



ख्वाजा मुईनुद्दीन चिश्ती भाषा विश्वविद्यालय, लखनऊ, उत्तर प्रदेश (भारत)
Khwaja Moinuddin Chishti Language University, Lucknow, U.P. (India)

U.P. STATE GOVERNMENT UNIVERSITY,
(Recognised Under Section 2(f) & 12(B) of the UGC Act, 1956 & B.Tech. Approved by (AICTE)



KHWAJA MOINUDDIN CHISHTI LANGUAGE UNIVERSITY LUCKNOW, U.P.



DEPARTMENT OF ECONOMICS SYLLABUS FOR POSTGRADUATE IN ECONOMICS (M.A.) UNDER CHOICE BASED CREDIT SYSTEM(CBCS) ACCORDING TO NEP-2020 FOR SESSION -2026-27



Ordinance

M.A. Economics Syllabus

From the Session 2026-27

1. **Applicability:**

The ordinance shall be applicable to the Master in Arts in Economics or other discipline as per NEP 2020, from the session 2022-23. Applicants who have completed their 3-year (VI semester) undergraduate degree will be liable to start their postgraduate from year 4th i.e. Semester VII upto semester X (5th year) from the given course structure.

2. **Definition of Key Terms:**

- A. **Choice Based Credit System:** The CBCS provides an opportunity for the students to choose courses from the prescribed courses comprising Core, Generic-Elective/ Skill Enhancement (SEC) or Discipline Specific Electives (DSE) courses.
- B. **Academic Programme** means an entire course of study comprising its programme structure, course details, evaluation schemes etc. designed to be taught and evaluated in a teaching Department/Centre or jointly under more than one such Departments/ Centres;
- C. **Credit** means the value assigned to a course which indicates the level of instruction; **One-hour lecture per week equals 1 Credit, 2 hours practical class per week equals 1 credit.** Credit for a practical could be proposed as part of a course or as a separate practical course.
- D. **'SGPA'** means Semester Grade Point Average calculated for individual semester.
- E. **'CGPA'** is Cumulative Grade Point Average calculated for all courses completed by the candidates at any point of time. CGPA may be calculated each year for both the semesters clubbed together if University Ordinances provides for.
- F. **'Grand CGPA'** is calculated in the last year of the course by clubbing together the SGPA of all the semesters. Grand CGPA is being given in transcript form. For the benefit of the candidates, a formula for conversion of Grand CGPA into %age marks as given in the transcript.
- G. **'Grade Point'** is a numerical value allotted to each letter grade.
- H. **'Grade Card'** will be given to all students upon completion of academic work of any semester of a programme and will display the course details (code, title, number of credits) grade obtained in each course and SGPA/CGPA.
- I. **'Letter Grade'** it is an index of the programme leading to award of a degree, diploma, or certificate.



- J. **‘Transcript’** will be given to all students upon completion of academic work of all the semesters of a programme and will display the course details (code, title, number of credits) and grade obtained in each course, and CGPA.

3. **Types of Courses:**

- A. **Course** means a segment of a subject that is part of an Academic Programme;
- B. **Programme Structure** means a list of courses (Core, Major & Minor Electives, Co-Curricular and Industrial Training etc.) that makes up an Academic Programme, specifying the Syllabus, Credits, hours of teaching, evaluation and examination schemes, minimum number of credits required for successful completion of the programme etc. prepared in conformity to University Rules, eligibility criteria for admission.

4. **Attendance and credit determination**

- A. It will be necessary to take the examination for credit validation. Credits will be incomplete without the examination.
- B. To take the examination, 75 percent attendance will be mandatory as per the earlier rules.
- C. If a student qualifies for the examination on the basis of attendance in the class but is unable to take the examination due to any reason, he/she can take the qualifying examination at a later date. There is no need to take classes again.

5. **MOOCs:**

The students will have freedom to choose a similar course of 4/5/6 credits out of the MOOCs portal of UGC, in place of the Core Course offered in the semester. MOOC courses may be opted depending upon the availability on the government approved portal.

6. **Teaching:**

The faculty members of the Department are primarily responsible for organizing lecture work for P.G. The instructions related to tutorials are provided by the respective registering units under the overall guidance of the Department. Faculty from some other Departments are also associated with lecture and tutorial work in the Department.

7. **Eligibility for Admissions:**

The admission to students is offered through direct admission mode on the bases of merit list prepared by the university. In case of entrance test, merit for admission will be prepared on the basis of test result. Candidates with U.G. with Arts/ Commerce/Science are eligible to get admission.



8. Reservations/Relaxations

The eligibility condition and number of seats under various Reserved Categories shall be as per the proportionate reservation as provided under Uttar Pradesh state Govt. Rules.

9. Fees:

The fee charged from the students of post graduate degree programme shall be as approved by the Finance Committee.

10. Course Structure:

The course structure of the postgraduate degree programme shall be as under:

- A. All four semester shall have a weightage of 100 credits.
- B. Detailed course structure in forthcoming page

11. Assessment of Students' Performance and Scheme of Examinations:

- A. English and Hindi shall be the medium of instruction and examination.
- B. Examinations shall be conducted at the end of each Semester as per the Academic Calendar notified by the University.
- C. The system of evaluation shall be as follows:
 - Each paper will carry 100 marks, of which 25 marks shall be reserved for internal assessment based on a combination of tutorials, classroom participation, project work, seminar, term papers, tests, and attendance. The weightage given to each of these components in a combination shall be decided and announced at the beginning of the semester by the Department in consultation with the teachers.
 - The remaining 75 marks in each paper shall be awarded on the basis of a written examination at the end of each semester. The duration of written examination for each paper shall be three hours. Examinations for courses shall be conducted in the respective odd and even Semesters as per the Scheme of Examinations. Regular as well as ex-students shall be permitted to appear/reappear/improve in courses of Odd Semesters only at the end of Odd Semester and courses of Even Semesters only at the end of Even Semesters.

12. Pass Percentage & Promotion Criteria:

- A. The minimum marks required to pass any paper in a semester shall be 40% in each paper, separately in internals and end-semester examination, 40% in aggregate of a semester.
- B. The general rules/guidelines of the examination of University Ordinance shall be applicable.
- C. However, a candidate who has secured the minimum marks to pass in each paper but has not secured the minimum marks to pass in aggregate may reappear in any of the paper/s of his



choice in the concerned semester to be able to secure the minimum marks prescribed to pass the semester in aggregate.

13. Guidelines for the Award of Internal Assessment Marks:

Following are the guidelines for the award of Internal Assessment marks to the students admitted to P.G. Semester-based Course Scheme:

Award of Internal Assessment Marks for Core, skill Enhancement and Discipline Specific Elective are given in each paper.

14. Conversion of Marks into Grades:

For the ease of evaluation, assessment/evaluation of each course of a semester will be held for maximum marks of 100 irrespective of number of credits allotted to the course (25 for internal assessment and 75 for end semester examination). The marks will be converted to grades as per the following table:

Grade Point	Grade	Range of Marks	Numeric value of grade
10	O (outstanding)	$90 \leq M \leq 100$	10
9	A+ (Excellent)	$80 \leq M < 90$	9
8	A (Very Good)	$70 \leq M < 80$	8
7	B+ (Good)	$60 \leq M < 70$	7
6	B (Above Average)	$50 \leq M < 60$	6
5	C (Average)	$45 \leq M < 50$	5
4	P (Pass)	$40 \leq M < 45$	4
0	F (Fail)	$0 \leq M < 40$	0
0	Ab (Absent)	--	0

Programme Objectives: -

The Master of Arts programme in economics has been designed with the objective to develop in depth knowledge of students in frontier areas of theory and objective and methods, so that they are able to use the knowledge to study real world economic problem.

- A. The course has a strong focus on theoretical and skill and train students in the collection and analysis of the data using their software skill.



- B. The programme offers specialized optional course, which allow student to pursue their studies in their Area of Interest.
- C. To enable students for pursuing respectable career through self- employment, executive employment, entrepreneurship, professional career in the field of service sector such as e-Banking, share market investment , insurance and other avenues.

Programme Outcomes (POs)

Economics is long-established discipline whose relevance to the world of business, government, international relations, and academia is widely acknowledged. The Master of Arts (M.A.) Programme in Economics reflects new developments in the Economics discipline. Thus, the master's in economics programme seek to:

- PO 1. Prepare students to develop critical thinking to carry out investigation about various socio-economic issues objectively bridging the gap between theory and practice.
- PO 2. Create awareness to become a rational and an enlightened citizen so that they can take the responsibility to spread the government's initiative/schemes to the rural areas for the upliftment of the poor or vulnerable section of the society for inclusive growth.
- PO 3. Completion of this program students are aware about data collection from different resources and choose right methodology for research work.
- PO 4. After the completion of this program students are aware about preparation of research project.
- PO 5. Prepare students for working in real economic world from different areas such as- Banking, Financial sector capital market and NGO's etc.

Programme Specific Outcomes (PSOs)

At the end of the programme, the students will have adequate competency in the frontier areas of economic theory and methods.

- PSO 1. The students will acquire specialisation through optional courses.
- PSO 2. They will be able to use common software for analysis of economic data, Keeping the programme objective in view, the specific learning outcomes of master's in economics are:
- PSO 3. Prepare and motivate students for research studies in economics especially by developing questionnaire, collecting primary data through field survey.



- PSO 4. Motivate students in preparing for various competitive examination, NET, SET, Indian Economic Service (IES) etc., by developing or gaining value addition day by day by giving assignment by following a routine or developing discipline/concentration etc.
- PSO 5. Delineate the fiscal policies designed for developed and developing and less economies.

