॥ सा विद्या या विमुक्तये ॥



स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड क्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नांदेड

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

'Dnyanteerth', Vishnupuri, Nanded - 431 606 (Maharashtra State) INDIA

স্থান্তাত্তা বিশ্বাধীন, নাইভ Established on 17th September, 1994, Recognized By the UGC U/s 2(f) and 12(B), NAAC Re-accredited with B++ grade

Fax: (02462) 215572

Academic-1 (BOS) Section

website: srtmun.ac.in

Phone: (02462)215542

E-mail: bos@srtmun.ac.in

मानवविज्ञान विद्याशाखे अंतर्गत राष्ट्रीय शैक्षणिक धोरणानुसार पदव्युत्त्र स्तरावरील प्रथम वर्षाचे अभ्यासकम शैक्षणिक वर्ष २०२३-२४ पासून लागू करण्याबाबत.

परिपत्रक

संदर्भ: १. जा.क.शै-१/एनईपी२०२०/मानविज्ञान-अक-/२०२३-२४/१३२ दिनांक ०६/०७/२०२३.

२. जा.क.शै-१/एनईपी२०२०/मानवविज्ञान-अक-/२०२३-२४/१२९ दिनांक ३०/०६/२०२३.

या परिपत्रकान्वये सर्व संबंधितांना कळविण्यात येते की, संदर्भीय परिपत्रकान्वये दिनांक १६ जून २०२३ रोजी सपन्न झालेल्या मा. विद्यापरिषदेच्या बैठकीतील ऐनवेळचा विषय क्र. ०७/५६-२०२३ अन्वये मान्यता दिल्यानुसार मानविज्ञान विद्याशाखे अंतर्गत राष्ट्रीय शैक्षणिक धोरणानुसार अभ्यासकम शैक्षणिक वर्ष २०२३–२४ पासून लागू करण्यात आलेले आहेत. तथापी वरील संदर्भीय परिपत्रक १ व २ अन्वये प्रकाशित केलेल्या अभ्यासक्रमामध्ये अभ्यासमंडळानी किरकोळ दुरूरती करून अभ्यासक्रम सादर केले आहेत. त्यानुसार दुरूरतीसह खालील अभ्यासक्रम लागु करण्यात येत आहेत.

- 1. M. A. Applied Economics I year (University Campus)
- 2. M. A. Economics I year (University Sub Campus Latur)
- 3. M. A. Hindi I year (Affiliated College)

सदरील परिपत्रक व अभ्यासक्रम प्रस्तुत विद्यापीठाच्या www.srtmun.ac.in या संकेतस्थळावर उपलब्ध आहेत. तरी सदरील बाब ही सर्व संबंधितांच्या निदर्शनास आणून द्यावी, ही विनंती.

'ज्ञानतीर्थ' परिसर, विष्णुपरी, नांदेड - ४३१ ६०६. जा.क.:शैक्षणिक-१/परिपत्रक/एनईपीपीजी/मानवविज्ञान/ 2023-28/295

सहाय्यक.कुलसचिव

दिनांक : १२.०९.२०२३.

प्रत माहिती व पुढील कार्यवाहीस्तव :

- १) मा. अधिष्ठाता, मानवविज्ञान विद्याशाखा, प्रस्तुत विद्यापीठ.
- २) मा. संचालक, परीक्षा व मूल्यमापन मंडळ यांचे कार्यालय, प्रस्तुत विद्यापीठ.
- ३) मा. प्राचार्य, सर्व संबंधित महाविद्यालये, प्रस्तुत विद्यापीठ. ४) सिस्टम एक्सपर्ट, शैक्षणिक विभाग, प्रस्तुत विद्यापीठ. यानां देवून कळविण्यात येते की, सदरील परिपत्रक विद्यापीठाच्या संकेतस्थळावर प्रसिध्द करण्यात यावे.

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED-431606



(Structure and Syllabus of PG Degree Programme of Sub –Campus, Latur with Entry and Exit Option)

TWO YEARS MASTER DEGREE PROGRAMME MAJOR IN ECONOMICS UNDER THE FACULTY OF HUMANITIES

SCHOOL OF SOCIAL SCIENCES, S.R.T.M.U.N. SUB-CAMPUS, LATUR

Effective from Academic year 2023 – 2024 (As per NEP-2020)

Forward by the Dean, Faculty of Humanities

From the Desk of Dean

NEP 2020 proposes a new and forward-looking vision for India's Higher Education System through quality universities and colleges. Its key is in the curriculum and its practical implementation.

The curriculum must be exciting, relevant, and regularly updated to align with the latest knowledge requirements and meet specified learning outcomes. High-quality pedagogy is necessary to impart the curricular material to students successfully; pedagogical practices determine the learning experiences provided to students, thus directly influencing learning outcomes. The assessment methods must be scientific, designed to improve learning continuously test the knowledge application.

The university's proper framing and development of syllabi will result in the upbringing and nourishment of multidisciplinary and holistic citizens. Emphasis is on outcome-based learning. Every course has well-defined objectives and outcomes. The assessment guidelines also provide clarity and precision to the vision behind prescribing the particular course content.

