifth question consists of 20 marks, wherein a choice between four descriptive sub-questions and objective questions is given.
- All questions shall be compulsory with internal choice within the questions.
- The questions should be framed in such a way that every module contains two questions, with internal choices. For eg: for Question no.1 choices may be a or b, whereas students can answer any one from a or b.

Questions	Modules	Marks
Qn.1	Unit I	10
Qn.2	Unit II	10
Qn.3	Unit III	10
Qn.4	Unit IV	10
Qn.5	4 Sub-questions from Unit I, II, III & IV OR 20 MCQs from Unit I, II, III & IV	20
	Total	60

MULTIPLE CHOICE QUESTIONS

By taking into consideration of the Multiple Choice Exams which students have to answer in varied competitive exams like Central and State Civil Services as well as Qualifying exams for Assistant Professors , it is resolved by members of BOS and approved by the Academic Council to keep five objective type questions each from the respective modules.

DURATION OF EXAMINATION

Two Hours and one and a half hours respectively are allotted for 60 and 40 marks papers.

COURSE STRUCTURE (APPLICABLE FROM ACADEMIC YEAR : 2021-22)**MA (SEMESTER-I)**

COURSE CODE	REVISED PAPER		CREDIT	MARKS
CORE PAPERS				
ECOME101	I	MICROECONOMICS – I	6	100
ECOME102	II	MACROECONOMICS – I	6	100
ECOAE103	III	AGRICULTURAL ECONOMICS	6	100
ECOELM104	IV	ECONOMICS OF LABOUR MARKET	6	100

MA ECONOMICS (SEMESTER-I)

COURSE CODE	CORE PAPER: PAPER NO –I	CREDIT	MARKS
ECOME101	MICROECONOMICS – I	6	100

Course Objectives

The objective of this paper is to develop an understanding of the basic microeconomic theory that has applications in other areas of Economics. At the end of this course students are expected to be familiar with basic microeconomic theory and acquire analytical skills to analyse problems of economic policy. Examples and exercises would be for strengthening the understanding.

Course Outcomes

- Develop a nuanced understanding of consumer and firm behaviour along with general equilibrium theory.
- Provide students with the necessary theoretical and analytical tools to study problems of economic policy.

Module 1: Consumer Behavior**(15 Lectures)**

Preference ordering, The feasible set, Consumption decision, Comparative statics: price and income effects, Slutsky equation, Measuring the benefits of price change, Utility maximization problem, Indirect utility function, Expenditure function.

Module 2: Production, Cost and Supply

(15 Lectures)

Production function: properties and types, Cobb-Douglas, CES and Translog, Elasticity of substitution, Variations in scale, Variations in input proportions, Cost: Cost minimization: long run and short run, Cost function, Relation between long run and short run costs, Supply: Profit maximization and firm supply, Long run supply function, Profit function, Relationship between long and short run profit maximization.

Module 3: Theory of Competitive Markets

(15 Lectures)

Market demand and market supply curve, Short run market equilibrium, Stability of equilibrium: Walrasian and Marshallian approaches, Long run market equilibrium, Stability of long run equilibrium.

Module 4: General Equilibrium and Welfare Economics

(15 Lectures)

Walrasian general equilibrium of a competitive economy, Edgeworth exchange theory, Pareto criterion, First and Second theorems of welfare economics, Externalities and market failure.

References:

1. Das, S.P. (2007): Microeconomics for Business, Sage, New Delhi.
2. Gravelle H. and Rees R. (2004): Microeconomics, 3rd Edition, Pearson Education Ltd, New Delhi.
3. Jehle, G.A. and P.J. Reny (2006): Advanced Microeconomic Theory, 2nd Edition, Pearson Education, New Delhi.
4. Tandon, P. (2015): A Textbook of Microeconomic Theory, Sage, New Delhi.
5. Varian H (2000): Intermediate Microeconomics: A Modern Approach, 8th Edition, And W.W. Norton and Company.
6. Varian, H.B. (1992): Microeconomic Analysis, 3rd Edition, W.W. Norton and Company.

MA (ECONOMICS) (SEMESTER-I)

COURSE CODE	CORE PAPER: PAPER NO –II	CREDIT	MARKS
ECOME102	MACROECONOMICS – I	6	100

Course Objectives

This paper is designed to provide in-depth knowledge on varied concepts of Macroeconomics. The contents of the paper throws light on a range of issues like national income, social accounting, consumption expenditure, investment analysis, inflation, trade cycle as well as money supply and demand for money.

Course Outcomes

- The learners can enhance their understanding on the concepts like national income and social accounting, consumption expenditure and investment analysis.
- Students acquire knowledge on issues like inflation, trade cycle as well as money supply and demand for money.

Module 1: National Income and Social Accounting

(15 Lectures)

National Income Accounting Concepts, Accounting identities, Inflation and price indices. Social accounting-Concepts, Features and types of social accounts, National income and Product accounts, Input-output accounting, Flow of funds accounts.

Module 2: Consumption Expenditure and Investment Analysis

(15 Lectures)

Absolute income hypothesis; Relative income hypothesis; Permanent income hypothesis; Life-cycle hypothesis. Investment- Types of Investment- Determinants of Investment -Marginal efficiency of capital (MEC)-Supply price of capital (SP), Prospective yield of capital (PY)- FRB-MIT (Federal Reserve Bank and Massachusetts Institute of Technology).

Module 3: Inflation and Trade Cycles

(15 Lectures)

Theories of Inflation: Demand pull and Cost push, Keynesian Theory, Inflation and GDP, Trade cycles, Anti cyclical policy, Theories of Trade Cycles - Hicks, Schumpeter, Goodwin and Samuelson.

Module 4: Supply and Demand for Money

(15 Lectures)

Components of money supply; Measures of money supply: M1, M2, M3 and M4-Determinants of Money Supply- Classical approach, Cambridge approach, Keynesian approach, Liquidity preference theory, Portfolio balance Approach: Baumol and Tobin, Milton Friedman's Approach.

References:

1. Dornbusch, Fischer, Stratz, Macroeconomics, (Revised Edition).Tata McGraw-Hill. New Delhi
2. Ahuja H. L. Macroeconomics Theory and Policy, S. Chand and Co. Ltd New Delhi.
3. Froyen R. T. Macroeconomics (7th Edition). Pearson Education. New Delhi
4. Mankiw, N. G. Macroeconomics, (Revised Edition), Worth Publications. New York.
5. Carlin, W and S David, Macroeconomics, Oxford University Press.
6. Errol D'Souza Macroeconomics, Pearson Education India-2009.

MA (ECONOMICS) (SEMESTER-I)

COURSE CODE	CORE PAPER: PAPER NO –III	CREDIT	MARKS
ECOAE103	AGRICULTURAL ECONOMICS	6	100

Course Objectives

This course aims to enhance the students understanding of agricultural development. Starting from basic questions like what factors lead to agricultural development or why does the share of agriculture in GDP go down once economies start developing, the course tries to enhance the students' awareness on contemporary debates in the literature, and leads them to analysis of current governmental policies and strategies for surviving in the globalizing world.

Course Outcomes

- This paper enhances knowledge on the process of development of agriculture in an emerging economy.
- It throws light on the role and the policies as well as the competitiveness of the agricultural sector.

Module 1: Theories of Agricultural Development

(15 Lectures)

Role of agriculture in a developing economy vis-à-vis a developed economy; Theories of agricultural development (Lewis, Schultz, Mellor, Hayami and Ruttan)

Module 2: Sustainable Agricultural Development and Food Security

(15 Lectures)

Impact of green revolution; Models of spread of technology and experiences in input use efficiency; Measurement and strategies for sustainable development, Food security: Concept, measurement, magnitude, and critical evaluation of government policies

Module 3: Competitiveness of Agriculture Products and Marketing

(15 Lectures)

Measurement of efficiency of agricultural products in international markets, Efficiency of agricultural markets in India, Form and impact of government intervention in the markets and its effects on efficiency, Commodity markets: operation and likely impacts, Strategies for surviving in a globalizing world

Module 4: History and Policies for Agricultural Development in India

(15 Lectures)

Trends in production since 1950, National Food Policy, Agriculture Policy, Area, productivity, employment and wage rate analysis; Trends in India's agricultural exports and imports and implications.