Structure of the Programme: -

The M. A. Economics Programme is spread over two years. Each year is divided into two semesters. The Programme requires students to take a combination of Core courses, Freeze Electives, Enhancement, and the inter-disciplinary Generic Electives courses/Open Elective courses along with the MOOCS. A student is required to complete a minimum of 100 credits for the completion of the Programme and the award of the M. A. Economics degree from the university.



Department of Economics

Session 2026-27

Course No.	Name of the Course	Credit	Internal Marks	Theory/ Practical Marks	Total Marks	Remarks
Semester I						
MAECC-101	Micro Economics Analysis-1	05	25	75	100	Core Course
MAECC-102	Gender Economics	05	25	75	100	Core Course
MAECC-103	Advanced Environmental Economics-1	05	25	75	100	Core Course
MAECC-104	Economic data analysis	05	25	75	100	Core Course
MAEGE-101	Indian Economy	04	25	75	100	Generic Course
MAERP-101	Research Project Conceptual	04	25	75	100	Survey/Research Project
Semester Total		28				
Semester II						
MAECC-201	Micro Economics Analysis-II	05	25	75	100	Core Course
MAECC-202	Monetary Economics	05	25	75	100	Core Course
MAECC-203	Advanced Environmental Economics-II	05	25	75	100	Core Course
MAECC-204	Financial Economics	05	25	75	100	Core Course
MAERP-202	Research Project	04	25	75	100	Survey/Research Project
Semester Total		24				
Semester III						
MAECC-301	Macro Economics Analysis-I	05	25	75	100	Core Course
MAECC-302	International Trade and Finance	05	25	75	100	Core Course
MAECC-303	Ethics and Economics	05	25	75	100	Core Course
MAEEL304A Or MEEEL304B	Development Economics(A) Economic History of India Since 1947(B)	05	25	75	100	Core Course
MAERP-301	Research Project	04	25	75	100	Survey/Research Project
Semester Total		24				
Semester IV						
MAECC-401	Macro Economics Analysis-II	05	25	75	100	Core Course
MAECC-402	Health Economics	05	25	75	100	Core Course
MAECC-403	Globalization and Development	05	25	75	100	Core Course
MAEEL 404(A) Or MAEEL 404(B)	Quantitative Techniques(A) Demography(B)	05	25	75	100	Core Course
MAERP-404	Research Project	04	25	75	100	Survey/Research Project
Semester Total		24				



QUESTION PAPERS PATTERN

1. For Question papers carrying 75 marks:

SECTION A: Answer any out 5 of 10 Questions (5 X 5 Marks = 25 Marks)

SECTION B: Answer all the 5 questions with one option in each question.
(5 X 10 marks = 50 Marks)

Detail of the internal marks is as follows: -

1. For Question papers carrying 25 (Internal) marks:

➤ Internal Test	- 10 Marks
➤ Assignment	- 10 Marks
➤ Attendance	- 05 Marks
Total	- 25 Marks

2. For course Project/ Dissertation Carrying 25(Internal) marks:

➤ Presentation/Assignment + Viva	- 20 Marks
➤ Attendance	- 05 Marks
Total	- 25 Marks

3. Classes will be conducted based on 80% offline and 20% online.



M.A. ECONOMICS

SEMESTER-I MICRO ECONOMICS ANALYSIS-I

Course Code:-MAECC-101

Credits: 5

Course Objective:

To develop an advanced theoretical understanding of consumer behaviour and decision-making.
To develop a theoretical understanding of strategic behaviour of economic agents.

Course Content

UNIT I: Theory of consumer behaviour

Basic concepts; Marshall's Approach; Ordinal Utility Theory: Optimizations, derivation of demand function. Measurement of Utility, Cardinal vs. Ordinal Approaches. Theory of Revealed Preference and logic of Ordering; Strong and weak Ordering and theory of Demand; Hicks Revision of Demand theory. Elasticity of demand.

UNIT II: Theory of Production

Basic Concepts; Short-run and long-run production functions; Properties of homogeneous production functions (CD and CES production functions); Optimizing Behaviour and derivation of input demand functions,

UNIT III: Theory of cost

Concepts of Costs: Traditional Cost Theories: Short-run and Long-run Costs, Envelope curve; Modern theory of Costs: Short-run and Long-run, L-shaped scale curve

UNIT IV: Price-Output under Perfect Competition and Monopoly:

Perfect Competition: Short-run and Long-run Equilibrium; Supply curves of the Firm and Industry; Dynamic Changes and Industry Equilibrium. Monopoly: Short-run and Long-run Equilibrium; Predictions in Dynamic Changes.

UNIT V: Output under Monopolistic Competition and Oligopoly:

Product differentiation and Demand curve; Industry and Group; Chamberlin's model: with entry and price competitions and equilibrium of firms; Comparison Competitive and Monopolistic Competitive Markets; Concept of Excess capacity; Non-collusive Oligopoly.



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO1.To understand basic concept of microeconomics.	K
2	CO 2. To understand the theory of consumer behavior.	K
3	CO 3. To understand the cost function.	K
4	CO 4. Concept of Perfect and Monopoly market.	K
5	CO 5 To understand concept of Monopolistic and oligopoly	K

Readings:

1. Ahuja, H. L (2019): Advanced Economic Theory”, S. Chand & Company.
2. Shastri, Rahul. A (1999): Microeconomics”, Orient Blackswan.
3. Ahuja, H. L (2012): Uchchar Arthik Siddhant”, S. Chand & Company, New Delhi.
4. Dwivedi, D.N (2011): Microeconomics-Theory & Applications”, Pearson.
5. Lal, S.N (2013): Arthshastra Ke Siddhant”, Shiva Publishing House, Allahabad. Seth, M. L(2012): Arthshastra Ke Siddhant”, Laxmi Narayan Publications, Agra
6. Lipsey, Richard & Chrystal, Alec (2011): Economics”, Oxford University Press Publications, New Delhi.
7. Pindyck, Robert. S., Rubinfeld. Daniel. L., Mehta. Prem. L (2009): Microeconomics”, Pearson.
8. Salvatore, Dominic (2010): Principles of Microeconomics”, Oxford University Press Publications, New Delhi.
9. Samuelson, Paul. A& Nordhaus, William. D (2010): Economics”, Tata McGraw Hill. Koutsoyiannis, A (2008) (2nded): Modern Microeconomics”, Macmillan.
10. Stonier, A. W& Hague. Douglas. C (2003)(5th ed) : A Text Book of Economic Theory”, Pearson.
11. Ahuja, H.L(Fist Edition 2022): “Principles of Microeconomics”, S. Chand & Company, Syllabus based on NEP 2020.
12. आहूजा, एच.एल. (प्रथम संस्करण 2022): "सूक्ष्मअर्थशास्त्र के सिद्धांत", एस. चंद एंड कंपनी, एनईपी



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2020 पर आधारित पाठ्यक्रम।

Suggested equivalent online:

1. www.swayam.nptel.in
2. www.gyankosh.in



GENDER ECONOMIC

Course Code: MAECC- 102

Credit: 05

Course Objective:

To introduce students to the discipline of Gender Studies and its specific purposes and perspectives and to understand the basic concepts of Gender Studies.

Unit 1: Defining Gender:

Difference between Gender and Sex, Types of Gender, Patriarchy, Gender Stereotypes, From Women 's Studies to Gender Studies: A Paradigm Shift, Waves of Feminism, GDI GEM, GNI, Gendered Social Movements, International Initiatives for Wome Development.

Unit 2: Approaches to Gender:

Pre- and Post- Colonial Feminism, Capability approach, Approaches to Women and development (WIN, WAD, GAD), Intersectionality.

Unit 3: Women and Health:

Reproductive Health, Family planning, New Reproductive Technology, Maternal Health, Violence against women and Mental health.

Unit 4: Women and Work:

Women in primary, secondary and tertiary sectors, Gender Gap in accessto Resources and Control over Economic Resources, Gender Discrimination, Impact of gender equality on economic development, Marginalisation and Glass Ceiling, Gender issues at the work place.

Unit 5: Contemporary Issues:

Women and Planning, Gender Budgeting, Gender Mainstreaming, Migration and Displacement of women, Women in Discourse.

Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1.To understand basic concept of Gender Studies .	K
2	CO 2. To understand concept of Capability approach.	K
3	CO 3. Able to understand Reproductive Health.	K



4	CO 4.Explain the concept of Women in primary,secondary and tertiary sectors.	K
5	CO 5 Able to understand Gender Budgeting.	K

Selected Readings:

1. Agarwal Bina, Gender Challenges, Oxford University Press
2. Ahlawat Neerja, Gender Discrimination and Development Paradox, Rawat Publications, Jaipur
3. Boserup Ester, Women's Role in Economic Development, George Allen and Unwin, Routledge
4. Chattopadhyay S.K., Gender Socialization and the Making of Gender in the Indian Context, Sage
5. Chowdhry Prem, Understanding Women's Land Rights: Gender Discrimination in Ownership, Sage
6. Dreze J & Sen A, India: Development and Participation, Oxford University Press.
7. John Mary E., Women Studies in India: A Reader, Penguin, India
8. Judith Butler, Gender Trouble, Routledge
9. Menon Nivedita, Seeing like a Feminist, Penguin
10. Misra. Roli, Migration and Gender Construction: Women in Transition (ed) by Sage Stree
11. Misra. Roli, Rethinking Gender (ed) by Rawat Publications, Jaipur
12. Moser Caroline, Gender Planning and Development, Routledge
13. बिस्वान तपन, "मानवाधिकार लिंग और पर्यावरण", विवा बुक्स प्रकाशन

Suggested equivalent online:

1. www.swayam.nptel.in
2. www.gyankosh.in



ADVANCED ENVIRONMENTAL ECONOMICS-I

Course Code: MAECC-103

Credit:05

Course Objective:

Students will come to know about the relevance of environmental economics and how market allocate goods & how sometimes market fail to allocate environmental resources optimally and they will come to know how sustainable development of the economy can be attained.