NEP foresees more vibrant, socially engaged, cooperative communities and a happier, cohesive, cultured, productive, innovative, progressive, and prosperous nation. The introduction of Research Methodology and ethics will widen the vision and broaden the perspectives of the learners.

Introducing Case Studies and Field Projects has created a unique opportunity for the higher education institute to bridge the gap between the academia, industry and the community NEP believes effective learning requires a comprehensive approach that involves an appropriate curriculum, engaging pedagogy, continuous formative assessment, and adequate student support.

We are sure that the Postgraduate centres of this university and its affiliated colleges will implement the course effectively and successfully, resulting in a healthy and more creative academic ambience.

Prof. Ajay Tengse,

Dean, Faculty of Humanities,

Dr. Vikas Sukale,

Asso. Dean, Faculty of Humanities,

Swami Ramanand Teerth Marathwada University, Nanded.

From Desk of Chairman, Board of Studies of the Subject Economics

The New Education Policy is being implemented from the academic year 2023-24 in Swami Ramanand Teerth Marathwada University, Nanded. This policy provides a great opportunity to revolutionise the education sector. In this educational policy, many reforms have been made in the educational framework, rules, and administrative system. The policy will make it possible to achieve the goal of sustainable development of the country. The objectives of this policy are to build an efficient and strong educational system, this education strategy gives special attention to the skills of creative thinking, communication skills, cooperation, empathy and self-confidence. This policy lays down fundamental principles for educational systems, and institutions and inculcates Indian values through curriculum and pedagogy. The new policy is expected to create constitutional values as well as a debt band with the country as our country moves towards becoming a global knowledge generation hub. It is necessary to meet the rising aspirations of the youth.

The Education of economics has gained a lot of importance in recent times as the world has become a market due to globalization, privatization & liberalization. There was a need for a new national education policy to replace the traditional education system. In accordance with this policy, the economics curriculum has been changed to ensure quality education, the student's sustainable development, employment opportunities, environment, complementary development, human welfare, economic theory, statistics, mathematical economics, econometrics, financial policy, import, export, savings, investment, employment and creating vocational skills among students and to acquire Indian knowledge along with western economics knowledge. The role of the new national education policy is not only to create job seekers but to create an entrepreneur.

The syllabus prepared for Post graduate students of economics which is based on National Education Policy 2020. This Framework is formulated with a student-centric approach and provides flexibility in terms of choice of disciplines of study, developing academic pathways having creative combinations of disciplines for study with multiple entry and exit points, determining semester-wise academic load and the ease to learn at his/her pace, to the extent possible. I believe strongly that small steps taken in the right direction will definitely help in providing quality education to the stakeholders. I as the chairman board of studies in the economics of Swami Ramanand Teerth Marathwada University Nanded happy to state here that syllabus where finalised in meeting where more than 9 members from different institutes were attended.

Dr. Laxman Hanmantrao Patil

Chairman, Board of Studies of the Economics, Swami Ramanand Teerth Marathwada University, Nanded



Swami Ramanand Teerth Marathwada University, Nanded Members of the Board of Studies in the subject of Economics under the faculty of Humanities

Sr No	Name of the Member	Designation	Address with mail id	Contact No.
1	Dr. Laxman Hanmantrao Patil	Chairman	Shivaji Mahavidhyalya, Udgir lhpatil1971@gmail.com	9421365316
2	Dr. Pramod Pandurang Lonarkar	Member	School of Social Sciences this University pramodlonarkar83@gmail.com	7745083377
3	Dr. Shalinee Uttamrao Kadam	Member	School of Social Sciences this University shalineeukadam@gmail.com	8698063223
4	Dr. Vikas Vinayakrao Sukale	Member	Peoples College Nanded vvsukale@gmail.com	9423345145
5	Dr. Digambar Dattarao Bhosale	Member	Yeshwant Mahavidyalya, Nanded bhosaledigambar3@gmail.com	7020560852
6	Dr. Chhaya Prabhakar Karkare	Member	K.R.M Mahila Mahavidyalya, Nanded cpkarkare@gmail.com	9923330669
7	Dr. Rajeshwar Vishwanath Kirtankar	Member	Narayanrao Waghmare College Akhda Balapur Dist Hingoli rvkirtankar@gmail.com	8788823804
8	Dr. Vishal Chandrashekhar Belure	Member	Shankarrao Mahavidhyalya, Ardhapur Dist.Nanded vcbelure@gmail.com	9403477782
9	Dr. Pandurang Ramrao Muthe	Member	Yeshwant Mahavidhyalya Nanded ajaymeco82@gmail.com	9421359542
10	Dr. Balaji Tulshiram Ghute	Member	Dayanand College of Arts, Latur btghute@gmail.com	8329408608
11	Dr. Anil Digambar Wadkar	Member	Kumar Swami Mahavidyalaya Ausa Dist. Latur adwadkar1983@gmail.com	9822411978

Swami Ramanand Teerth Marathwada University, Nanded Sub-Campus, Latur

School of Social Sciences

Revised Syllabus as per NEP-2020 for M.A. Economics

Year of implementation:

Revised Syllabus will be implemented from academic year 2023-24.