References:

1. Basu Kaushik, Analytical Development Economics, Oxford University Press, 1998
2. Bhalla G S., Globalization and Indian Agriculture, Volume 19 of the State of the Indian Farmer Series. Academic Foundation, 2004.
3. Dreze Jean and Amartya Sen, Hunger and Public Action, Oxford University Press, 1989.
4. Sawant S D (2002), Indian Agriculture: Past developments and policies for the future, Dantwala Monograph Series, No. 4, 2002.
5. Sengupta D, Chakraborty D and Banerjee P, Beyond the Transition Phase of WTO: An Indian Perspective on Emerging Issues, Academic Foundation, 2006.
6. Shiva Vandana, The Violence of the Green Revolution, Palgrave Macmillan, 1992.

MA (ECONOMICS) (SEMESTER-I)

COURSE CODE	CORE PAPER: PAPER NO –IV	CREDIT	MARKS
ECOELM104	ECONOMICS OF LABOUR MARKET	6	100

Course Objectives

The objective of this course is to introduce the student to labour economics with an emphasis on microeconomic theory and empirics. Through the course, the student will learn basic economic forces behind employment and wages, sources of labour market imperfections, driving forces for education and skill upgradation, discrimination among the workers and public policies for labour welfare.

Course Outcomes

- The analysis of case studies would help the student to understand real world issues pertaining to labour markets and also to assess related public policy measures.
- The course sheds light on a range of new developments and a host of issues studied by generations of labour market experts thereby students are equipped with the skill of getting assimilated with the labour markets in real life as well.

Module 1: Nature of the Labour Market

(15 Lectures)

Concept of labour market, Characteristics, Types, Basic Search Theory in labour markets.

Module 2: Micro and Macro Approaches in Labour Markets

(15 Lectures)

The theory of labour demand, Industry demand for labour, Determinants of labour demand, The theory of supply, Work-leisure choice in Indifference curves, Budget constraint Utility maximization, backward-bending supply curve and its applications.

Module 3: Wage Issues in Labour Markets

(15 Lectures)

Theories of Wages, Wage structure and components of wages, Share of wages, Inequality of Wage income, Male-Female Wage differentials, Contract labour, Properties of contractual wages, Minimum wages, Wage and output relations in India during pre- and post-reform period, Wage code 2020.

Module 4: Case Studies on Labour Market in India

(15 Lectures)

Role of risk, Wage differentials, Employee Turnover, Migrant Labour, Impact of Trade Unions on Productivity and Wages, Social Security, Occupational Safety and Security, Sectoral Labour Market, Formal and informal

References:

1. Bhagoliwal TN, Economics of Labour and Industrial Relations, Sahitya Bhavan, Agra, 1996.
2. Cahuc Pierre and Andre Zylberberg, Labor Economics, Massachusetts Institute of Technology, 2004
3. Harris Barbara and Sinha White, Trade Liberalisation and India's Informal Economy, Oxford University Press, New Delhi, 2007.
4. Sapsford David and Zafiris Tzannatos, The Economics of the Labour Market, Macmillan, London, 1993.
5. Singh Jwitesh Kumar, Labour Economics, Deep and Deep Publishers, Delhi, 1998.
6. Uchikawa Shuji (eds.) Labour Market and Institution in India 1990s and Beyond, Manohar Publishers, New Delhi, 2003.

MA (SEMESTER-II)

COURSE CODE	REVISED PAPER		CREDIT	MARKS
CORE PAPERS				
ECOME201	V	MICROECONOMICS – II	6	100
ECOME202	VI	MACROECONOMICS – II	6	100
ECOADP203	VII	AGRICULTURAL DEVELOPMENT AND POLICY	6	100
ECOTUIR204	VIII	INDUSTRIAL RELATIONS IN INDIA	6	100

MA (ECONOMICS) (SEMESTER-II)

COURSE CODE	CORE PAPER: PAPER NO -V	CREDIT	MARKS
ECOME201	MICROECONOMICS – II	6	100

Course Objectives

The objective of this course is to acquaint students with different approaches to analysing strategic behavior of individuals under asymmetric and incomplete information. Case studies and applications would be used to expound strategic behavior.

Course Outcomes

- Create an understanding of strategic behavior under oligopoly
- Provide students with the necessary theoretical and conceptual underpinnings to real world concepts and issues using illustrations and case studies.

Module 1: Introduction to Game Theory**(15 Lectures)**

Introduction to Game Theory, Normal Form and Extensive Form of a game, Dominant Strategy Equilibrium, Nash Equilibrium in Pure and Mixed strategies, Prisoner's Dilemma, Dynamic Games, Subgame Perfection

Module 2: Oligopoly

(15 Lectures)

Oligopoly and its features, The Cournot model, The Bertrand Model, The Stackelberg model, Oligopoly in repeated games and tacit collusion, Comparison with monopoly, Limit pricing and Entry deterrence in monopoly.

Module 3: Economics of Information

(15 Lectures)

Principal-Agent models, Moral Hazard and Adverse Selection, The market for lemons, optimal contracts under asymmetric information, Signaling and Screening.

Module 4: Case Studies and Applications

Case studies and Applications: Price competition for homogenous and differentiated products, Quantity/Production capacity competition, Leadership and Cartels, Insurance and Debt contracts, Advertising and Brand reputation.

References:

1. Das, Satya P. (2007): Microeconomics for Business, Sage Publications India Pvt Ltd., New Delhi.
2. Gibbons R.A. (1992): A Primer in Game Theory, Harvester-Wheatsheaf.
3. Gravelle, H. and Rees, R. (2004): Microeconomics, 3rd Edition, Pearson Education Limited, New Delhi.
4. Jehle, G.A. and P.J. Reny (2006): Advanced Microeconomic Theory, 2nd Edition, Pearson Education, New Delhi.
5. Png, Ivan (2012): Managerial Economics, 4th Edition, Routledge, New York.
6. Varian H. (2000): Intermediate Microeconomics: A Modern Approach, 8th Edition, W.W. Norton and Company.

MA (ECONOMICS) (SEMESTER-II)

COURSE CODE	CORE PAPER: PAPER NO -VI	CREDIT	MARKS
ECOME202	MACROECONOMICS – II	6	100

Course Objectives

This paper provides deep understanding on macroeconomic concepts. The paper highlights pricing mechanism under imperfect market structures, rigidities and real business cycle theory. Considering the latest developments in the literature of macroeconomics, Keynesian Macroeconomics is introduced so that students can understand the rules, discretion and inconsistencies in policy decisions as well as traditional and non conventional policy making.

Course Outcomes

- To acquaint students with latest developments in macroeconomics
- To enhance the understanding of students regarding the practical approach of policy making.
- To establish link between macroeconomic theories and international open Economy

Module 1: Prices under imperfect competition

(15 Lectures)

Imperfectly Flexible Prices, Price-setting under imperfect competition. Menu costs, real rigidity and neutrality, Quadratic price adjustments.

Module 2: Theories of Business Cycles

(15 Lectures)

Real Business-Cycle Theory, Introduction: Some Facts about Economic Fluctuations, An Overview of Business-Cycle Research, A Baseline Real-Business-Cycle Model Household Behavior, Empirical Application: Money and Output, Assessing the Baseline Real-Business-Cycle Model Problems.

Module 3: New Keynesian Economics

(15 Lectures)

New Keynesian Economics, Disequilibrium, multiple equilibria, Hysteresis Reconstructing the Keynesian multiplier, The New Keynesian model of inflation.

Module 4: Macroeconomics Policy Issues

(15 Lectures)

Macroeconomic Policy, Rules versus Discretion, Credibility & Reputation, Dynamic Inconsistency Banks, Financial Intermediaries and Unconventional Monetary Policy Inflation Targeting and Exchange Rates.