Course Content

Unit - I

Introduction, Nature Scope and Methodological Issues in Environmental Economics, Institutions and Environmental Governance, Relation between development and environmental stress; Environmental Kuznet's Curve, Impact of Human Activity on Environment.

Unit – II

Environmental Kuznet's Curve, Ecology, Environment and Eco-system, Ecology and Economics, Economy- Ecology-Environment Interaction; Conflicting Paradigms, The Material Balance Principle: Ecological Concern in the evolution of Economic thought. Entropy Law

Unit-III

Economics of Exhaustible Resources: Hotelling's rule; Solow-Harwick's Rule; Market structure and optimal extraction policy; Uncertainty and the rate of resources extraction; Resource scarcity. Economics of Renewable Resources; Economic Models of forestry and fisheries; Extinction of species.

Unit – IV

Concept of Sustainable Development, Sustainable Economic Growth and Development: An Economists perspective. Rules of Sustainable Development, Indicators of Sustainable Development, Measuring Sustainable Development,



Unit – V

Energy & Environment, Infrastructure and Environment, Trade and Environment, Agriculture and Environment, Industry and Environment, Services Sector and Environment, Economics of Pollution (air, Water, Solid Waste, Noise, Land degradation), Stationary and Mobile Sources of Pollution, Urban and Rural Environmental problems.

Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To able to learn that economic objectives are not necessarily in conflict with environmental goals.	K
2	CO 2. Understand the concept of Ecology.	K
3	CO 3. To learn the Economics of Renewable Resources.	K
4	CO 4. Understand the concept of Sustainable Development	K
5	CO 5. Explain the concept of Pollution.	K

Suggested Readings:

1. Bharucha, Erach : Paryavaran Adhyann, Orient Blackswan.
2. Bhattacharya, Rabindra Nath (2002): Environmental Economics – An Indian Perspective, OxfordUniversity Press.
3. Eugene,T (2005) : Environmental Economics, Vrinda publications, Delhi.
4. Jhingan,M.L & Sharma,C.K (2009) : Environmental Economics Theory Mgt & Policy, Vrinda publications, Delhi.
5. Kolstad, Charles. D (2012): Intermediate Environmental Economics, Oxford University Press.
6. कौशिक सी.पी. और कौशिक अनुभा (दूसरा संस्करण 2022) पर्यावरण अर्थशास्त्र न्यू एज इंटरनेशनल।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



ECONOMIC DATA ANALYSIS

Course Code: MAECC-104

Credit:05

Course Objective:

The objective of the course is to provide the students with a thorough knowledge and understanding of the basics of economic data analyses.

Unit I

Meaning, Scope, Importance and Limitations of Statistics in Economics. Measures of Central Tendency; Mean, Median, Mode, Geometric mean and Harmonic mean.

Unit II

Measures of dispersion: Range, Quartile deviation, Mean Deviation and Standard deviation. Concepts of Skewness and kurtosis.

Unit III

Correlation; Simple, Coefficient of correlation — Karl Pearson and Rank Correlation, Simple linear regression, Association of Attributes

Unit IV

Purpose and uses of Index Number, Problems of Construction, different formulae for Price and Quantity Index Numbers, Tests for Index Numbers, Chain Index, and Cost of Living Index.

Unit V

Concepts and Components of Time-Series- Long-term trend, Seasonal, Cyclical and Random Fluctuations, Analysis of trend- Moving Average Method.

Course Outcome: After successful completion of this course students will be able to:

S.N	Course Outcome	Bloom, s Taxonomy
1	CO 1: To understand the concept of Central tendency.	K
2	CO 2: Able to understand measure of dispersion	K
3	CO 3: To understand the concept of regression.	K
4	CO 4: To understand the concept of index number.	K
5	CO 5: To understand the time series.	K



Suggesting Readings:

1. Mathematics for Economists-Mehta and Mandani.
2. R.G.D. Allen- Mathematical Analysis for Economists.
3. Croxton, F.E., D.J. Cowden and S. Klein : Applied General Statistics.
4. A.L. Nagar and R.K. Das- Basic Statistics.
5. Spiegel, M.R.: Theory and Problems of Statistics.
6. Yule and Kendall – An Introduction to the Theory of Statistics
7. Chiang,A.C. (1984). Fundamental Methods of Mathematical Economics, (3rd Edition)
McGraw-Hill.
8. Gupta, S. P., Statistical Methods (28th Edition) , Sultan Chand & Sons
9. शुक्ला एवं शुक्ला (संशोधित संस्करण 2018) "सांख्यिकी के सिद्धांत" साहित्य भवन प्रकाशन, आगरा।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



INDIAN ECONOMY

Course Code: MAEGE-101

Credit: 4

Course Objective:

The objective of the course is to provide the students with a thorough knowledge and understanding of the nature, problems and functioning of Indian economy.

Course Content

Unit I

Indian Economy scope and nature, Indian Economy before Independence: A Review; Economic consequences of the British rule; Need for planned economic development; Basic strategy for development of the Indian economy under the planning period, Main aspects of new economic policy and its relevance.

Unit II

Changes in the strategy of Indian planning; Role of the public and private sectors in India; India; An underdeveloped Economy and Developing Economy, Growth of Indian Economy since independence,

Unit III

Industrial policy; Nature and extent of industrialization; and the existing production structure of industry in India. Agrarian Reforms: Land Reforms, New agricultural policy; Production Structure of Indian Agriculture.

Unit IV

Fiscal and Financial Sector reforms and recent changes in the policy; Natural Resources; Foreign capital in India; and Foreign Direct investment and Portfolio Investment, Savings and Capital Formation in Indian Economy.

Unit V

Foreign Trade in Goods and Services; ; WTO and Indian Economy; Economic Development and Environment Degradation; Population problem; Unemployment; Regional imbalances; Trends in migration;



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept Indian Economy.	K
2	CO 2. Able to understand Role of the public and private sectors in India.	K
3	CO 3. Able to understand role of industrial policy.	K
4	CO 4. To understand the concept of Financial sector reform.	K
5	CO 5. To able to understand the World trade organization (WTO).	K

Suggested Readings

1. Pranab Mukherji (2012) "Budget Making" in K. Basu and A. Maertens (eds), *The New Oxford Companion to Economics in India*, OUP
2. Dipak Dasgupta and Supriya De (2012) "Fiscal Deficit", in Basu and Maertens.
3. Y V Reddy (2015), "Continuity, Change and The Way Forward: Fourteenth Finance Commission", EPW Vol. 50, Issue No. 21,23, May, 2015
4. Economic Survey of India 2022-23.
5. Economic Survey and Union Budget 2023-24, Access Publishing.
6. भारत का आर्थिक सर्वेक्षण 2022-23.
7. Union Budget 2023-24.
8. केंद्रीय बजट 2023-24।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



Research Project Conceptual

Course Code: MAERP-101

Credit: 4

Course Objective:

The objective of the course is to make the students learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis and interpretation.

Course Outcomes:

Students will be able to understand

- In-depth knowledge and application of Economics in research.
- Learn to prepare Research Project.

General Outlines:

1. Each student should be assigned a project supervisor from the faculty members of the concerned centre, preferably on the basis of the students' preferences.
2. The topic of project report should be decided by the supervisor taking into account the area of interest of the student. As far as possible the topic should address the current issues / developments in the field.
3. Standard norms for the preparation of a research project report may be followed – introduction, brief background, relevance of the topic, literature review, problem statement, objectives, hypotheses, sample design, data nature and sources, tools and techniques of data collection, data presentation, analysis, and interpretation, findings and conclusion.
4. The project outcomes may be reported in the following form: Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure etc..
5. APA 6th edition style sheet may be followed for preparing in-text citations, foot notes, end notes, references and bibliography.
6. The project outcomes should be evaluated both in the form of project reports and seminar presentation/viva-voce examination by a duly constituted committee by the appropriate authority.



Suggested Reading:

1. Ranjit Kumar (2014) *Research Methodology: A Step-by-step Guide for Beginners*, 4th Edition, sage Publication.
2. Bethlehem, J. (2009) *Applied Survey Methods: A Statistical Perspective*, Wiley.
3. Cachran, Willam, G (2008) *Sample Techniques*, Third Edition, Wiley-India, ISBN 978-81-265-1524-0. Reprint:2008.
4. Mishra B. 2018, *Research Methodology*, Chaukhambha Orientalia Publication.
5. कोठारी सी. आर. (पहला संस्करण 2022), रिसर्च मेथडोलॉजी, न्यू एज इंटरनेशनल प्राइवेट लिमिटेड।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



M.A. ECONOMICS
SEMESTER-II
MICRO ECONOMICS ANALYSIS-II

Course Code: MAECC-201

Credit: 05

Course Objective:

The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of modern economic analysis.

Course Content

Unit I

Collusive Oligopoly and Theory of Games:

Collusive Oligopoly: Cartels: Market sharing and joint profit maximization; Price leadership: Low-cost, Dominant firm, and Barometric price Leaderships. Theory of Games and collusive oligopoly, Certainty and Uncertainty.

Unit II

Marginalist Controversy and Average Cost Pricing:

Marginalist Controversy and Average Cost Pricing: Hall and Hitch Report and Full-Cost Pricing, Theories of Firm: Baumol, Marris and Williamson Models of the Firm.