About the School of Social Sciences:

The School of Social Sciences established in 2009 with the M.A. Economics Programme. The Masters Degree programme in Social Work (M.S.W.) has been added to the school in the year 2011. From academic year 2012-13 M.A. Sociology programme has been initiated in the school. Since beginning, School has student centric approach to make them capable in socio-economic perspectives by providing practical, skill based and theoretical knowledge. All PG programmes are of two year's duration to be completed in four semesters. Our School is a recognized research centre for promoting the research practices under the stream of Social Sciences. School of Social Sciences offers CBCS syllabus under CGPA pattern for all post graduate programmes to develop interdisciplinary approach among the students. Our curriculum is based on UGC's guidelines and it is research as well as job oriented in nature.

As research plays an important role in the socio-economic development of the society, our faculties are working in the research areas: Public finance and policy, urban development, gender and cultural development etc. Two faculties are research guides and 07 students are working for Ph.D. under their guidance. Apart from regular class room teaching, the School is offering SET/NET guidance to the students. School promotes students for Avishkar research competition every year that is why our students could participate at state level competition. The research project work is basic component of all PG programme.

In recent time some students of our school have enrolled and registered themselves for SWAYAM-NPTEL online courses and benefiting a wide source of knowledge. Our school has also started an online certificate course on 'Data Interpretation using MS Excel and SPSS'. With the time our school is progressing in a positive way.

About the M.A. Economics Programme:

Study of higher courses like Economics is in great demand worldwide now days. Talent from the field of economics are excelled in the examinations like Maharashtra Public Service Commission (MPSC), Union Public Service Commission (UPSC), Reserve Bank of India (RBI), National Bank for Agriculture and Rural Development (NABARD), Co-Operative Banks and other private and public sector organizations. Swami Ramanand Teerth Marathwada University, Nanded at its Sub-Centre, Latur is offering Post Graduate Degree (M.A.) in Economics. This course covers recent developments in economics. The objective of this course is to develop an understanding of the basic and intermediate principles of Economics. The focus of the course will be on substantive issues and applications of basic principles of economics and field related to economics. The course will be a mixture of theory and assignments. By the end of this course, the students are expected to be familiar with theoretical and practical aspects of Economics and acquire analytical skills to address various prevalent problems of the society. The course curriculum is autonomous. The syllabus is structured as per NEP-2020 and Choice Based Credit System (CBCS) to make student learn from other interested areas to his/her credit. The result of the degree will be based on CGPA system of the University.

Objectives of the Programme:

- 1. Enriching Post Graduation level knowledge in an important subject 'Economics'.
- 2. Providing opportunity at University campus to interested students of rural background.
- 3. Creating human resource to cope with the national and international openings through the subject learning.
- 4. Enabling higher education significant wherever required and deliverable.

Outcomes of the Program:

- 1. Student progression towards research and employment opportunities.
- 2. Core subject learning and skill development/enhancement enabling students to identify their potential/suitability at appropriate undertakings.
- 3. Performance at University examination evaluation in justifying the course learnt by the students.
- 4. Conditioning Post Graduate education qualitatively improved.



Faculty of Humanities Major in Economics

Credit Framework of Two-Year PG Programme

Year & Level	Sem .	Major Su	ibject	RM	OJT/FP	Research Project	Credits	Total Credits
1	2	(DSC) 3	(DSE) 4	5	6	7	8	9
		HECOC 521: Advanced Micro Economics - I (4 Cr)	HECOE 521:Mathematical Economics-I (4 Cr)	HECOR	•••		20	
	1	HECOC 522:Advanced Macro Economics - I (4 Cr)	OR HECOE 522:Economics of	521:Research Methodology				
		HECOC 523:Statistical Methods-I (Cr 4)	Growth & Development-I (4 Cr)	(4 Cr)				40
1	2	HECOC 571: Advanced Micro Economics - II (4 Cr)	HECOE 571:Mathematical Economics-II (4 Cr)		HECOF 571:Field Project			
		HECOC 572:Advanced Macro Economics - II (4 Cr)	OR HECOE 572:Economics of					
		HECOC 573:Statistical Methods-II (Cr 4)	Growth & Development-II (4 Cr)		(4 Cr)			
		Ex	it option: PG Diploma (after thr	ree year Degree)			
		HECOC 621:Public Economics-I (4 Cr)	HECOE 621:Econometrics-I (4 Cr)			HECOF 621:		
	3	HECOC 622:International Trade & Finance-I (4 Cr)	OR HECOE 622:Financial			Research Project (Field Survey) (4 Cr)	20	
2		HECOC 623:Lab Work (4 Cr)	Institutions & Market-I (4 Cr)			(4 C1)		40
2	4	HECOC 671:Public Economics-II (4 Cr)	HECOE 671:Econometrics-II (4 Cr)			HECOR 671: Research		10
		Finance-II (4 Cr) HECOE 672:Fin	OR HECOE 672:Financial			Project/ Dissertation (6	Dissertation (6	
		HECOC 673:Lab Work (2 Cr)) Institutions & Market-II (4 Cr) Cr)		Cr)			
Total Cr	redits	46	16	4	4	10		30