References:

1. Dornbusch, Fischer and Startz, 2012, Macroeconomics, 10th Editions, McGraw Hill Education Pvt. Ltd. New Delhi.
2. Heijdra, Ben J. and Frederick Van Der Ploeg. 2002, Foundations of Modern Macroeconomics. Oxford University Press, Oxford.
3. Romer, David, 2012, Advanced Macroeconomics, McGraw-Hill. Fourth Edition.
4. Wickens, Michael, 2011, Macroeconomic Theory and the Dynamic General Equilibrium Approach. Princeton University Press.
5. Wendy Carlin & David Soskice, 2006, Macroeconomics- Imperfections, Institutions and Policies- Oxford University Press (2006).
6. Olivier Blanchard – Macroeconomics, Pearson, Seventh Edition (2017)

MA (ECONOMICS) (SEMESTER-II)

COURSE CODE	CORE PAPER: PAPER NO –VII	CREDIT	MARKS
ECOADP203	AGRICULTURAL DEVELOPMENT AND POLICY	6	100

Course Objectives

This course aims to enhance the students understanding of agricultural development. Starting from basic questions like what factors lead to agricultural development or why does the share of agriculture in GDP go down once economies start developing, the course tries to enhance the students' awareness on contemporary debates in the economic parlance, and leads them to analysis of current governmental policies and strategies for surviving in the globalizing world.

Course Outcomes

- Aims to improve awareness on agricultural development.
- Promotes students awareness on contemporary debates in the area of agricultural products and market.

Module 1: Theories of Agricultural Development

(15 Lectures)

Role of agriculture in a developing economy vis-à-vis a developed economy; Theories of agricultural development (Lewis, Schultz, Mellor, Hayami and Ruttan)

Module 2: Sustainable Agricultural Development in India

(15 Lectures)

Impact of green revolution; Models of spread of technology and experiences in input use efficiency; Measurement and strategies for sustainable development; Bio Technology – Meaning and Trends, Organic Farming, Contract Farming-Diversification of Agriculture in India

Module 3: Competitiveness of Agriculture Products and Marketing

(15 Lectures)

Nature and Types of Agriculture produce, Concept and types of Agricultural Markets, Supply Chain of Agricultural, Marketable and Marketed Surplus, Causes of low Marketable Surplus in India. Problems of Agriculture Marketing in India. Model APMC Act 2003, National Agriculture Market (eNAM), Impact of Government Intervention in the Markets.

Module 4: History and Policies for Agricultural Development in India

(15 Lectures)

Trends in Agricultural Production Since 1950; National Food Policy; Agriculture Policy; Area, productivity; Agricultural Policies and its Evaluation ; Trends in India's Agricultural Exports and Imports and Implications.

References:

1. Basu Kaushik, Analytical Development Economics, Oxford University Press, 1998.
2. Bhalla G S., Globalization and Indian Agriculture, Volume 19 of the State of the Indian Farmer Series. Academic Foundation, 2004.
3. Dreze Jean and Amartya Sen, Hunger and Public Action, Oxford University Press, 1989

4. Lewis Arthur, Economic Development with Unlimited supply of labour, Manchester School of Economics and Social Studies 22: 139-91, 1954.
5. Mellor J and Mudahar M, in Agriculture in Economic Development: Theories, findings and Challenges in Asian context in A Survey of Agricultural Economics Literature, Edited by Lee Martin. University of Minnesota Press, 1992.
6. Norton George and Jeffery Alwang, Introduction to Economics of Agricultural Development, McGraw Hills, New York, 1993.

MA (ECONOMICS) (SEMESTER-II)

COURSE CODE	CORE PAPER: PAPER NO –VIII	CREDIT	MARKS
ECOTUIR204	INDUSTRIAL RELATIONS IN INDIA	6	100

Course Objectives

This course aims to provide a basic conceptual understanding of the industrial relations as well as the political economy of trade unions in India. Empirical relevance of theories with suitable examples from a practical industrial relations viewpoint will strengthen a student's understanding of the topic along with their limitations.

Course Outcomes

- Upon completion of this course, students will be able to identify the impact of industrial relation in different sectors of the Indian Economy.
- Enable to understand the political economy of trade unions.

Module 1: Industrial Relations

(15 Lectures)

Approaches to Industrial Relations: Macro Approaches- System Approach and Class Conflict Approach, Micro Approaches- Taylorism, Fordism and Post-Fordism, Neo-Fordism, Pluralism.

Module 2: Political Economy of Trade Unions

(15 Lectures)

Evolution and Role of Trade Unions. Approaches to the Origin of Trade Unions. Bargaining Theory of Wages, Impact of unions on productivity and wages, Employment Security and Efficiency.

Module 3: Industrial Relations in India

(15 Lectures)

History, growth and structure of trade unions, Independent and white collar unions in India, Trade Unions and Contract Workers. Employer's Organisations: Role of managerial class in industrial relations. Industrial conflict: Forms of conflict, strikes, lockouts, absenteeism, employee turnover, causes and consequences and trends in industrial disputes, Industrial Relation in Gig economy.

Module 4: Role of the State in Industrial Relations in India

(15 Lectures)

Impact of Globalisation, Tripartism, Labour Legislation affecting industrial relations: Statutory and Non-Statutory measures to settle industrial disputes, Workers Participation in Management, Voluntary Retirement Scheme and other retrenchment measures.

References:

1. Amin, Ash (Ed.), Post-Fordism-A Reader, Blackwell, Oxford, 1994.
2. Government of India, Ministry of Human Resource Development, Report of Second National Commission on Labour, 2002.
3. Hicks J.R., The Theory of Wages, Clarendon Press, Oxford, 1932.
4. Monappa, Arun, Industrial Relations, Tata McGraw Hill, New Delhi, 2005.
5. Pencavel, John, Labour Markets under Trade Unionism: Employment, Wages and Hours, Basil Blackwell, Cambridge, Massachusetts, 1991
6. Roy, J. Adams (eds.), Comparative Industrial Relations, Harper Collins Academic, London, 1991.

MA (SEMESTER-III)

COURSE CODE	REVISED PAPER		CREDIT	MARKS
ELECTIVE PAPERS (ANY FIVE)				
ECOE301	IX	ECONOMETRICS	6	100
ECOIE302	X	INDUSTRIAL ECONOMICS	6	100
ECOPFPC303	XI	PUBLIC FINANCE AND PUBLIC CHOICE	6	100
ECOITTP304	XII	INTERNATIONAL TRADE: THEORY AND POLICY	6	100
ECOEHD305	XIII	ECONOMICS OF HUMAN DEVELOPMENT	6	100
ECOIE306	XIV	INDIAN ECONOMY	6	100
ECOED307	XV	ECONOMICS OF DEVELOPMENT	6	100
ECOFE308	XVI	FINANCIAL ECONOMICS	6	100

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –IX	CREDIT	MARKS
ECOE301	ECONOMETRICS	6	100

Course Objective

This paper is designed with the objective of acquainting the students with the advanced research techniques.

Course Outcomes

- The students will be able to draw inferences and solve research problems using advanced econometric techniques.

Module 1: Theory of Probability

(Lectures 15)

Basic concepts and definitions of probability, Laws of addition and multiplication, Conditional probability, Bay's theorem (statement), Binomial, Poisson and Normal Distribution, the Law of Large Numbers (without proof).

Module 2: Index Numbers

(Lectures 15)

Problems and methods of construction of various types of indices, Laspeyres, Pasche's and Fisher's ideal index numbers, Tests for adequacy of index numbers: Time reversal, factor reversal and circular tests, chain base indices, base shifting splicing and deflating the index nos., costs of living index numbers and consumer price index numbers. New CPI of India, Estimation of CPI food, Fuel etc using the method of exclusion.

Module 3: Classical Linear Regression Model

(Lectures 15)

The classical linear regression model: Simple Linear Regressions and Multiple linear Regressions, Properties of estimators, Estimation and hypothesis testing, Interpreting regression coefficients, R^2 and adjusted R^2 , F and t values in regression, Assumption and violation of the assumptions of Classical Linear Regressions Models, Interval estimation and hypothesis testing, Problem of autocorrelation, Heteroskedasticity, Multicollinearity.