Unit III

Factor Pricing and Income Distribution:

Factor Pricing under Perfectly Competitive Markets; Factor Pricing Under Imperfectly Competitive Markets: Monopolistic and Monopsonistic powers; Bilateral Monopoly, Pricing of fixed factors: Rents and Quasi Rents, Distribution.

Unit IV

General Equilibrium:

Interdependence in the Economy; The Walrasian System; Existence, Uniqueness and Stability of an Equilibrium; Path to General Equilibrium; Two-factor, two-commodity, Two-consumer General Equilibrium System.

Unit V

Welfare Economics:

Welfare Economics: Pareto Optimality; Kaldor-Hicks Compensation Criteria, Bergson Criteria; Maximization of Social Welfare. Arrow's Impossibility Theorem and Theory of Second Best.



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept oligopoly.	K
2	CO 2. Able to understand the Average cost pricing.	K
3	CO 3. To understand the concept of factor pricing.	K
4	CO 4. To understand the concept of General Equilibrium System.	K
5	CO 5. To understand the concept of welfare economics.	K

Suggested Readings:

1. Ahuja, H. L (2019): Advanced Economic Theory”, S. Chand & Company.
2. Shastri, Rahul. A (1999): Microeconomics”, Orient Blackswan.
3. Ahuja, H. L (2012): Ucchatar Arthik Siddhant”, S. Chand & Company, New Delhi.
4. Dwivedi, D.N (2011): Microeconomics-Theory & Applications”, Pearson.
5. Lal, S.N (2013): Arthshastra Ke Siddhant”, Shiva Publishing House, Allahabad. Seth, M. L (2012): Arthshastra Ke Siddhant”, Laxmi Narayan Publications, Agra
6. Lipsey, Richard & Chrystal, Alec (2011): Economics”, Oxford University Press Publications, New Delhi.
7. Pindyck, Robert. S., Rubinfeld. Daniel. L., Mehta. Prem. L (2009): Microeconomics”, Pearson.
8. Salvatore, Dominic (2010): Principles of Microeconomics”, Oxford University Press Publications, New Delhi.
9. Samuelson, Paul. A & Nordhaus, William. D (2010): Economics”, Tata McGraw Hill. Koutsoyiannis, A (2008) (2nd ed): Modern Microeconomics”, Macmillan.
10. Stonier, A. W & Hague. Douglas. C (2003) (5th ed) : A Text Book of Economic Theory”, Pearson.
11. Ahuja, H.L (First Edition 2022): “Principles of Microeconomics”, S. Chand & Company, Syllabus based on NEP 2020.
12. आहूजा, एच.एल. (प्रथम संस्करण 2022): "सूक्ष्मअर्थशास्त्र के सिद्धांत", एस. चंद एंड कंपनी, एनईपी 2020 पर आधारित पाठ्यक्रम।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



MONETARY ECONOMICS

Course Code: MAECC-202

Credit: 05

Course Objective:

The course provides an introduction to monetary theory. The course will focus on two fundamental issues in monetary economics: price level determination and the real effects of disturbances. Attention will be given both to theoretical models and empirical evidence.

Course Content

Unit I:

Introduction to money and institution:

The nature of money and payment system, and financial system, RBI, Commercial banks, classification of commercial bank, credit system.

Unit II:

Theory demand for money:

Demand for money, Real cash balances, Neoclassical theory, Keynesian theory, transaction demand for money, Friedman's Theory, Fisher's transaction approach to quantity theory of money, Cambridge cash balance approach, Inflation: cost pull inflation, demand pull inflation, Phillips Curve.

Unit III:

Theory of supply of money:

Theory of supply of money, High power money, Theory of money supply, loanable fund theory, Interest rate, Theories of interest rate determination.

Unit IV:

Monetary policy:

Objectives and tools, monetary policy of reserve bank of India, open market operation, bank rate cash reserve ratio (CRR) and statutory liquid ratio (SLR), Jan Dhan Yojana, Mudra yojana.



Unit V:

Fiscal Policy and Its Instruments:

Meaning, tools, objectives, fiscal policies, public expenditure, taxation and public debt policies.

Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of Money.	K
2	CO 2. Able to understand the demand for money.	K
3	CO 3. Able to understand the theory of money supply.	K
4	CO 4. To understand the concept of monetary policy.	K
5	CO 5. To understand the concept of fiscal policy	K

Suggested Readings:

1. Bagchi, Amaresh (2005) : Readings in Public Finance, Oxford University Press.
2. Cullis, John & Jones Philip (2009) : Public Finance and Public Choice, Oxford University Press.
3. Eyler, Robert (2009) : Money and Banking-An International Text , Routledge.
4. Gupta, Janak Raj (2011): Public Economics in India Theory and Practice, Atlantic.
5. Gupta, S.B (2009) : Monetary Economics-Institutions, Theory & Policy , S.Chand & Company, New Delhi.
6. Head, J.C (1974): Public Goods and Public Welfare, Durham, NC, Duke University Press.
7. Inge Kaul, Pedro Conceicao (2006): The New Public Finance, Oxford University Press.
8. Jhingan, M.L (2012) : Monetary Economics , Vrinda Publications, New Delhi.
9. Jhingan, M.L (2012) : Maudrik Arthshastra , Vrinda Publications, New Delhi.
10. Johansen, Life (1965) : Public Economics, Chicago: Rand McNally.
11. Khanna, Perminder (2005): Advanced Study in Money and Banking: Theory and Policy Relevance in The Indian Economy , Atlantic.



12. Lal, S.N(2012): Mudra,Banking, Avam Videshi Vinimay ,Shiva Publishing House, Allahabad.
13. Margolis,J&Guitton,H : Public Economics (1974), Mcmiillan.
14. Musgrave,R.A (1959) , The Theory Of Public Finance, McGraw Hill.
15. Musgrave,R.A& P.B. Musgrave (1989) : Public Theory: Theory & Practice, McGraw Hill.
16. Nadar,E.Narayanan (2013) : Money and Banking , PHI Learning Press.
17. Paul, R.R (2011): Money, Banking & Exchange , Kalyani Publishers, Delhi.
18. Seth. M.L (2012) : Maudrik Arthshastra , Laxmi Narayan Publications,Agra.
19. Shome Parthasarathi (2002): India's Fiscal Matters, Oxford University Press, New Delhi.
20. Uppal, R.K (2011): Money, Banking and Finance in India- Evolution & Present Structure New Century Publications.
21. सिंघई जी.सी. और सिंह एस.के. (प्रथम संस्करण 2020): धन और बैंकिंग, साहित्य भवन प्रकाशन आगरा।
22. Hajela T. N. (5th Edition): “Public Finance”, Ane Books Pvt. Ltd.
23. भाटिया, एच. एल. (चौथा संस्करण 2018): सार्वजनिक वित्त, विकास पब्लिशिंग हाउस, दिल्ली।
- 24. Suggested equivalent online:**
25. www.swayam.nptel.in
26. www.gyankosh.in



ADVANCED ENVIRONMENTAL ECONOMICS-II

Course Code: MAECC-203

Credit: 5

Course Objective:

The objective of the course is to provide the students with a thorough knowledge and understanding of the foundations of environment economics.

Course Content

Unit I:

Environment and Development:

Economics and the Environment, Evolution and Growth of Environmental Economics, Relation between Environment and Growth, Environmental Kuznets hypothesis.

Unit II:

Basic Concepts and Theories:

Public Goods and Externalities, Common Property Resources, resource degradation and market efficiency. Coasetheorem, social cost benefit analysis

Unit III:

Environmental Valuation, Accounting and Management:

Types of environmental values, Evolution of Environmental Accounting, Features of Integrated Environmental and Economic Accounting,

Unit IV:

Global and Regional Issues:

Poverty, population and environment, global agreements on environment, political economy of sustainable development, Environment

Unit V:

Environmental laws and their implementation, Policy instruments for controlling pollution environmental standards, forestry policy. Water Depletion vs. Water Logging, Environmental Good's Demand, and its Revealed Preference.



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of Environmental Economics.	K
2	CO 2. Able to understand social cost benefit analysis	K
3	CO 3. To understand the concept Environmental Accounting.	K
4	CO 4. To understand the concept sustainable development.	K
5	CO 5. To understand the concept Environmental laws and their implementation.	K

Suggested Readings:

1. Bharucha, Erach : Paryavaran Adhyann, Orient Blackswan.
2. Bhattacharya, Rabindra Nath (2002): Environmental Economics – An Indian Perspective, Oxford University Press.
3. Eugene, T (2005) : Environmental Economics, Vrinda publications, Delhi.
4. Jhingan, M.L & Sharma, C.K (2009) : Environmental Economics Theory Mgt & Policy, Vrinda publications, Delhi.
5. Kolstad, Charles. D (2012): Intermediate Environmental Economics, Oxford University Press.
6. कौशिक सी.पी. और कौशिक अनुभा (दूसरा संस्करण 2022) पर्यावरण अर्थशास्त्र न्यू एज इंटरनेशनल।

Suggested equivalent online:

www.swayam.nptel.in



www.gyankosh.in

FINANCIAL ECONOMICS

Course Code: MAECC-204

Course Credit: 5

Course Objective:

To develop students' abilities in acquiring a better understanding of the functioning of Financial markets.

.Unit-1

Structure Of Financial System; Functions of Financial Sector; Equilibrium in Financial Markets; Financial System and Economic Development; Financial Intermediation, Indicators of Financial Development; Security Analysis – Meaning and Types of Risk, Concept and Types of Return, Risk-Return Trade – off, Valuation of Securities.