Swami Ramanand Teerth Marathwada University, Nanded **Faculty of Humanities Major in Economics** Post Graduate - First Year Programme, Semester I(Level 6) **Teaching Scheme**

	Course Code	Course Name	Credits Assigned			Teaching Scheme Hrs./Week		
			Theory	Practical	Total	Theory	Practical	Total
Major	HECOC 521	Advanced Micro Economics - I	4	••••	4	4	••••	4
	HECOC 522	Advanced Macro Economics - I	4		4	4		4
	HECOC 523	Statistical Methods-I	4		4	4	••••	4
Major	HECOE 521	Mathematical Economics-I	4		4	4	••••	4
Elective (Choose any one)	HECOE 522	Economics of Growth & Development-I	4		4	4		4
Research Methodology	HECOR 521	Research Methodology	4		4	4		4
	Total Credits				20	20		20



Swami Ramanand Teerth Marathwada University, Nanded **Faculty of Humanities Major in ECONOMICS** Post Graduate - First Year Programme, Semester II (Level 6) **Teaching Scheme**

	Course Code	Course Name	Credits Assigned			Teaching Scheme Hrs./Week			
			Theory	Practical	Total	Theory	Practical	Total	
Major	HECOC 571	Advanced Micro Economic - II	4	••••	4	4		4	
	HECOC 572	Advanced Macro Economics - II	4	••••	4	4		4	
	HECOC 573	Statistical Methods -II	4		4	4		4	
Major	HECOE 571	Mathematical Economics-II	4		4	4		4	
Elective (Choose any one)	HECOE 572	Economics of Growth & Development-II	4		4	4		4	
Field Project	HECOF 571	Field Project	4		4	4		4	
	Total Credits		20		20	20		20	

Note:

- 1. Every student will have to opt 05 courses per semester.
- 2. Each student will opt for 20 credits per semester. Total credits at the exit with one year PG diploma will be 40 and at the end of the two programme will be 80 credits



Swami Ramanand Teerth Marathwada University, Nanded Faculty of Humanities Major in Economics Post Graduate First Year Programme, Semester I (Level 6) Examination Scheme

[20% Continuous Assessment (CA) and 80% End Semester Examination (ESE)] (For illustration we have considered a paper of 02 credits 50 marks, need to be modified depending on credits of individual paper)

Subject	Course Code	Course Name		Theory						
(1)	(2)	(3)	Continu	Continuous Assessment (CA) ESE				Col.(6+7)		
			Test I (4)	Test II (5)	Assignment (6)	Avg of T1+T2+Assi./3 (7)	Total (8)	(9)		
Major	HECOC 521	Advanced Micro Economics – I	20	20	20	20	80	100		
	HECOC 522	Advanced Macro Economics – I	20	20	20	20	80	100		
	HECOC 523	Statistical Methods-I	20	20	20	20	80	100		
Major- Electives	HECOE 521	Mathematical Economics-I	20	20	20	20	80	100		
(Choose any one)	HECOE 522	Economics of Growth & Development-I	20	20	20	20	80	100		
Research Methodology	HECOR 521	Research Methodology	20	20	20	20	80	100		



Faculty of Humanities Major in Economics

Post Graduate First Year Programme, Semester II(Level 6) **Examination Scheme**

[20% Continuous Assessment (CA) and 80% End Semester Examination (ESE)] (For illustration we have considered a paper of 02 credits 50 marks, need to be modified depending on credits of individual paper)

Subject	Course Code	Course Name		Theory						
(1)	(2)	(3)	Continuous Assessment (CA)					Col.(6+7)		
			Test I (4)	Test II (5)	Assignment (6)	Avg. of T1+T2+Assi./3 (7)	Total (8)	(9)		
Major	HECOC 571	Advanced Micro Economic - II	20	20	20	20	80	100		
	HECOC 572	Advanced Macro Economics - II	20	20	20	20	80	100		
	HECOC 573	Statistical Methods -II	20	20	20	20	80	100		
Major-	HECOE 571	Mathematical Economics-II	20	20	20	20	80	100		
Electives (Choose any one)	HECOE 572	Economics of Growth & Development-II	20	20	20	20	80	100		
Field Project	HECOF 571	Field Project	20	20	20	20	80	100		

* For Field Project, there will be Viva Voce / Presentation for internal 20 marks

SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY, NANDED

Faculty of Humanities

M.A. (First Year)

Subject: Economics

End of Semester Examination (ESE)

Question Paper Pattern (4 Credits)

Paper Name:, Paper Code:

Time: 03 Hours

(As Per NEP-2020)

Marks: 80

(115 1 61 1 1 1 2 0 2 0)

Note: End Semester Examination assessment (80% of the Maximum Marks):