Module 4: Time Series Analysis

(Lectures 15)

Testing for unit root, Cointegration and Error Correction Models, Granger causality, ARDL models, ARIMA Model, ARCH and GARCH Models.

References:

1. Chiang A. C.: Fundamental Methods of Mathematical Economics, 3rd edition, McGraw-Hill, 1984.
2. Dowling Edward T: Introduction to Mathematical Economics, Schaum Outline Series in Economics, Tata McGraw -Hill, New Delhi, 2004.
3. Green W H, Econometric Analysis, eighth edition.

4. Gujarati D: Econometrics: by Examples, Palgrave Macmillan, 2011.
5. Gupta S.C. Fundamentals of Statistics S. Chand & Sons New Delhi (1993).
6. Kennedy P.: A Guide to Econometrics, sixth edition, Wiley Blackwell edition, 2008.

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –X	CREDIT	MARKS
ECOIE302	INDUSTRIAL ECONOMICS	6	100

Course Objectives

This paper will make aware learners about the factors helping industry, other areas supports it, market structure, also to focus on financial institutions, policies and theories of location. It also focuses on aspects related to industrial growth.

Course Outcomes

- Enable to empower students about the historical background of industrial development and financial institutions.
- It provides understanding on market structure and best theories to fix the location of industries.

Module 1: Introduction to Industrial Economics

(Lectures 15)

Introduction, History of the field, Factors inhibiting Industrialization, Industrial Development under Plans in India, The organizational forms and alternative Motives of the Firm, Current Problems of public sector industries in India.

Module 2: Market Structure

(Lectures 15)

Standard forms of Market, Monopolistic Competition, Contestable Market, Product Differentiation, Economies of scale and scope, Market Structure and Profitability, Market Structure and Innovation, Measures: Organizational level and political level.

Module 3: Industrial Finance

(Lectures 15)

Sources of Finance: Internal and External, Role, Nature, Volume and Types of Institutional Finance: IFCI, IDBI, IRI, SFC, SIDC, And SIDBI, Commercial Banks Secured and Unsecured Loans.

Module 4: Industrial Growth in India and Industrial Location

(Lectures 15)

Industrial Policies of 1948, 1977 and 1999, Trends in industrial growth after 1991, Factors affecting industrial Location, Theories of industrial Location: Weber and Sargent Florence, Industrial imbalance: Causes and Measures, Need for Balanced Regional Development in India.

References:

1. Ahluwalia I. J.-Industrial Growth In India – Stagnation Since the Mid Sixties- Oxford University Press, Delhi, 1985.
2. Hay J. and Morris D. J. – Industrial Economics – Theory and Evidence, Oxford University Press (Latest Edition)
3. Martin Stephen, Industrial Economics – Economic Analysis and Public Policy, Macmillan Publishing Company, New York, (Latest Edition)
4. Mookharji Dilip (Eds), Indian Industry – Policies and Performance, Oxford University Press, Delhi, 1998.
5. Pandey I. M. –Financial Management, Vikas Pub. House Pvt. Ltd., New Delhi, 2000.
6. Mohanty Binod (eds.) –Economic Development Perspectives, Vol. 3, Public Enterprises and Performance – Common Wealth Publication New Delhi, 1998.

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –XI	CREDIT	MARKS
ECOPFPC303	PUBLIC FINANCE AND PUBLIC CHOICE	6	100

Course Objectives

The objective of this paper is to provide advanced theoretical knowledge of theory of Public Finance and public choice. In addition, the learners would find it interesting to analyze Indian government budgets and Indian fiscal federalism.

Course Outcomes

- Provides in-depth knowledge on range of issues related to public finance and public choice. This enables the students to analysed the budgets of government of India

Module 1: Evolution of Public Finance and Public Choice Theory

(Lectures 15)

The concept of private and public wants, provision of private and public goods, merit wants and merit goods, Macroeconomic aspects and nature of public finance in developing economies, Public choice theory, its Role in development.

Module 2: Principles of Taxation and Expenditure

(Lectures 15)

Principles of Taxation, Taxable capacity, Colin Clark and Musgrave's view, taxable capacity v/s optimum budget, Rise in public expenditure, demand and supply side hypotheses, Pure theory of public expenditure, Ability to pay theory, benefit principle, Voluntary exchange theory, Samuelson's pure theory, cost benefit analysis.

Module 3: Government budgeting (With special reference to India).**(Lectures 15)**

Concept of budget, purposes and budgetary theory, classification of budgets, Functional, organizational, economic and object, Zero base budgeting, Impact of budgetary changes, increase in government expenditure (deficit spending), increase in taxation (surplus without spending), balanced budget (spending without deficit), Previous two years budget analysis.

Module 4: Fiscal Federalism.**(Lectures 15)**

The concept of fiscal federalism, division of power and functions, division of resources, working of Indian fiscal federalism, finance commissions of India and resource transfer, previous two finance commissions in India.

References:

1. James Buchanan, The Economics of Public Finance, 1964.
2. R.A. Musgrave, Public Finance in a Democratic Society, 1986.
3. Raja Chelliah, Fiscal Policy in Underdeveloped Countries, 1976
4. Wayland D. Gardner, Government Finance: National, State, Local, 1978
5. Indian Finance Commission Reports.
6. Bimal Jalan, Indian Economy: Problems and Prospects, 1992.

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –XII	CREDIT	MARKS
ECOITTP304	INTERNATIONAL TRADE: THEORY AND POLICY	6	100

Course Objectives

This paper aims at providing a theoretical exposition of bases, effect and restrictions on free flow of International Trade with empirical evidence. It also updates learner's knowledge about regional trading arrangement and multilateralism in the context of WTO.

Course Outcomes

- Enables to understand the flow of international trade
- Awareness on varied trade policies

Module 1: Classical and Neoclassical Theories of Trade.

(Lectures 15)

Brief review of absolute and comparative advantage of trade, real and opportunity cost approaches, terms of trade, reciprocal demand and offer curves, The Heckscher – Ohlin (H-O) Theory, Factor Price Equalization Theorem, Leontief's paradox, Rybczynski Theorem, Product cycle theory and technological gap theory.

Module 2: Modern Trade Theory.

(Lectures 15)

Concept of intra industry trade, imperfect competition and trade: the Neo Heckscher – Ohlin models, Favley model, Neo Chamberlinians model, Krugman model, Oligopolistic models– Brander–Krugman model, reciprocal dumping model, Iceberg model, Gravity equation.

Module 3: Trade Policy.

(Lectures 15)

Instruments of trade policy: Tariffs and welfare, optimum tariff, tariff and real rewards to factors of production, the Stopler–Samuelson Theorem, Metzler's paradox, theory of Customs union, quotas and export subsidies, gains from trade, Trade and growth.

Module 4: Contemporary Regional Trading and WTO.

(Lectures 15)

Regionalism and Multilateralism in the context of WTO, Critical Evaluation of the Role played by WTO, Overview of regional trading arrangement: SAARC, SAFTA, ASEAN, European Union, NAFTA.

References:

1. Grimwade Nigel, International Trade (Second Ed), Routledge, London 2001
2. Grubel H.G. and P.J. Lloyd, Intra-Industry Trade, Macmillan, London, 1975
3. Haberler G. A Survey of International Trade Theory, International Finance Section, Department of economics, Princeton University, 1961
4. Krugman P.R. and –M. Obstfeld, International Economics Theory and Policy, Addison- Wesley, Delhi, 2000
5. Salvatore D., International Economics, John Wiley and Sons, Singapore 2002
6. Sodersten Bo and R. Geoffrey, International Economics, Macmillan, London, 1994

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –XIII	CREDIT	MARKS
ECOEH305	ECONOMICS OF HUMAN DEVELOPMENT	6	100

Course Objectives

This course on Economics of Human Development focuses on the widely accepted global perspective of viewing development as the expansion of peoples' capabilities, capacities and choices. This elective has a relatively strong applied component specifically in relation to India, built into each module.