Unit- 2

Structure and Functions of Financial Markets; Money Market and its Constituents-Call Money Market, Treasury Bill Market, Commercial Bill Market, Repo Market, Commercial Paper Market, Certificate Of Deposits Market;

Unit-3

Capital Market - Government Securities Market, Corporate Securities Market, Primary and Secondary Market for Securities, FIIs; Discount Market; Unregulated Credit Markets-Types and Functions. SEBI – Objectives, Functions and Performance.

Unit-4

Working of Capital Market in India; Markets for Futures Options and other Financial Derivative Definition and Types of Non-Banking Financial Intermediaries-their Growth and Impact on India's Economic Development; Merchant Banking; Mutual Funds.

Unit-5

Financial Sector Reforms in India-Need, Objectives, Steps Taken and Future Agenda. Financial Inclusion; International Financial Institutions.



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept financial system.	K
2	CO 2. Able to understand money market.	K
3	CO 3. To understand the concept capital market.	K
4	CO 4. Able to understand non-banking financial institutions.	K
5	CO 5. To understand the concept financial inclusion.	K

Suggested Readings-

1. Bhole, L.M. (2009), *Financial Institutions and Markets*, Tata McGraw-Hill Education, New Delhi.
2. Avadhani, V.A. (1992), *Investment and Security Markets in India*, Himalaya Pub. House, Mumbai.
3. M. Melvin (2003), *International Money and Finance*, 7th edition, Addison Wesley Publisher.
4. Sayers, R.S. (1938), *Modern Banking*, Oxford. University Press, London.
5. Sen S.W. (2010), *Central Banking and Underdeveloped Money Market*,
6. Muranjan, S. Y. (1952), *Indian Banking*, Kamala Publishing House, Bombay.
7. Gupta, S.B. (1988), *Monetary Economics: Institutions, Theory and Policy*: S Chand & Company,
8. New Delhi.
9. Tarapore, S.S. (2000), *Issues in Financial Sector Reforms*, UBS Publishers, New Delhi.

Suggested equivalent online:

www.swayam.nptel.in



RESEARCH PROJECT

Course Code: MAERP-202

Credit: 4

Course Objective:

The objective of the course is to make the students learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis and interpretation.

General Outlines:

- Each student should be assigned a project supervisor from the faculty members of the concerned centre, preferably on the basis of the students' preferences.
- The topic of project report should be decided by the supervisor considering the area of interest of the student. As far as possible the topic should address the current issues / developments in the field.
- Standard norms for the preparation of a research project report may be followed – introduction, brief background, relevance of the topic, literature review, problem statement, objectives, hypotheses, sample design, data nature and sources, tools and techniques of data collection, data presentation, analysis, and interpretation, findings, and conclusion.
- The project outcomes may be reported in the following form: Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure, etc. The students are required to complete the project report upto Chapter-3 in the third semester.
- APA 6th edition style sheet may be followed for preparing in-text citations, foot notes, end notes, references and bibliography.
- The project outcomes should be evaluated both in the form of project reports and



seminar presentation/viva-voce examination by a duly constituted committee by the appropriate authority.

Suggested Reading:

1. Ranjit Kumar (2014) *Research Methodology: A Step-by-step Guide for Beginners*, 4th Edition, sage Publication.
2. Bethlehem, J. (2009) *Applied Survey Methods: A Statistical Perspective*, Wiley.
3. Cachran, Willam, G (2008) *Sample Techniques*, Third Edition, Wiley-India, ISBN 978-81-265-1524-0. Reprint:2008.
4. Mishra B. 2018, *Research Methodology*, Chaukhambha Orientalia Publication.
5. कोठारी सी. आर. (पहला संस्करण 2022), रिसर्च मेथडोलॉजी, न्यू एज इंटरनेशनल प्राइवेट लिमिटेड।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



MA Economics
Semester-III
MACRO ECONOMICS ANALYSIS-I

Course Code: MAECC-301

Credit: 05

Course Objective:

The objective of this course is to familiarise the students of master's degree with the basic concepts, theories and approaches to understand the behaviour of macroeconomic aggregates and policies.

Unit-I

National Income -

Basic Concepts, Measurement of National Income and Difficulties; Domestic and National Product and their Components, National income at factor cost and at Market Prices, Real and nominal GNP; National Income and Welfare, Social Accounting and its significance, System of National Accounts; Measurement of national Income in India.

Unit-II

Classical Theory of Output and Employment –

The Classical Postulates; Say's Law of Market, Full Employment – Demand for and Supply of Labour; Labour Supply and Money Wages; Unemployment and Wage Rigidity; Overall Equilibrium in the Basic Static Model (Goods, Labour & Money Markets).

Unit-III

Keynesian Theory of Income Determination-

Concepts and Functions; Two sector, Three sector and four sector Models of Income Determination; Investment Multiplier; Balanced Budget Multiplier; Keynesian Theory of Money and Interest; Basic two sector IS-LM Model.

Unit-IV

Theories of Consumption-

Keynesian Theory; Consumption Puzzle; Absolute Income Hypothesis, Relative Income Hypothesis, Permanent Income Hypothesis, Life Cycle Hypothesis.

Unit-V



Economic system; Capitalism, socialism and mixed economy, Problems of resource allocation, distribution of national income.

Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. Able to understand measurement of National Income.	K
2	CO 2. To understand the concept of classical theory of employment.	K
3	CO 3. To understand the concept of multiplier.	K
4	CO 4. Able to understand theory of consumption function.	K
5	CO 5. To understand the concept distribution of national income.	K

Suggested Readings:

1. Ackley, G (1976) : Macroeconomics: Theory And Policy, Macmillan, New York.
2. Branson, W.A (1989) : Macroeconomics Theory And Policy, Harper & Row.
3. D.L (1969) : Advanced Macroeconomics, McGraw Hill, New York.
4. Dornbusch, Rudiger & startz, Richard (2012): Macroeconomics , Tata McGraw Hill Education.
5. Dwivedi, D.N (2010) : Macroeconomics: Theory and Policy , Tata McGraw Hill Education.
6. Gupta, R.D. & Rana, A.S (2009) : Keynes post-Keynesian Economics , Kalyani Publishers, New Delhi&Ludhiana.
7. Hansen, A.H (1953) : A Guide To Keynes, McGraw Hill.
8. Jhingan, M.L (2010): Macroeconomics , Vrinda Publications, New Delhi.
9. Jhingan, M.L (2012) : Samasti Arthshastra , Vrinda Publications, New Delhi.
10. Shapiro, Edward (2005): Macroeconomic Analysis, Galgotia Publications, New Delhi.
11. Sikdar, Saumyen (2011) : Principles of Macroeconomics , Oxford University Press, New Delhi.
12. Surrey, M.J.C (1976) : Macroeconomic Themes, Oxford University Press. Romer,
13. Ahuja, H.L (20th Edition 2019) : Macroeconomics: Theory and Policy , S. Chand & Company, New Delhi.
14. आहूजा, एच.एल. (20वां संस्करण 2019): मैक्रोइकॉनॉमिक्स: सिद्धांत और नीति, एस. चंद एंड कंपनी, नई दिल्ली।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



INTERNATIONAL TRADE AND FINANCE

Corse Code: MAECC-302

Credit: 5

Course Objective:

The objective of this course is to familiarise the students of Master degree with the basic theories, approaches, and policies of international economics.

Unit-I

Theories of International Trade:

Advantage, Comparative Advantage and Opportunity Costs, Heckscher-Ohlin Theory of Trade; Factor Price equalization; Empirical testing of Heckscher Ohlin Theory, New approaches to trade theory: The Product Cycle Theory, Technology Gap Theory; Causes of Emergence and Measurement of Intra-industry Trade.

Unit-II

Terms of Trade:

Concepts and Measurement, Prebisch and Singer views on terms of trade. Theory of Tariff; Regionalism and Multilateralism; Political Economy of Non-tariff barriers Various forms of Economic Integration; Questioning the benefits of integration: Brexit crisis.

Unit-III

Balance of Payments and Adjustments:

Concepts and components; Causes of disequilibrium and different approaches: Traditional, Absorption and monetary approach, Process of adjustment in the balance of payment under Gold Standard.

Unit-IV

Concept of Exchange Rate:

Fixed Exchange Rate and Flexible Exchange Rates; Theory of foreign exchange market, exchange trading, arbitrage, and market hedging; Foreign trade multiplier; Crisis and exchange rate.

Unit-V

Collapse of Bretton woods system and emergence of international monetary system (IMF and World Bank) World Trading System, WTO and its impact on different sectors, Globalization: Discontents, Issues for Developing Countries, Emergence of Global value chain, Changing pattern of Trade; UNCTAD, Global Inequality.



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of International Trade.	K
2	CO 2. Able to understand terms of trade.	K
3	CO 3. To understand the concept of balance of payment.	K
4	CO 4. Able to understand the concept of exchange rate.	K
5	CO 5. To understand the concept of IMF and World Bank.	K

Suggested Readings:

1. Agarwal, Babita (2009) : Antarrastriya Arthshastra, Omega Publications.
2. Bhatia, H.L (2006) : International Economics, Vikash Publishing House.
3. Cherunilam, Francis (2008) : International Economics" Tata McGraw Hill Education.
4. Field, Alfred.J & Appleyard, Dennis.R (2013) : International Economics, McGraw Hill Education.
5. Gerber, James (2012) : International Economics, Pearson.
6. Jhingan, M.L (2011): Antarrastriya Arthshastra, Vrinda Publications, New Delhi.
7. Krugman, Paul.R & Obstfeld, Maurice (2008) : International Economics, Pearson.
8. Lal, S.N (2012) : Antarrastriya Arthshastra, Shiva Publishing House, Allahabad.
9. Mannur, H.G (2001) : International Economics, Vikash Publishing House Pvt Ltd.
10. Salvatore, Dominick (2012) : International Economics: Trade & Finance, Wiley Publishers.
11. Sinha, V.C., Sinha, Pushpa & Sinha, Vivek (2011) : Antarrastriya Vyapar Avam Vitt, Mayur Publications.
12. Vaishya, M.C. & Singh, Sudama (2006) : International Economics , Oxford & IBH Publishing House, Delhi.
13. Krugman, Paul.R (10th Edition 20017) : International Finance: Theory & Policy, Pearson education.
14. मिश्रा जे.पी. (2020): अन्तर्राष्ट्रीय अर्थशास्त्र, साहित्य भवन प्रकाशन, आगरा।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



Ethics and Economics

Course Code: MAECC-303

Credit: 5

Course Objective:

This course aims to develop an understanding of the relationship between ethics and economics and their role in economic decision-making. It introduces major ethical and economic philosophies from Indian and Western traditions. The course examines issues related to welfare, justice, social responsibility, governance, and market behaviour. It also promotes ethical reasoning, integrity, and awareness of human well-being and sustainable development.