- 1. ESE Question paper will consists of 6 questions (each carry 20 marks)
- 2. Students are required to solve a total of 4 Questions
- 3. Question No.1 will be compulsory and shall be based on entire syllabus.
- 4. Students need to solve ANY THREE of the remaining Five Questions (from Q. No. 2 to 6) and shall be based on entire syllabus.
- Q.1) Descriptive Question (Compulsory) (20 Marks)

A)

B)

C)

D)

E)

(*Note:* 5 sub-questions (each carry 4 marks) will be asked under Q. No. 1 and there will be at least one sub-question from every chapter, students must attempt all these sub questions)

- Q.2) Descriptive Question (20 Marks)
- Q.3) Descriptive Question (20 Marks)
- Q.4) Descriptive Question (20 Marks)
- Q.5) Descriptive Question (20 Marks)
- Q.6) Descriptive Question (20 Marks)

(Solve Any Three Questions from Q. No. 2 to 6) (60 Marks)

Total = (80 Marks)

Guidelines for Course Assessment:

A. Continuous Assessment (CA) (20% of the Maximum Marks):

This will form 20% of the Maximum Marks and will be carried out throughout the semester. It may be done by conducting **Two Tests** and One Assignment. Average of marks scored in these two tests and one assignment of a theory paper will make CA.

B. Assessment of Term Work/ Tutorial/Field Works:

At least 08 test / assignments covering entire syllabus must be given during the 'class wise tutorial'. The assignments should be students'centric and attempts be made to make assignments more meaningful, interesting and innovative. Term work assessment must be based on overall performance of the student with every assignments graded time to time. The grades be converted to marks as per 'credit and grading system' manual and should be added and averaged.

Note: Number of lectures required to cover syllabus of a course depend on number of credit assigned to it. For example, for a two credit course, 30 lectures each of one hour duration are assigned, while that for a four credit course 60 lectures.



Faculty of Humanities Major in Economics Post Graduate -First Year Programme, Semester First

Course Code: HECOC 521

Course Title: Advanced Micro Economic Analysis – I (*Major*) Curriculum Details (for 4 Credits)

Course pre-requisites:

- 1. Meaning, importance, and classification of Economics
- 2. Basic understanding of types of curves

Course Objectives:

- 1. To acquaint students with the nature of economics
- 2. To give an idea about the consumer behaviour
- 3. To familiarize students about the behaviour in risky situations.
- 4. To give knowledge about the laws and theories of production

Course Outcomes:

- 1. Students would understand basic concepts in economics.
- 2. Enables students to know the behaviour of consumer.
- 3. Students will have an idea about behaviour of consumer under risky choices.
- 4. Learners will be familiar with the theories of production.

Module 1: Foundation in Micro Economics

(12 Hours)

- 1.1 Scope of Economic Theory and Basic Economic Problem
- 1.2 Production Frontier Shifts in, Production Frontier, Opportunity Costs
- 1.3 Nature of Scientific Theory, Deductive and Inductive Method; Role of assumptions in Economic Theory - Friedman's view
- 1.4 Law of demand- Causes of Law of Demand, Elasticity of Demand- Types, Case Studies

Module 2: Cardinal Analysis of Utility

- 2.1 Utility-Meaning, Classification
- 2.2 Law of Diminishing Marginal Utility
- 2.3 Law of Equi-Marginal Utility
- 2.4 Derivation of Demand Curve from Cardinal Utility

Module3: Ordinal Analysis of Utility

(12 Hours)

- 3.1 Ordinal utility- Indifference Curve, Properties, Price Line
- 3.2 Consumers Equilibrium, Corner Solutions
- 3.3 Income Effect, Price Effect and Substitution Effect by Hicks and Slutsky
- 3.4 Decomposing Price Effect into Income and Substitution Effect, Three demand theorems based on Ordinal Analysis, Derivation of Demand Curve for Normal & Giffen Goods

Module4: Consumers Behavior in Uncertainty

(12 Hours)

- Risk, Risk averter v/s risk lover, Risk lover and gambling
- Risk aversion and insurance, The St. Petersburg paradox and Bernoulli hypothesis
- 4.3 Neumann - Morgenstern method of constructing utility
- Friedman Savage hypothesis, Markowitz hypothesis. 4.4

Module5: Classical Theories of Production

(12 Hours)

- 5.1 Production function Law of variable proportion, Returns to scale
- 5.2 Cobb-Douglas production function, CES production function
- 5.3 Iso-Quant curve, MRTS, Iso-cost line;
- 5.4 Optimum Factor Combination and Output Expansion Path, Multi Product Firm Choice of Products, Optimum Combination of Two Products.