Course Outcomes

- Awareness on the concepts and dimensions of Human Development
- Enables to understand the relevance of Human Development Indices

Module 1: Concepts of Human Development**(Lectures 15)**

Comparison of growth & development, perspectives on development, Human development basic needs v/s quality of life approach, capability approach, Millennium Development Goals v/s Sustainable Development Goals.

Module 2: Dimensions of Human Development

(Lectures 15)

Empowerment, equity, sustainability, security, Productivity and participation: role of freedom in promoting human development. Multi- dimensionality of poverty: concept of inclusive growth and obstacles to achieve it, Government policy to promote human development with respect to education and health care.

Module 3: Human Development Indices

(Lectures 15)

Need for Indices, GDP, Physical quality of life index (PQLI), Disability Adjusted Life Years (DALY), Social Capability Index, Human Development Index, Human Poverty Index, Gender Related Development Index (GDI), Gender Empowerment Measure comparative analysis for the past three years.

Module 4: Aspects of Human Development

(Lectures 15)

Livelihood, Inequality, Gender, Child Labour, Aging Population, Poverty Alleviation, Food Security, Environment, Displacement and Migration, Education and Health, Workers in informal Sector, Need for Social Security- Role Conflict between ILO and WTO, Concept of Human Security.

References:

1. Chelliah Raja J. and R. Sudarshan (ed), Income Poverty and Beyond: Human Development in India, UNDP, Social Science Press, New Delhi 1999.
2. Comim F.M. Qizilbash and S. Alkire (eds), The Capability Approach: Concepts, Measures and Applications, Cambridge Uni. Press, Cambridge,2007.
3. Dev S. Mahendra, P. Antony, V. Gayathri and R.P. Mamgain, Social Economic Security in India, Institute for Human Development, New Delhi 2001
4. International Labour Organization, A Fair Globalization: Creating Opportunities for All, World Commission on the Social Dimension of Globalization, Geneva, 2004.
5. United Nations Development Programme (UNDP) : Human Development Reports
6. UNDP – India, State Human Development Reports.

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –XIV	CREDIT	MARKS
ECOIE306	INDIAN ECONOMY	6	100

Course Objectives

The paper aims at building strong fundamentals to varied challenges confronting the Indian economy with special reference to it's developmental challenges. Wherever possible an effort is made to incorporate the discussion on relevant case studies in different sectors of the economy.

Course Outcomes

- Students get familiarized with the sectoral issues to be tackled with the Indian perspective.
- Generate awareness on the solutions to deal with the development challenges of the Indian economy in the 21st century globalised world.

Module 1: Characteristics of Indian Economy

(Lectures 15)

Features and Characteristics of the Indian Economy, Trends and Structure, Demographic features, National income, Growth and Structural Change in the Indian Economy, Poverty, inequality and policy implications.

Module 2: Infrastructure and Human Development

(Lectures 15)

Energy; Conventional and Non-Conventional energy development in India, Energy policy, Social infrastructural developments; Education and Health, Recent debates on Human Development in India; Concept and Measurement.

Module 3: Industry and FDI

(Lectures 15)

Industrial Profile of India - Private Sector, Large, Medium and Small Scale Industries, Village Industries, Public Sector, Role and Problems of Public Sector Industries, Small-scale and cottage industries in India-SMEs in India. Recent trends in Industrial growth. Industrial sickness, Exit policy, Role of BIFR, Impact of Globalization: Trends and pattern of FDI in India; Trends and pattern of Indian industry abroad, Export and import component of Indian industrial sector, Industrial Combinations; Causes, Mergers & Amalgamations.

Module 4: The Agricultural Sector

(Lectures 15)

Agricultural Production and Productivity issues, Institutional structure, land reforms in India, technological change in agriculture, Pricing of agricultural inputs and output; Terms of trade between agriculture and industry, Agricultural finance policy, Agricultural Marketing and Warehousing, Issues in food security, Policies for sustainable agriculture.

References

1. Agarawal A.N. (2006): Indian Economy: Problems of Development and Planning , A Division of New Age International (P): Limited, New Delhi.
2. Bawa, R.S. and P.S. Raikhy (Ed.) (1997), Structural Changes in Indian Economy, Guru Nanak Dev University Press, Amritsar.
3. Brahmananda, PR. And V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-state Perspectives, Book well, Delhi.
4. Dutt R and KPM Sundharam (2002): Indian Economy: S. Chand New Delhi.
5. Misra S.K. and V.K. Puri, (2020): Indian Economy, Himalaya, Publishing house, Mumbai.
6. Uma Kapila (2019): Indian Economy-Since Independence-17th Edition, Academic Foundation.

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –XV	CREDIT	MARKS
ECOED307	ECONOMICS OF DEVELOPMENT	6	100

Course Objectives

The objective of this paper is to integrate the developmental perspectives and theories to enable the students to understand the complexity of developing economies and the related economic challenges. The students get to critically reflect on the major economic ideas in development parlance.

Course Outcomes

- To familiarize students with the developmental aspects of nations
- To acquaint with different theories on growth and development

Module 1 : Approaches to Development

(Lectures 15)

Capital formation and Economic Development, Role of agriculture and industry in economic Development, Human Capital formation and economic Development, Human Development approach, Institutional Structure and economic Development, Deficit Finance and Economic Development.

Module 2: Poverty and Inequality

(Lectures 15)

Poverty and income distribution, Poverty and problems of measurement, Income inequality, measurements of inequality, Understanding inequality in the developed and underdeveloped worlds- Impact of inequality on the process of development.

Module 3: Theories of Economic Growth and Development

(Lectures 15)

The Harrod-Domar growth model and its application to LDCs, Surplus labour (Lewis), big push (Rosenstein-Rodan) , Balanced growth (Nurkse) , Unbalanced growth (Hirshman), Solow's model of economic growth, The process of cumulative causation (Myrdal).

Module 4: Population Growth and Developmental Challenges

(Lectures 15)

Population; basic concepts, The theory of demographic transition, Age structures of population, Population Pyramids: high fluctuating, early expanding, late expanding, low fluctuating and natural decrease. Migration; Rural-Rural and Rural-Urban migrations, Cross country migration, Reverse migration, circular migration, The Harris - Todaro Model, Problems of urbanization. Employment markets; Formal sector and informal sector employments and wage rates.

References

1. Meier G. and J. Rauch, Leading Issues in Development Economics, Oxford University Press, 2018.
2. Thirlwall A.P (2018) Growth and Development (8th Edition), 2018
3. Basu, K., Analytical Development Economics: The Less Developed Economy Revisited, The MIT press, 2008.
4. Ray, Debraj, Development Economics, OUP, New Delhi, 2007.
5. Behrman, JR and TN Srinivasan, Handbook of Development Economics, Elsevier, 1995
6. Hayami, Yujiro, Development Economics: From the Poverty to the Wealth of Nations, OUP, Great Britain, 2001.

MA (ECONOMICS) (SEMESTER-III)

COURSE CODE	ELECTIVE PAPER: PAPER NO –XVI	CREDIT	MARKS
ECOF308	FINANCIAL ECONOMICS	6	100

Course Objectives

This paper introduces students to the varied concepts of economics of Finance. It aims at importing knowledge about the basic models of investment and portfolio analysis, including the CAPM. The paper is designed to throw light on the valuation of assets, derivatives and options in addition to patterns of corporate financing which will be based on case study approach.

Course outcomes

- Students will be exposed to the concepts and terminologies of financial economics
- Learners will understand the basics of investment and learn to understand the present and future value of investment.
- Students will be familiar with the concepts like balance sheet, analysis of the balance sheets and corporate finance.

Module 1: Investment and Portfolio Analysis

(Lectures 15)

Basic theory of interest, discounting and present value; internal rate of return - (IRR), evaluation criteria. fixed income securities; bonds prices and yields. Structure of interest rate. yield curves, spot and forward rates. Portfolio of assets, random asset returns. Mean variance portfolio analysis.