Course Outline

Unit – I

Ethics or moral philosophy, Defining Ethics, Ethical concepts vs. Economic Concepts, Economic Philosophic school and central doctrines. Indian Knowledge System: Kautilya's Arthashastra: a treatise on Statecraft and some other related issues.

Unit II

Western Philosophy: Adam Smith as moral philosopher, Utilitarianism: Bentham, John Stuart Mill. The Markets and Smith's invisible hands. Self-interest vs. greed. Rationalist Morality by Emanuel Kant. Ethical issues and market System.

Unit – III

Self Interest and welfare economics: Amartya Sen, Welfare, Efficiency and Ethics, Welfare Economics and externalities. What is economic justice, Theories of Justice: Aristotle, John Rawls.

Unit – IV

Values and Economics, ethics and integrity, Moral, Social Norms Culture and development, Indian Culture and Economic interface, Code of Conduct, Defining corruption, causes of Corruption, Approaches to reducing Corruption.

Unit – V

Self Interest vs. Social Goods. Nassau William Senior: Theory of Abstinence and capital formation. Ethics, market and government regulations. Corporate Social Responsibility. Indian Knowledge related to Corporate Governance values and ethics.

Course Outcome: After successful completion of this course students will be able to:

S.No	Course Outcome	Bloom's Taxonomy
1	CO1.To explain the measure school of economics philosophy and	K



	their central doctrine	
2	CO 2. To differentiate between Ethical concept and economics concept	K
3	CO 3. To evaluate the role of Ethical standard social norms, and cultural values in market system and economic development	K
4	CO 4. To understand the ethical dimensions of self interest, welfare economics, justice, market behaviour and government regulation	K
5	CO 5 To understand issues related to corporate governance , corporate social responsibility, integrity in economics activities	K

Suggested Readings:-

1. Teaching the Ethical Foundations in Economics, National Council on Economic Education, New York.
2. Smith, Adam (2008), The Theory of Moral Sentiments, B.N. Publishing.
3. Kautilya (2000), Arthashastra, Penguin Classics India. ISBN: 9780140446036.
4. Hirata, Johannes (2011), Happiness, Ethics and Economics, Routledge, Canada and USA.
5. Williams, Rowan & Elliott, Larry (2010), Crisis and Recovery: Ethics, Economics and Justice, Palgrave Macmillan.
6. Jain, V.K. & Biyani, Omprakash (2008), Business Ethics and Communications, S. Chand, New Delhi.
7. Vasisht, Neeru & Rajput, Namita (2010), Corporate Governance Values & Ethics, Taxmann, New Delhi.
8. Samuelson, Paul A. & Nordhaus, William D. (2012), Economics, Tata McGraw Hill Education Private Limited, New Delhi.
9. Sen, Amartya (2001), On Ethics and Economics, Oxford University Press.
10. Dutt, Amitava Krishna & Wilber, Charles K. (2013), Economics and Ethics: An Introduction, Palgrave Macmillan.



11. Backerman, Wilfred (2011), Economics as Applied Ethics: Value Judgements in Welfare Economics, Palgrave Macmillan.
12. Graafland, Johan J. (2009), Economics, Ethics and the Market: Introduction and Applications, Routledge.
13. Sen, A.K. & Williams, B. (1982), Utilitarianism and Beyond, Cambridge University Press.
14. Rawls, John (1971), A Theory of Justice, Harvard University Press.
15. Roemer, John (1982), Free to Lose, Harvard University Press.
16. Sen, Amartya (1999), Aarthik Vikas Aur Swatantrata (Hindi), Neha Publishers & Distributors.

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



DEVELOPMENT ECONOMICS

Course Code: MAEEL-304 (A)

Course Credit: 05

Objectives of the Paper:

This course aims to introduce the students to know and understand the theoretical concepts of economic development, different indices of the measurement of development, issues related to poverty & inequality and introduced the measures of fiscal and monetary policies.

UNIT-I:

Economic Development: Concept & Measurement :

Meaning of undeveloped, underdevelopment and development, Measuring Development: Income Measures, Basic Needs Approach, PQLI, HDI, HPI, GDI and Capabilities Approach of Amartya Sen, Common characteristics of developing nations, obstacles to economic development, structural changes underdevelopment development gap, international comparisons of developments.

UNIT-II:

Poverty, Inequality, and Development

Development gap—concept and measurement. Absolute and relative poverty; Measurement of inequality and poverty—Lorenz curve, poverty gap, Foster-Greer Thorbecke index, Human poverty index, Chennerly- Ahluwalia development index.

UNIT-III:

Theories and Approaches of Development

Classical Theory of Development – Adam Smith, J.S. Mill, Neo Classical – Leibenstein's critical Minimum Effort Thesis, low income equilibrium trap – Ranis and Fei model – Dualism – Social – Financial and Technical Dualism and Kremer's O-ring theory of economic development.

UNIT-IV:

Development Policies and Perspectives

Role of economic and non-economic factors , Sectoral Priorities and Development policies, role of the informal sector, environmental issues in development, food security, education, health and nutrition, Choice of techniques and appropriate technology, Role of macroeconomic policies in developing countries

UNIT-V:

Trade and Economic Development

International Trade, Aid, Finance in Development, Technology, Transfer and Multinational Corporations. Dual Gap Model, WTO and developing countries, Regional Cooperation; External resources – FDI, FII, Aid vs. trade, technology inflow; International trade as engine of growth; Static and dynamic gains from trade.



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept measuring development.	K
2	CO 2. Able to understand Development gap.	K
3	CO 3. To understand the concept of Classical Theory of Development.	K
4	CO 4. Able to understand food security.	K
5	CO 5. To understand the concept of FDI and FII.	K

Suggested Readings-

1. Basu, Kaushik (2010): Analytical Development Economics: The Less Developed Economy, Oxford University Press.
2. Dasgupta, Dipankar: Growth Theory, Oxford University Press, 2007
3. Ghatak, S., An Introduction to Development Economics. Allen and Unwin London, latest edition.
4. Hayami, Y., Development Economics, Oxford University Press, New York, 2010 (5th Impression)
5. Hendrik Van Den Berg, Economic Growth and Development, McGraw-Hill International Edition, 2005
6. Jhingan, M.L (42nd edition 2019): Economics of Development and Planning, Vrinda Publications, New Delhi.
7. Meier, G.M., Leading Issues in Economics Development, Oxford University Press, New Delhi, Latest edition.
8. Mishra, S.K & Puri, V.K (Sixteenth Revised and Updated Edition: 2016): Economics of Development and Planning, Himalaya Publishers, Mumbai.
9. Ray Debraj, Development Economics, Oxford University Press, Latest Edition.
10. Singh, Kartar & Shishodia (2007): Environmental Economics: Theory and Applications, Sage India.
11. Somashekar, NT: Developmental Economics, New Age Publication (Latest edition)
12. मिश्रा जे.पी. (संशोधित संस्करण 2022): वृद्धि और विकास का अर्थशास्त्र, साहित्य भवन प्रकाशन, आगरा।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



ECONOMIC HISTORY OF INDIA SINCE 1947

Corse Code: MAEEL-204 (B)

Credit: 05

Course Description

This course analyses key aspects of Indian economic development during the second half of British colonial rule. In doing so, it investigates the place of the Indian economy in the wider colonial context, and the mechanisms that linked economic development in India to the compulsions of colonial rule. This course links directly to the course on India 's economic development after independence in 1947.

Course Outline

Unit – I

Introduction:

Colonial India: Background and Introduction Overview of colonial economy. Macro Trends
National Income; population; occupational structure.

Unit – II

Agriculture

Agrarian structure and land relations; agricultural markets and institutions – credit, commerce, and technology; trends in performance and productivity; famines.

Unit – III

Railways and Industry

Railways; the de-industrialisation debate; evolution of entrepreneurial and industrial structure; nature of industrialisation in the interwar period; constraints to industrial breakthrough; labour relations.

Unit – IV

Economy and State in the Imperial Context

The imperial priorities and the Indian economy; drain of wealth; international trade, capital flows and the colonial economy – changes and continuities; government and fiscal policy.