- Ahuja H.L. (2003) Advanced Economic theory: Microeconomic Analysis, 13th Edition, S.Chand and Co. Ltd. New Delhi.
- Chaturvedi, Gupta and Pal (2002) Business Economics: Text and Cases Galgotia Publishing Company, New Delhi
- Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.
- Gravelle, H. and Rees R. (2003), Microeconomics, 3rd Edition, Prentice Hall.
- Henderson, J. M. and R. E. Quant (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- Hirshleifer, J. and A. Glazer (1997), rice Theory and Applications, Prentice Hall of India, New Delhi.
- Koutsoyiannis, A. (1979), Modern Microeconomics, 2nd edition Macmillan Press, London.
- Mishra, S.K. and Puri, V.K. (2001): Advanced Microeconomic Theory, Himalaya Pub. Mumbai
- Samuelson, P.A. and W.O. Nordhaus (1998), Economics, 16th Edition, Tata McGraw Hill, New Delhi
- Sen A. (1999) Microeconomics: Theory and Application, OxfordUniversity Press, New Delhi.
- Stigler G. (1996) Theory of Price, 4th Edition, Prentice Hall of India, New Delhi.
- Verian H. (2000) Microeconomic Analysis, W.W Norton New York.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester First

Course Code: HECOC 522

Course Title: Advanced Macro Economic Analysis – I (*Major*)

Curriculum Details (for 4 Credits)

Prerequisite of Course:

- 1. Basic Knowledge in national income and its measurement
- 2. Basic understanding about consumption, investment, inflation and business cycle.

Learning Objectives:

- To equip students to understand the basics of national income accounting.
- To develop an understanding of the consumption function.
- 3 To develop an understanding of the investment function.
- 4 To make students understand the causes and consequences of business cycles.

Learning Outcomes:

- 1. After the study of this course student will be able to understand the national income accounting.
- 2. Student will have useful knowledge of consumption function and its theories.
- 3. This course equips the students to understand systemic facts and latest theoretical developments for empirical analysis.
- 4. Students will recognize how monetary and fiscal policy can be used to achieve policy goals.

Module 1 : National Income and Accounts

(12 Hours)

- 1.1 Meaning and Concepts of National Income
- 1.2 Circular Flow of Income in two, three and four-sector economy
- 1.3 Social Accounting-Meaning, Components, Presentation and Importance
- 1.4Input-Output Accounting-Finding out GNP, GNI and GNE, Technical Coefficient

Module 2 : Consumption Function

- 2.1 Keynes Psychological Law of Consumption and its Implications
- 2.2 Determinants of the Consumption Function
- 2.3Measures to Raise Propensity to Consume
- 2.4 Absolute Income, Relative Income, Life Cycle and Permanent Income Hypotheses

Module 3: Investment Function

(12 Hours)

- 3.1Investments-Meaning, Types and Determinants
- 3.2 The investment multiplier
- 3.3Accelerator and investment behaviour
- 3.4 Impact of inflation and policy measures on investment

Module 4: Theories of Inflation

(12 Hours)

- 4.1 Classical, Keynesian and Monetarist approaches to inflation
- 4.2The Philips curve analysis Short run and long run Philips curve
- 4.3Effects of Inflation on Production and Redistribution of Income and Wealth
- 4.4 Policies to control inflation

Module 5 : Theories of Business Cycle

(12 Hours)

- 5.1 Samuelson's Model of Business Cycle
- 5.2Hicks's Theory of Business Cycle
- 5.3Goodwin's model of Business Cycle
- 5.4 Measures to Control Business Cycles.

- Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- D souza Errol (2008) Macroeconomics: Person Publication, New Delhi.
- Dornbusch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York
- Hall, R.E. and J.B. Taylor (1986), Macroeconomics, W.W. Norton, New York
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., NewDelhi.
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
- Branson, W. a. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- Heijdra, B. J. and V. Frederick (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
- Powelson, J. P. (1960), National Income And Flow of Funds Analysis, McGraw Hill, New York.
- Romer, D. L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New
- Rao, V. K. R. V. (1983), India's National Income: 1950 to 1980, Sage Publications, New Delhi.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
- Surrey, M.J.C. (Ed.) (1976), Macroeconomic Themes, Oxford University Press, Oxford.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester First

Course Code: HECOC 523

Course Title: Statistical Methods - I(Major)

Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Familiarity with basic calculations
- 2. Primary but not-mandatory mathematical understanding

Learning Objectives:

- 1. To make student contented with preliminary quantitative methods
- 2. To equip students with concrete knowledge of statistical methods
- 3. To develop competencies in learners to use the statistical methods appropriately
- 4. To emphasize different novel aspects in the statistical methods

Learning Outcomes:

- 1. Course will be useful in understanding preliminary quantitative methods
- 2. Course will be useful for the application of different statistical techniques
- 3. Course will help to choose appropriate statistical tools
- 4. Course will help to interpret the data

Module 1: Introduction to Statistical Methods

(12 Hours)

- 1.1: Statistics- Meaning, Importance, Scope and limitations
- 1.2 Data: Meaning, Types- Categorical Vs Non-Categorical, Cross-Section, Time Series, Panel Data.
- 1.3 Measurement of Scales: Nominal, Ordinal, Interval, Ratio
- 1.4 Statistical Techniques: Types of Statistical Techniques

Module 2: Descriptive Statistics: Central Tendency

- 2.1 Central Tendency: Meaning and Types
- 2.2 Arithmetic Mean, Weighted Mean: Meaning, Merits, Demerits and Calculations
- 2.3 Median: Meaning, Merits, Demerits and Calculations
- 2.4 Mode: Meaning, Merits, Demerits and Calculations