Module 2: Financial Statements and Analysis

(Lectures 15)

Concepts of Balance Sheet - Statement of profit and loss, profit versus cash flow, consolidated financial statement, standard financial statements. Financial Ratios and analysis, Application of financial statement analysis, Relationship between finance, economics and accounting.

Module 3: Portfolio Analysis

(Lectures 15)

Meaning and diversification of investment portfolio, Portfolio risk, Efficient Frontier and optimal portfolio, Capital Market line, Capital Asset pricing Model (CAPM), Securities Market Line- SML, the beta of an Asset and of portfolio.

Module 4: Corporate Finance

(Lectures 15)

Patterns of corporate financing; stock. debt, preferences. convertibles. Capital structure and the cost of capital, corporate debt and dividend policy. the Modigliani -Miller theorem.

References:

1. David Luenberger, Investment science. Oxford University Press. 1997.
2. Hull John C. Options. Futures and other derivatives. Pearson Education. 2005.
3. Thomas Copeland, J. Fred Weston and Kuldeep Shastri. Financial Theory and Corporate Policy, Prentice Hall, 2003.
4. Richard Brealey and Stewart Myers. Principles of Corporate Finance. McGraw Hill. 2002.
5. Prasanna Chandra Financial Management: Theory and Practice, 10th edition, McGraw Hill Education (India) Pvt. Ltd.
6. William Sharpe, Gordon Alexander and J. Bailey. Investment, Prentice Hall of India 2003.

MA (SEMESTER-IV)

COURSE CODE	REVISED PAPER		CREDIT	MARKS
ELECTIVE PAPERS: GROUP - A - SKILL ENHANCEMENT (ANY ONE)				
ECOSME401	XVII	STATISTICAL METHODS IN ECONOMICS	6	100
ECOQE402	XVIII	QUANTITATIVE ECONOMICS	6	100
ECOME403	IXX	MANAGERIAL ECONOMICS	6	100
ECOMB404	XX	MONEY AND BANKING	6	100
ELECTIVE PAPERS: GROUP - B - INTERDISCIPLINARY (ANY ONE)				
ECOMMEA405	XXI	MATHEMATICAL METHODS FOR ECONOMIC ANALYSIS	6	100
ECODTP406	XXII	DEMOGRAPHY: THEORY AND POLICY	6	100
ECOEE407	XXIII	ENVIRONMENTAL ECONOMICS	6	100
ECOAPRM408	XXIV	ECONOMICS OF AGRICULTURAL PRODUCTION AND RURAL MARKETS	6	100
DISSERTATION (CASE STUDY)				
-	-	DISSERTATION	10	100

MA ECONOMICS (SEMESTER-IV) GROUP - A - SKILL ENHANCEMENT

COURSE CODE	ELECTIVE PAPER: PAPER NO –XVI	CREDIT	MARKS
ECOSME401	STATISTICAL METHODS IN ECONOMICS	6	100

Course Objectives

This paper specifically designed with the goal of equipping students with the skills to use statistical techniques in varied disciplines. The paper also aims to acquaint the students with the techniques of elementary research.

Course Outcomes

- The students will be able to analyse primary and secondary data and draw inferences from the datasets.

Module 1: Introduction to Probability

(Lectures 15)

Basic concepts and definitions of probability: Laws of addition and multiplication; Conditional, Joint and Marginal probability, Bay's theorem (statement).

Module 2: Methods of Sampling

(Lectures 15)

Types of sampling: Simple Random Sampling, Stratified Random Sampling, Multistage Sampling, Purposive sampling and Properties of simple random samples.

Module 3: Statistical Inference

(Lectures 15)

Point and Interval Estimation-properties of estimators: confidence intervals for population Parameters, Hypothesis Testing, Type I and Type II errors, One tailed and two tailed tests- t test and F test, Chi-Square and p-value, ANOVA.

Module 4: Simple and Multiple Linear Regression Models

(Lectures 15)

Estimation and hypothesis testing, properties of estimators, interpreting regression coefficients, R^2 and Adjusted R^2 , Relaxation of assumptions of classical Linear Regression Models, Auto correlation, Multicollinearity, Heteroskedasticity.

References:

1. Cochran William G.: Sampling Techniques, John Wiley, 2007.
2. Gujarati D: Econometrics: by Examples, Palgrave Macmillan, 2011.
3. Kennedy P.: A Guide to Econometrics, sixth edition, Wiley Blackwell edition, 2008.
4. Santhakumaran A., Fundamentals of Testing Statistical Hypotheses, Atlantic, 2001.
5. Diez. D., Open Intro Statistics, 4th edition.
6. Nachane, Dilip M., 2006." Econometrics: Theoretical Foundations and Empirical Perspectives," OUP Catalogue, Oxford University Press

MA (ECONOMICS) (SEMESTER-IV) GROUP - A - SKILL ENHANCEMENT

COURSE CODE	ELECTIVE PAPER: PAPER NO –XVIII	CREDIT	MARKS
ECOQE402	QUANTITATIVE ECONOMICS	6	100

Course Objectives

This paper acquaints the students with advanced quantitative techniques, which are used in economics. The approach will be majorly application based.

Course Outcomes

- The students will be able to apply advanced quantitative techniques to solve complex economic problems.

Module 1: Differential and integral calculus**(Lectures 15)**

Derivative of a function: addition, multiplication and Chain rule, Second and Higher Order Differentiation, concavity and convexity of functions, Simple rules of indefinite integration, and definite integration and their applications.

Module 2: Matrices and Determinants

(Lectures 15)

Matrices: Inverse of a matrix– Solution of simultaneous equations using matrices (Cramer’s Rule), Transpose, Trace, Adjoint and Inverse of Matrix, Determinants: Types and Properties, Rank of a Matrix, Application of Matrices in Economics: Input-Output Analysis, Hawkins-Simon Conditions

Module 3: Difference Equations

(Lectures 15)

Solving first-order difference equations – Application of first-order difference equations to financial problems – The cobweb model – Second-order difference equations –economic applications of second– order difference equations – Applications of difference equations: Growth models and lagged market equilibrium models.

Module 4: Linear Programming

(Lectures 15)

Basic concept, formulation of a linear programming problem Its structure and variables – Nature of feasible, basic and optimal solution – Solution of linear programming through graphical and simplex method – Statement of basic theorems of linear programming – Formulation of the dual of a programme and its interpretation – Shadow prices and their uses.

References:

1. Chiang A. C.: Fundamental Methods of Mathematical Economics, 3rd edition, McGraw-Hill, 1984.
2. Dowling Edward T: Introduction to Mathematical Economics, Schaum’s Outline Series in Economics, Tata McGraw -Hill, New Delhi, 2004.
3. Lerner Joel J and P. Zima: Theory and Problems of Business Mathematics, McGraw Hill, New York, 1986.
4. Mehta and Madnani: Mathematics for Economists, Sultan Chand & Sons, 2013.
5. Soni R S: Essential Business Mathematics & Business Statistics, Ane Books Pvt. Ltd, 2009.
6. Handry, A.T. (1999), Operations Research, PHI, New Delhi

MA (ECONOMICS) (SEMESTER-IV) GROUP - A - SKILL ENHANCEMENT

COURSE CODE	ELECTIVE PAPER: PAPER NO –IXX	CREDIT	MARKS
ECOME403	MANAGERIAL ECONOMICS	6	100

Course Objectives

This optional paper requires good understanding of managerial aspects of the firms and its operations. The paper aims at providing varied aspects related to market equilibrium as well as the macroeconomic environment.