Unit- V

Institutions

Era of LPG in India. Role of planning commission, NITI ayog, Finance Commission



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept colonial economy.	K
2	CO 2. Able to understand agricultural markets and institutions.	K
3	CO 3. To understand the concept of industrial structure.	K
4	CO 4. Able to understand international trade.	K
5	CO 5. To understand the concept of planning commission.	K

Readings:

1. Lakshmi Subramanian, *"History of India 1707-1857"*, Orient Blackswan, 2010, Chapter 4.
2. Sumit Guha, 1991, *'Mortality decline in early 20th century India'*, *Indian Economic and Social History Review (IESHR)*, pp 371-74 and 385-87.
3. Tirthankar Roy, *The Economic History of India 1857-1947*, Oxford University Press, 3rd edition, 2011.
4. J. Krishnamurty, *Occupational Structure*, Dharma Kumar (editor), *The Cambridge Economic History of India*, Vol. II, (henceforth referred to as CEHI), 2005, Chapter
5. Irfan Habib, *Indian Economy 1858-1914*, *A People's History of India*, Vol.28, Tulika, 2006.
6. Ira Klein, 1984, —When Rains Fail: Famine relief and mortality in British India, *IESHR* 21.
 7. Jean Dreze, *Famine Prevention in India in Dreze and Sen (eds.) Political Economy of Hunger*, WIDER Studies in Development Economics, 1990, pp.13-8.
 8. John Hurd, *Railways*, CEHI, Chapter 8, pp.737-761.
9. Rajat Ray (ed.), *Entrepreneurship and Industry in India*, 1994.
10. AK Bagchi, —Deindustrialization in India in the nineteenth century: Some theoretical implications, *Journal of Development Studies*, 1976.
11. MD Morris, *Emergence of an Industrial Labour Force in India*, OUP
12. K.N. Chaudhuri, *Foreign Trade and Balance of Payments*, CEHI, Chapter 10.
13. B.R. Tomlison, 1975, *India and the British Empire 1880-1935*, *IESHR*, Vol.XII.
14. Dharma Kumar, *The Fiscal System*, CEHI, Chapter 12. Basudev Chatterjee, *Trade, Tariffs and Empire*, OUP 1992, Epilogue

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



RESEARCH PROJECT

Course Code: MAERP-303

Credit: 4

Course objective:

The objective of the course is to make the students learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis and interpretation.

Course Outcomes:

Students will be able to understand

- In-depth knowledge and application of Economics in research.
- Learn to prepare Research Project.

General Outlines:

1. Each student should be assigned a project supervisor from the faculty members of the concerned centre, preferably on the basis of the students' preferences.
2. The topic of project report should be decided by the supervisor taking into account the area of interest of the student. As far as possible the topic should address the current issues / developments in the field.
3. Standard norms for the preparation of a research project report may be followed – introduction, brief background, relevance of the topic, literature review, problem statement, objectives, hypotheses, sample design, data nature and sources, tools and techniques of data collection, data presentation, analysis, and interpretation, findings and conclusion.
4. The project outcomes may be reported in the following form: Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure, etc. The students are required to complete the project report upto Chapter-3 in the third semester.
5. APA 6th edition style sheet may be followed for preparing in-text citations, foot notes, end notes, references and bibliography.
6. The project outcomes should be evaluated both in the form of project reports and seminar presentation/viva-voce examination by a duly constituted committee by the appropriate authority.



Suggested Reading:

1. Ranjit Kumar (2014) *Research Methodology: A Step-by-step Guide for Beginners*, 4th Edition, sage Publication.
2. Bethlehem, J. (2009) *Applied Survey Methods: A Statistical Perspective*, Wiley.
3. Cachran, Willam, G (2008) *Sample Techniques*, Third Edition, Wiley-India, ISBN 978-81-265-1524-0. Reprint:2008.
4. Mishra B. 2018, *Research Methodology*, Chaukhambha Orientalia Publication.
5. कोठारी सी. आर. (पहला संस्करण 2022), रिसर्च मेथडोलॉजी, न्यू एज इंटरनेशनल प्राइवेट लिमिटेड।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



MA Economics

Semester-IV

MACRO ECONOMICS ANALYSIS – II

Corse Code: MAECC-401

Credit: 5

Course Objective:

The objective of this course is to familiarise the students of master's degree with the advance concepts, theories and approaches to understand the behaviour of macroeconomic aggregates and policies.

Unit-I

Theories of Investment:

IS-LM model with Govt. Sector; IS-LM Model with Foreign Sector; Keynesian Theory of Investment Decisions, The Accelerator Theory of Investment; Lags in Investment, Jorgenson's Neo- Classical Theory of Investment; Theory of Rational Expectations; The Supply-Side Economics.

Unit-II

Business Cycle Theories:

Pure Monetary Theory; Monetary over investment theory; Schumpeter's innovation theory; Keynes' theory, Samuelson's Multiplier-accelerator interaction theory; Hicks' trade cycle theory; Global Recession and Euro-Area Crisis.

Unit-III

Inflation and Unemployment:

Meaning, causes, effects and control of Inflation; Theories of Inflation; Inflation and the rate of unemployment – Phillips's curve hypothesis; Policy dilemma – inflation or unemployment; automation and unemployment.

Unit-IV

Macroeconomic Policies:

Meaning, Objectives and Formulation, Monetary & Fiscal Policy – instruments and their relative effectiveness; trade policies and exchange rate policies.



Unit-V

Growth Models:

Meaning and measurement, sources of growth, growth models: Harrod and Domar, Neo classical growth models-Solow.

Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of IS-LM model.	K
2	CO 2. Able to understand trade cycle theory.	K
3	CO 3. To understand the concept of Inflation.	K
4	CO 4. To understand the concept trade policies and exchange rate policies.	K
5	CO 5. Able to understand sources of growth.	K

Suggested Readings

1. Ackley.G (1976) : Macroeconomics: Theory And Policy, Macmillan, New York.
2. Branson, W.A (1989) : Macroeconomics Theory And Policy, Harper & Row.
3. D.L (1969) : Advanced Macroeconomics, McGraw Hill, New York.
4. Dornbusch, Rudiger & startz, Richard (2012): Macroeconomics , Tata McGraw Hill Education.
5. Dwivedi,D.N (2010) : Macroeconomics: Theory and Policy , Tata McGraw Hill Education.
6. Gupta, R.D. & Rana, A.S (2009) : Keynes post-Keynesian Economics , Kalyani Publishers, New Delhi&Ludhiana.
7. Hansen,A.H (1953) : A Guide To Keynes, McGraw Hill.
8. Jhingan, M.L (2010): Macroeconomics , Vrinda Publications, New Delhi.
9. Jhingan, M.L (2012) :SamastiArthshastra , Vrinda Publications, New Delhi.
10. Shapiro, Edward (2005): Macroeconomic Analysis, Galgotia Publications, New Delhi.
11. Sikdar,Saumyen (2011) : Principles of Macroeconomics , Oxford University Press, New Delhi.
12. Surrey,M.J.C (1976) : Macroeconomic Themes, Oxford University Press. Romer,



ख्वाजा मुईनुद्दीन चिश्ती भाषा विश्वविद्यालय, लखनऊ, उत्तर प्रदेश (भारत)
Khwaja Moinuddin Chishti Language University, Lucknow, U.P. (India)

U.P. STATE GOVERNMENT UNIVERSITY,
(Recognised Under Section 2(f) & 12(B) of the UGC Act, 1956 & B.Tech. Approved by (AICTE))



13. Ahuja,H.L (20th Edition 2019) : Macroeconomics: Theory and Policy , S. Chand &Company, New Delhi.
14. आहूजा, एच.एल. (20वां संस्करण 2019): मैक्रोइकॉनॉमिक्स: सिद्धांत और नीति, एस. चंद एंड कंपनी, नई दिल्ली।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



HEALTH ECONOMICS

Course Code: MAECC-402

Credit: 5

Course Objective:

This course provides a microeconomic framework to analyse, among other things, individual choice in the demand for health and education, government intervention and aspects of inequity and discrimination in both sectors. It also gives an overview of health and education in India.

Course Content

Unit I:

Role of Health and Education in Human Development

Importance in poverty alleviation; health and education outcomes and their relationship with macroeconomic performance.

Unit-II

Microeconomic Foundations of Health Economics

Demand for health; uncertainty and health insurance market; alternative insurance mechanisms; market failure and rationale for public intervention; equity and inequality.

Unit-III

Evaluation of Health Programs

Costing, cost effectiveness and cost-benefit analysis; burden of disease.

Health Sector in India: An Overview

Health outcomes; health systems; health financing.

Unit-IV

Education: Investment in Human Capital

Rate of return to education: private and social; quality of education; signalling or human capital; theories of discrimination; gender and caste discrimination in India.

Education Sector in India: An Overview

Literacy rates, school participation, school quality measures.



Unit-V :

HD in India. Role of Institutions (national and international), government and NGOs, studies specially related to Indian Economy showing linkage between human development and economic growth.

Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of Human development.	K
2	CO 2. To understand the concept of health insurance market	K
3	CO 3. Able to understand cost-benefit analysis.	K
4	CO 4. To understand the concept of Human capital.	K
5	CO 5. To understand the concept human capital formation.	K

Suggest Readings:

1. William, Jack, *Principles of Health Economics for Developing Countries*, World Bank Institute Development Studies, 1999.
2. World Development Report, *Investing in Health*, The World Bank, 1993.
3. Ronald G., Ehrenberg and Robert S., Smith, *Modern Labor Economics: Theory and Public Policy*, Addison Wesley, 2005.
4. Husain M, *Health and Healthcare in India*, AB Publication, 2023

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



GLOBALIZATION AND DEVELOPMENT

Corse Code:-MAECC-403

Credit: 5

Course Objective:

The objective of the course is to provide the students with a thorough knowledge and understanding of the significance of economic development in the perspective of globalization.

Unit-I

Issues in Globalization: Alternative Perspectives on its Nature and Character.

Critical Dimensions: Economic, Political, Strategic, Cultural and Informatics, Globalization, and the new global economy: Globalization as representing the triumph of free market capitalism; Continuity and change in the world economy since the 1970s; Economic Policy Changes in the Advanced and Developing Nations and Developments in Communication Technology.