Module 3: Measures of Dispersion and Spread

(12 Hours)

- 3.1 Significance and Properties of Dispersion
- 3.2 Range, Inter-quartile Range and Quartile Deviation: Meaning, Merits, Demerits and Calculations
- 3.3 Standard Deviation and Lorenz Curve: Meaning, Merits, Demerits and Calculations
- 3.4: Skewness and Kurtosis: Meaning, Merits, Demerits and Calculations

Module 4: Index Number

(12 Hours)

- 4.1 Uses of Index Number; Problems in Construction of Index number
- 4.2 Methods of Constructing Index Number- Unweighted and Weighted Index Numbers
- 4.3 Types of Weighted Indices- Laspeyres Methods, Paasche Method, Bowley's Method, Fishers Ideal Method
- 4.4 Quantity or Volume Index numbers, Tests of Adequacy- Time Reversal Test, Factor Reversal Test: Chain Index Numbers

Module 5: Time Series

(12 Hours)

- 5.1 Components of Time Series
- 5.2 Measurement of Trend- Freehand or Graphic Method, Semi-Average Method, Moving Average Method and Method of Least Squares
- 5.3 Measurement of Seasonal Variations; Measurement of Cyclical Variations
- 5.4 Calculation of Correlation in Time Series

References:

Anderson, D. (2019), Statistics for Business and Economics, Cengage

Bernstein, S. and Bernstein, R. (2020), Elements of Statistics-I Descriptive Statistics and Probability, McGraw Hill

Bernstein, S. and Bernstein, R. (2020), Elements of Statistics-II Inferential Statistics, McGraw Hill

Chitale, R. (2018), Statistical and Quantitative Methods, Nirali Publication, New Delhi

Dalgaard, P. (2008), Introductory Statistics with R, Springer

Das, N.G. (2017), Statistical Methods, 1st edition, McGraw Hill

Gupta, S.P. (2012), Statistical Methods, S. Chand & Sons, New Delhi

McKillup, S. (2011), Statistics Explained, Cambridge University Press

Mishra, A. (2020), Theory of Statistical Hypothesis Testing, Notion Press, New Delhi

Mishra, A. (2020), Theory of Statistical Estimation, Notion Press, New Delhi

Szabat, K. and Viswanathan (2017), Business Statistics, 7th edition, Pearson



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester First

Course Code: HECOE 521

Course Title: Mathematical Economics-I (*Major Elective*)

Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Familiarity with elementary mathematical methods
- 2. Basic knowledge of economic theory behind mathematical applications

Learning Objectives:

- 1. To make students aware about the basic mathematical methods.
- 2. To elaborate students about the theories of consumer behaviour.
- 3. To familiarize students with the theories of production.
- 4. To develop an understanding of the cost and revenue functions.

Learning Outcomes:

- 1. Students will have compatible knowledge of the basic mathematical methods.
- 2. Students would understand mathematical aspect to the theories of consumer behaviour.
- 3. Students will be familiar with the theories of production and costs.
- 4. Learners will understand about the production cost and revenue.

Module 1: Basic Mathematical Methods:

(12 Hours)

- 1.1 Theory of indices, Variable, Constant and Parameter
- 1.2Simple functional relationship and their graphs
- 1.3 Elementary ideas of differential and integral calculus
- 1.4 Difference and differential equations.

Module 2: Set Theory and Matrices:

(12 Hours)

- 2.1The real Number System
- 2.2Concept of Sets and their Operation
- 2.3Matrix Meaning, Types and Operations
- 2.4Solution of Simultaneous Equations using Matrices

Module 2: Theory of Consumer Behaviour:

- 3.1 Cardinal and Ordinal Utility, Maximization and Ordinal Utility
- 3.2 Compensated Demand Functions, Slutsky Equation

- 3.3Separable and Additive Utility Functions, Indirect Utility Functions, Duality Theorem
- 3.4 Concept of Elasticities, Consumer's Surplus; Linear Expenditure Systems.

Module 4: Theory of Production

(12 Hours)

- 4.1Production function Homogeneous and Non-Homogeneous
- 4.2Cobb-Douglas Production Function and its Properties
- 4.3CES Production Function its Properties, Producer's equilibrium
- 4.4 Analysis of Joint Profit Maximization and Multi-Product Firm, Production Possibility Curve

Module 5: Theory of Cost and Revenue:

(12 Hours)

- 2.1 Meaning and Nature of Cost and Revenue Functions
- 2.2 Simple Derivation of Short and Long run Cost Functions
- 2.3 Modern Approach to Theory of Costs
- 2.4 Simple Derivation of Revenue Functions