Course Outcomes

- Enable students to understand the varied factors determining demand supply aspects leading to market equilibrium.
- Enriches them with the knowledge on theory of markets

Module 1: Introduction to Managerial Economics

(Lectures 15)

Meaning, Nature, Scope and Significance, Corporate Economic Decisions, Economic Optimisation using basic functional relations of Total, Average and Marginal Relations, Marginal Analysis via finding Maximum and Minimum, Linear Programming Problems and Multivariate optimisation (Lagrangian Technique)

Module 2: Market Equilibrium

(Lectures 15)

Determinants of Demand –Industry versus firm Demand, Relationship between Demand curve and demand function, Determinants of Supply -Industry versus firm Supply, Supply relationship between Supply curve and Supply function , Market Equilibrium and Changes in Market Equilibrium

Module 3: Production and Cost

(Lectures 15)

The Production Function- Behaviour of Average and Marginal Products, Law of Diminishing Returns, Marginal Revenue Product and Optimal Employment, Optimal level of Multiple Inputs, Constrained Optimisation Approach to developing the Optimal Input combination Relationships. Scale and Scope of Production-Costs of Different types, Behaviour of Average and Marginal Costs, Costs in the long run, Economics of Multiplan operation, Learning Curve.

Module 4: Theory of Markets and the Macro Economic Environment

(Lectures 15)

Perfect Competition Monopoly and Monopolistic Competition, Oligopoly, Oligopoly and Game Theory. Macro Economic Environment - Economic Transition in India – A quick Review, Liberalization, Privatization and Globalization , Business and Government - Public-Private Participation (PPP) ,Industrial Finance, Foreign Direct Investment(FDIs).

References:

1. Hirschey, M.(2007). Economics for Managers Thomoson South-Western, Printed in India by Baba Barkha Nath Printers Haryana.
2. Hirschey, M.(2004). Managerial Economics , Thomoson South-Western, Printed in India by Eastern Press Bangalore.
3. Mukherjee Sampat(2005) Business and Managerial Economics, New central Book Agency Ltd Kolkata.
4. Ghosh Geetika & Choudhury, (2005). Managerial Economics, Cengage Learning, New Delhi.
5. James R. McGuigan, R. Charles Moyer, and Frederick H. deB. Harris (2005) Managerial Economics: Applications, Strategy, and Tactics, Tenth Edition, Thomson South-Western Publishers.
6. Michael Baye and Jeff Prince (2018), Managerial Economics & Business Strategy, 9th Edition, McGraw Hill.

MA (ECONOMICS) (SEMESTER-IV) GROUP - A - SKILL ENHANCEMENT

COURSE CODE	ELECTIVE PAPER: PAPER NO –XX	CREDIT	MARKS
ECOMB404	MONEY AND BANKING	6	100

Course Objectives

The objectives of the paper are to provide an understanding on operation of monetary forces, evolution of money, developments of central bank and commercial banks, development banking and banking sector reforms. The course objectives of the paper include; to make the learners understand the working of monetary forces, to orient the learners about Money and Banking, to help the learners in realizing operating of monetary forces through multitude of channels - Market, Non-market, Institutional etc. To make understand the students about an evolution of money, developments of commercial banks, central banks, theory relating to banking and banking practices in India and other countries.

Course Outcomes

- The learners will get an information and understanding about banking system, theories of banks and non-banks, developments of central bank and commercial banks, development banking, reforms in banking sector and Basel norms.
- The learners will learn in detail about the operating of monetary forces through multitude of channels- market, non-market, institutional etc.
- The learners will be able to understand an evolution of money, developments of commercial banks, central banks, theory relating to banking and banking practices in India and other countries.

Module 1: Introduction to Money

(Lectures 15)

Introduction, Definition, Evolution of Money, Nature and Significance of Money, Kinds of Money, Demand and Supply of Money, Monetary Standards, The Commodity Theory of Money Value, A Brief Review of Theories of Money, The Theory of Money Supply, The 'H' Theory of Money Supply.

Module 2: Banking System and Theory of Banks and Non-Banks

(Lectures 15)

Introduction: Group Banking and Chain Banking, Unit Banking, Mixed Banking and Correspondent Banking, Advantages and Disadvantages. Banking in United Kingdom: Origin, Banking System and Structure, Bank of England and Evolution of Central Banking, Structure, Management and Functions of Bank of England. Banking in United States of America: Introduction, Commercial Banking in USA, Federal Reserve System, Other Financial institutions , Credit Control Devices, Changing Theories of Commercial Banking , Modern Representation of Banking Theories by James Tobin and E.S. Shaw , Gurley - Shaw Thesis and Non-Bank Financial Institutions (NBFIs).

Module 3: Development of Commercial Banks and the Central Banking System (Lectures 15)

Introduction of Commercial Banks, Evolution of Modern Banking System, Structure of Commercial Banking System, Importance, Functions, Process of Credit Creation. Central Banking System: Definition, Changing Concepts of Central Banking, Objectives, Guidelines and Measures of Central Banks , Functions of Central Bank , Role of Central Banks in Developing Countries: Regulatory and Promotional Role, State Ownership of Central Bank.

Module 4: Development Banking and Banking Sector Reforms

(Lectures 15)

Introduction of Development Banking: Nature, Financial Appraisal, Liquidity Ratios, Capital Ratios- Technical and Economic Appraisal, Social Cost-Benefit Analysis, Development Finance institutions, Capital Adequacy, Sources of Funds of DFIs - Banking Sector Reforms-Brief review of Banking Legislation, Need for Reforms, Narasimham Committee Reports, Post Reform Scenario-Basel norms I, II and III

References:

1. Basu A.K, (1967), Fundamentals of Banking Theory and Practice, Fourth Edition, Mukerji, Calcutta.
2. Bedi H.L and Hardikar, (2001) Practical Banking Advances, UBS Publishers, 10th edn., New Delhi.

3. Desai Vasant (2017), Development Banking and Financial Intermediaries, Himalaya Publishing House, Mumbai
4. M. Y. Khan (2011), Indian Financial System, Tata McGraw Hill, 7th edition, New Delhi.
5. Mithani and Gordon, (2016), Banking Theory and Practice, Himalaya Publishing House, Mumbai.
6. Srivastava P K.(2020), Banking Theory and Practice, Himalaya Publishing House, Mumbai.

MA (ECONOMICS) (SEMESTER-IV) GROUP - B – INTERDISCIPLINARY

COURSE CODE	ELECTIVE PAPER: PAPER NO –XXI	CREDIT	MARKS
ECOMMEA405	MATHEMATICAL METHODS FOR ECONOMIC ANALYSIS	6	100

Course Objectives

This paper introduces the students to mathematical techniques which are applied in various areas of research. So the approach would be to teach mathematical applications in Economics.

Course Outcomes

- The students will be able to apply the mathematical techniques to various problems in economics.

Module 1: Introduction to Functions and Derivatives

(Lectures 15)

Graphs, functions and equations- Slope and intercept of a straight line, Higher order functions. Derivative of a function, Rules of differentiation, Application of derivatives in Economics.

Module 2: Partial Derivatives

(Lectures 15)

Partial derivatives, Cross partial elasticities, constrained optimisation, Lagrange multipliers and constraints, Applications in Economics: Homogeneous production functions and returns to scale, Cobb-Douglas production function.

Module 3: Basics of Matrices**(Lectures 15)**

Matrices, Determinants and basic operations on matrices: Addition, Multiplication, Transpose, Inverse of a matrix, Solution of simultaneous equations using matrices.

Module 4: Quadratic Equations**(Lectures 15)**

Introduction to quadratic equations and deriving their roots, Understanding the nature of roots of quadratic equation: Real, imaginary and complex, Finding out the roots of quadratic equations using Matrices, Estimation of simple and exponential growth rates.

References:

1. Chiang A.C.: Fundamental Methods of Mathematical Economics, 3rd edition, McGraw-Hill, 1984.
2. Dowling Edward T: Introduction to Mathematical Economics, Schaum Outline Series in Economics, Tata McGraw -Hill, New Delhi, 2004.
3. Dowling Edward T: Theory and Problems of Mathematical Methods for Business and Economics, McGraw –Hill, 1993.
4. Mehta and Madnani: Mathematics for Economists, Sultan Chand & Sons ,2013.
5. SoniR S: Essential Business Mathematics & Business Statistics, Ane Books Pvt. Ltd , 2009.
6. Sydsaeter, K&P. Hammond,2002, Mathematics for Economic Analysis. Pearson Educational Asia.