Unit-II

Transnational Corporations and the Globalization Process: TNCs and FDI and technology flow; Changing patterns of international trade: intra-firm and inter-firm trade; international production networks.

Unit-III

Structure and Working of the International Capital market: the main actors and instruments of international asset transaction; offshore banking; Eurocurrencies and their trading; global finance and hot money flows.

Unit-IV

Regional and multilateral agreements: Brief History of Multilateral Institutions, their Structure and Working: International Monetary Fund and the World Bank; The World S Trade Organization: Organizational structure and decision-making process and its evolving role;



Questioning the benefits of economic integration: Inequality and instability in global economy.

Unit-V

Agricultural Globalization and Developing Countries; Industry and Services in the globalization process: Labour, Migration and Outsourcing; Globalization, State, Sovereignty and the Civil Society; The World Social Forum.

Course Outcome: After successful completion of this course students will be able to:

S.	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of Globalization.	K
2	CO 2. Able to understand Changing patterns of international trade.	K
3	CO 3. To understand the concept of International Capital market.	K
4	CO 4. Able to understand Multilateral Institutions.	K
5	CO 5. To understand the concept of the World Social Forum.	K

Suggested Readings

1. Bhatia, S.K. (2017). *Brexit and India: Analyzing the Implication* (Eds.). New Delhi Publishers.
2. Daniels, P.W., and Lever, W.F. (1997). *The Global Economy in Transition*. Harlow:
3. Edwards, M., and Gaventa, J. (2001). *Global Citizen Action: Perspectives and Challenges*. Boulder Colo: Westview Press.
4. eld, D., McGrew, A., Goldblatt, D., and Perraton, J. (1999). *Global Transformation: Politics, Economics and Culture*. Cambridge: Polity Press.
5. Herman, Edward and Robert W McChesney, *Globalization of culture* (New Delhi: Madhyam Books 2003)
6. Hoogvelt, A. M. M. (1997). *Globalisation and the Postcolonial World: The New*



Political Economy of Development. Palgrave Macmillan.

7. Jackson, H. J. (1998). *The World Trade Organisation.* London: *The Royal Institute of International Affairs.*
8. James, P., and Veltmeyer, H. (2001). *Globalisation Unmasked.*
9. London: Zed Books.
10. Khor, K. P., and Khor, M. (2001). *Rethinking Globalisation: Critical Issues and Policy Choices.* London: Zed Books.

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



QUANTITATIVE TECHNIQUES

Course code: MAEEL- 404 (A)

Credit:05

Course Objective:

The objective of this course is to familiarise the students of master's degree with the basic mathematics required to understand the various dimensions of economics.

Unit-I

Differentiation and Integration:

Limit, Continuity, Differentiation of algebraic, exponential, logarithmic, trigonometric, and implicit functions; Partial Differentiations, Euler's theorem and total differentials.

Unit-II

Maxima and minima with and without constraints; Indefinite and definite integrals, Economic applications of differentiation and integration.

Unit-III

Differential and Difference Equations:

Differential and difference equations of first and second order; Applications for determining Market Equilibrium.

Unit-IV

Linear Algebra:

Concept of Vector; Matrix: Types, properties of determinants, rank and inverse of matrix; System of linear equations, Solution by Crammer's rule and matrix inverse method, Linear independence and dependence of vectors, characteristic roots and vectors, quadratic forms.

Unit-V

Linear Programming:

Formulation of linear programming problem; simplex and graphical methods, Concept of Duality; Input-Output Analysis– Open and Closed Models; Game Theory & its applications.



Course Outcome: After successful completion of this course students will be able to:

S. No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of Differentiation of algebraic.	K
2	CO 2. Able to understand Maxima and minima.	K
3	CO 3. To understand the concept of Matrix.	K
4	CO 4. Able to understand Applications for determining Market Equilibrium.	K
5	CO 5. To understand the concept Linear Programming.	K

Suggested Readings

1. Agarwal, D.R. (2009): Mathematics for Economics, Vrinda Publications, Delhi. Livernois, John., Rees, Ray., & Hoy, Michael (2012) : Mathematics for Economics , PHI Learning.
2. Agarwal, D.R. "Prarambhik Ganitiya Arthshastra (Hindi), Vrinda Publications, Delhi.
3. Allen, R.G.D (2008) : Mathematical Analysis for Economics , AITBS.
4. Bhardwaj, R.S (2006): Mathematics for Economics and Business, Excel Books.
5. Chiang, A.C & Wainwright, Kevin (2013) : Fundamental Methods of Mathematical Economics" McGraw Hill Publication.
6. Dowling, Edward.T (2005): Schaum's Easy Outline of Introduction to Mathematical Economics , Tata McGraw Hill Education.
7. Madnani, G M K : Mathematics for Economics. Sultan Chand & Sons
8. Mishra, J.P. "Ganiteeya Arthshastra", Pratiyogita Sahitya.
9. Rosser, Mike (2003) : Basic Mathematics for Economists , Routledge.
10. Seth, M.L., "Arthshastramei Prarambhik Ganit", Laxmi Narayan Publications, Agra.
11. Sharma, J.K (2007): Business Mathematics, Ane Books Pvt. Ltd.
12. Yamane, Taro (2007) : Mathematics For Economists : An Elementary Survey , PHI Learning.

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



DEMOGRAPHY

Course Code: MAEEL-404(B)

Credits: 05

Course Objective:

The main objective of this paper is to make the students aware of the importance of population in economic development and the various theories that explain the growth of population in a country.

Unit I:

Concept of Population and Demography:

Biological Theories; Theories of Population: Malthusian, Post-Malthusian, Neo-Malthusian; Optimum theory; Modern theories and Recent Developments; Theory of Demographic Transition, Demographic Dividend, Migration

Unit II:

Measures of Demographic Analysis:

Fertility, Mortality, Nuptiality; Morbidity, population Pyramid, Population Ageing.

Unit III:

Population and Economic Development:

Models of Population and Economic Development; Demand for Children in Poor Countries; Population Projection.

Unit IV:

Indian Population and Demographic Changes:

Inter-State Variations; Population Policy; Sources of Data-Census, SRS, NFHS, RCH etc.

Unit V:

Contemporary Issues:

World Population: structure and Growth, Emerging challenges in population and Demography



Course Outcome: After successful completion of this course students will be able to:

S.No	Course Outcome	Bloom's Taxonomy
1	CO 1. To understand the concept of Population.	K
2	CO 2. To understand the concept Demographic Analysis.	K
3	CO 3. Able to understand economic development.	K
4	CO 4. To understand the concept source of data.	K
5	CO 5. Able to understand demography.	K

Suggested Readings:

1. Agarwala S.N. India's Population Problem, Tata McGraw-Hill Co., Bombay.
2. Bhende, Asha A. and Tara Kanitkar, Principles of Population Studies, Himalaya Publishing House, Mumbai
3. Bose, A., India's Basic Demographic Statistics, B.R. Publishing Corporation, New Delhi Bogue, D.J., Principles of Demography, John Wiley, New York
4. Chaubey, P.K., Population Policy in India, Kanishka Publications, New Delhi.
5. Different publications based on Census of India, published by Census Commissioner and Registrar General of India, New Delhi
6. Family Welfare Programme in India, Year Book 2012, Government of India, New Delhi
7. National Family Health Survey-(reports for India and different States of India) Government of India and International Institute for Population Sciences, Mumbai
8. National Population Policy 2000, Government of India, New Delhi

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in



RESEARCH PROJECT

Course Code: MAERP-404

Credit: 4

Course Objective:

The objective of the course is to make the students learn the skills of formulation of research problem, objectives, hypotheses and also the skills of data collection, analysis and interpretation.

General Outlines:

- Each student should be assigned a project supervisor from the faculty members of the concerned centre, preferably based on the students' preferences.
- The topic of project report should be decided by the supervisor considering the area of interest of the student. As far as possible the topic should address the current issues / developments in the field.
- Standard norms for the preparation of a research project report may be followed – introduction, brief background, relevance of the topic, literature review, problem statement, objectives, hypotheses, sample design, data nature and sources, tools and techniques of data collection, data presentation, analysis, and interpretation, findings and conclusion.
- The project outcomes may be reported in the following form: Chapter-1: Introduction & Review of Literature; Chapter-2: Research Methodology; Chapter-3: Conceptual & Theoretical Description; Chapter-4: Analysis and Interpretations; Chapter-5: Conclusion, Suggestions & Scope for further research; References, Annexure, etc. The students are required to complete the project report upto Chapter-3 in the third semester.
- APA 6th edition style sheet may be followed for preparing in-text citations, foot notes, end notes, references, and bibliography.
- The project outcomes should be evaluated both in the form of project reports and seminar presentation/viva-voce examination by a duly constituted committee by the appropriate authority.



Suggested Reading:

1. Ranjit Kumar (2014) *Research Methodology: A Step-by-step Guide for Beginners*, 4th Edition, sage Publication.
2. Bethlehem, J. (2009) *Applied Survey Methods: A Statistical Perspective*, Wiley.
3. Cachran, Willam, G (2008) *Sample Techniques*, Third Edition, Wiley-India, ISBN 978-81-265-1524-0. Reprint:2008.
4. Mishra B. 2018, *Research Methodology*, Chaukhambha Orientalia Publication.
5. कोठारी सी. आर. (पहला संस्करण 2022), रिसर्च मेथडोलॉजी, न्यू एज इंटरनेशनल प्राइवेट लिमिटेड।

Suggested equivalent online:

www.swayam.nptel.in

www.gyankosh.in