MA (ECONOMICS) (SEMESTER-IV) GROUP - B – INTERDISCIPLINARY

COURSE CODE	ELECTIVE PAPER: PAPER NO –XXII	CREDIT	MARKS
ECODTP406	DEMOGRAPHY: THEORY AND POLICY	6	100

Course Objectives

This paper provides students an understanding of demographic processes as well as the linkages between population and economic development. The paper aims to familiarised students the major demographic events.

Course Outcomes

- Provides knowledge on the interrelationship between population and economic development
- Equip students with the knowledge on fertility, mortality and migration

Module 1: Population Science, Demography and Economic Development (Lectures 15)

Population Science and Demography, Population Environment and Development, Implications of Population, Sources Of Demographic Data, Malthusian Theory of Population, Theory of demographic transition, Age and Sex composition of Population, Age Pyramids, Ageing Population.

Module 2: Nuptiality and Fertility (Lectures 15)

Concepts of Nuptiality, Analysis of Marital Status Data, Singulate Mean Age at Marriage, Concepts and Measurements of Cohort and Period Fertility, Rele's Method, Bongaart's Proximate determinants of fertility, socio-economic determinants of proximate variables, indirect estimation of Fertility, Social Engineering.

Module 3: Mortality (Lectures 15)

Concepts and Analysis of Morbidity, Measurements of Mortality, Infant and Child mortality rates, Standardization of Mortality Rates, Life Table: Concepts, Types, Uses, Method of Construction: Differential and Determinants of Mortality.

Module 4: Migration and Population Projections (Lectures 15)

Concepts, Patterns and Measures of Migration, Migration Theories and Models (Ravenstein's, Lee's, Wolpert's and Todaro's Models). Internal and International Migration, Spatial Distribution and Urbanization, Importance of Population Projection.

References:

1. Bhatt M. (2002): On the trial of Missing Indian Females, Economic and Political Weekly, 37(51) (52): 5105-518, 5244-5263.

2. Bhende AA and T. Kantikar, Principles of Population Studies, Himalaya publishers, Mumbai-2000.
3. Bogau DJ, EE, Arriagas, Douglas L. Anderson, Reading in Population Studies and Methodology, published for United Nations Population Fund by Social Development Center, Chicago, Illinois, 1993.
4. Coale A.J., 1971, Age Patterns of Marriage, Population Studies, 25 (2), PP 193-214.
5. Cahuc Pierre and Andre Zylberberg, Labor Economics, Massachusetts Institute of Technology, 2004
6. Uchikawa Shuji (eds.) Labour Market and Institution in India 1990s and Beyond, Manohar Publishers, New Delhi, 2003.

MA (ECONOMICS) (SEMESTER-IV) GROUP - B – INTERDISCIPLINARY

COURSE CODE	ELECTIVE PAPER: PAPER NO –XXIII	CREDIT	MARKS
ECOEEA407	ENVIRONMENTAL ECONOMICS	6	100

Course Objectives

This paper introduces students to the key fundamentals in environmental economics. It also equips students with tools and methodologies that are applied to analyse environmental problems and policies. Further, the paper enhances their understanding of environmental issues, perceived within the context of natural eco system.

Course Outcomes

- Students will be able to understand the conceptual framework of environmental economics
- It equips students to solve issues related to the environmental field
- It empower students to handle Environmental sustainability projects

Module 1: Introduction to Environmental Economics

(Lectures 15)

Types of goods and services- public, private and common pool resources, externalities and market failure, Pollution as a Public Bad, The equi-marginal principle, Economic efficiency versus equity, Damage functions and abatement costs-Coase Theorem.

Module 2: Environmental impact assessment

(Lectures 15)

Valuation of Natural Resources, Direct and Indirect Methods, Environmental impact assessment, Regional, National and Supranational dimensions of environmental degradation, Global Externalities and Climate Change.

Module 3: Economic Growth and the Environment

(Lectures 15)

Limits to growth and Sustainable Development, Economic Growth and environment, Environmental Kuznets Curve, Environment as an economic and social good/asset, Natural Resource (Exhaustible, renewable, common property resources), Green Accounting.

Module 4: Environmental Policy and Practices

(Lectures 15)

Approaches to environmental policy, Command and control, Environmental Standards, Technology Mandates, Market based instruments - Taxes, subsidies, liability instruments tradable permits; Kyoto Protocol; Rio debate- Relevant Case Studies.

References:

1. Dixon, J. A., and M. M. Hufschmidt, eds. (1986): Economic valuation techniques for the environment: A case study workbook. Baltimore: Johns Hopkin University.
2. Field B.C. (1997): Environmental Economics- An Introduction, McGraw-Hill International Edition, Singapore.
3. Hodge Ian (1995): Environmental Economics, MacMillan Press Ltd., London.
4. Jeroen C.J.M. van den Bergh (2002): Handbook of Environmental and Resource Economics, Edward Elgar Publishing.
5. Jinhua Zhao and Tony Fisher: Notes on Irreversibility, Sustainability and the Limits to Growth, <http://econpapers.repec.org/paper/isugenres/default22.htm>
6. Kolstad Charles (2006): Environmental Economics, Oxford University Press, USA.

MA (ECONOMICS) (SEMESTER-IV) GROUP - B – INTERDISCIPLINARY

COURSE CODE	ELECTIVE PAPER: PAPER NO –XXIV	CREDIT	MARKS
ECOAPRM408	ECONOMICS OF AGRICULTURAL PRODUCTION AND RURAL MARKETS	6	100

Course Objectives

This paper would be helpful to understand the various types of relationships in agriculture: factors and products, problems of instability in production, the functioning of imperfections in credit markets, labour markets, and land markets.

Course Outcomes

- Enable students to understand the importance of agricultural production
- Provides them the knowledge on different sources of credit to engage into agricultural operations

Module 1: Economics of Agricultural Production, Resource Use and Instability in Agriculture (Lectures 15)

Resource and input use, Important production relationships, Economics of input and product substitution, Imperfections in product and input markets in developing agriculture, Sources of price variability and income instability, Rationale for and types of government intervention for price support and reduction in instability, Alternative concepts of cost of cultivation and determination of minimum support prices in India, Role and optimum size of buffer stocks

Module 2: Rural Credit Markets (Lectures 15)

Characteristics of rural credit markets, credit fragmentation – Organized and unorganized sectors– Theories of informal credit markets: Lender's Risk Hypothesis, Default and collateral, Credit rationing: Default, Informational asymmetries – Moral hazard – Evolution of credit systems in India– Role and Performance of Commercial Banks, Co-operative Credit Institutions, Regional Rural Banks, NABARD and Micro-credit through SHGs in India, imperfections in rural credit markets in India

Module 3: Labour Markets

(Lectur

es 15)

Concepts of work, skill and productivity– Methods of measurement of employment and unemployment– Free and unfree labour– Types of employer-employee relationships – Determinants of wage rates– Labour market segmentation – Gender-based discrimination– Biases in data sources– Wage Differentials – Contract Labourers in rural markets.

Module 4: Land and Lease Markets

(Lectures 15)

Types of farming– Historical evolution– Segmented property rights– Characteristics and functioning– Economic, extra-economic and legal restrictions– Lease market– Formal and informal leases– Economics of share tenancy – Crop-sharing practices in India– Inequity in distribution of holdings– Market interlocking and interlinkages – Analysis of rural classes – Contract Farming.

References:

1. Bardhan P.K, Land, Labour and Rural Poverty, Oxford University Press, New Delhi, 1984
2. Basu Kaushik, Agrarian Structure and Economic Underdevelopment, Harwood, Switzerland, 1990
3. Dantwala M.L. (Ed), Indian Agricultural Development since Independence, (Second Edition) Oxford and I.B.H. Pvt. Ltd., 1991
4. Ray Debraj, Development Economics, Oxford University Press, Oxford, 2004
5. Kapila Uma, Understanding the Problems of the Indian Economy, (Sixth Edition) Academic Foundation, New Delhi, 2005
6. Kahlon A.S. and D.S. Tyagi, Agricultural Price Policy in India, Allied Publishers Pvt. Ltd., New Delhi 1983.