- Allen, R.G.D. (1976), Mathematical Economics, Macmillan, London. (Eassys in Honour of Manmohan Sing), Oxford University Press, New Delhi.
- Arrow, K.J. and M. Intrilligator (Eds.) (1982), Handbook of Mathematical Economics, Volumes I, II and III, North Holland, Amsterdam.
- Bose D.(2007), An Introduction to Mathematical Economics, Himalaya Publishing House, New Delhi.
- Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
- Chung, J.W. (1993), Utility and Production: Theory and Applications, Basil Blackwell, London
- Ferguson, C.E. (1976), Neo-classical Theory of Production and Distribution.
- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi
- शेवाळे,आनंद., आणि बेलुरे,विशाल. (२०२२).*गणितीय अर्थशास्त्र व अर्थमिती* (प्रथमआवृत्ती). विद्या बुक्स पब्लिशर्स, औरंगाबाद.
- बेल्रे, विशाल. (२०२०, सप्टेंबर). रॉयचे नित्य समीकरण, शेफर्डचे सहायक प्रमेय आणि उपभोगातील अन्योन्यता. *प्रिंटिंगएरिया मासिक. ०१*(६९), ७१-७३, हर्षवर्धन प्रकाशन बीड.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester First

Course Code: HECOE 522

Course Title: Economics of Growth and Development - I (*Major Elective*)

Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Basic understanding of terminologies from micro economics
- 2. Basic understanding of terminologies from macro economics

Learning Objectives:

- 1. To make student sentient with the changes in development concepts
- 2. To furnish the students with recent development theories
- 3. To highlight the classical, neoclassical and modern approach towards development
- 4. To familiarize students with development process in developing and less developed countries

Learning Outcomes:

- 1. Course will be useful in understanding the concept of development from many dimensions
- 2. Learners will be aware of the different approaches towards development
- 3. Course will be useful in understanding different theories of development and their application to less developed countries
- 4. Course enables learners with the current scenario of development among different countries

Module 1: Introduction to Development

(12 Hours)

- 1.1 Economic Development- Meaning, Modern Version of Development
- 1.2 Distinction between growth and development
- 1.3 Distinction between development and underdevelopment
- 1.4 Sustainable development.

Module 2: Measurement, Obstacles and pre-requisites of Development

- 2.1 Measurements of Development
- 2.2 Obstacles to Development
- 2.3 Pre-Requisites of Development
- 2.4 Factor Governing Economic Development

Module 3: Theories of Growth & Development-I

(12 Hours)

- 3.1 Classical theory of development- Adam Smith
- 3.2 Karl Marx's Theory of Economic Development
- 3.3 The Schumpeter Theory
- 3.4 Rostow's Stages of Growth

Module 4: Theories of Growth & Development-II

(12 Hours)

- 4.1The Keynesian Theory of Development
- 4.2 Nelsons Low Level Equilibrium Trap
- 4.3 Myrdal's Theory of Backwash Effect
- 4.4 Big Push Theory

Module 5: Theories of Growth & Development - III

(12 Hours)

- 5.1 The theories of Balanced Growth
- 5.2 The theories of unbalanced Growth
- 5.3 Lewis Theory of unlimited Labour Supply
- 5.4 Fei-Ranis Model

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Bagchi, A. (1982), The Political Economy of Underdevelopment, Cambridge University Press
- Bardhan, P. and C. Udry (eds) (2000), 1st edition, Readings in Development Economics, The MIT Press
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
- Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
- Chenery, H.B. et. al. (Eds.) (1974), Redistribution with Growth, Oxford University Press, Oxford.
- Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
- Debraj Ray (1999), Economics of Development, Oxford India Paperbacks
- Meier, G. and J. Rauch (2004), Leading Issues in Economic Development, 7th edition, Oxford University Press
- Ray, D. (1998), Development Economics, Princeton University Press
- Thirlwall, A.P. (2006), Growth and Development, 8th edition, Palgrave MacMillan



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester First

Course Code: HECOR 521

Course Title: RESEARCH METHODOLOGY (RM)

Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Basics awareness with concept of research and its usefulness.
- 2. Primary knowledge of data collection and analysis

Learning Objectives:

- 1. To acquaint students with research and social research
- 2. To give an idea about the Research design and research hypothesis
- 3. To familiarize students with the statistical techniques and tools used in research
- 4. To prepare students to write research report

Learning Outcomes:

- 1. Learner will acquaint with different types of research
- 2. Learner will able to identify research problem
- 3. Learner will able to follow the steps in research
- 4. Learner will able to conduct sound research

Module 1: Introduction to Research

(12 Hours)

- 1.1 Meaning, Objectives and Characteristics of Research
- 1.2 Scientific Method and Research
- 1.3 Social Science Research Meaning, Nature, Importance and Limitation
- 1.4 Types and Methods of Research

Module 2: Research Design

- 2.1 Meaning, Need, Types and Importance
- 2.2 Stages involved in Research Design
- 2.3 Formulation of Research Problem
- 2.4 Formulation of Hypothesis and Application

Module 3: Sampling Techniques and Data Collection

(12 Hours)

- 3.1 Sampling Technique Probability and Non-Probability
- 3.3 Sample Design and Sample Size
- 3.4 Primary Data Collection Interviews, Questionnaire, Schedule, Observation, Panel Method
- 3.4 Secondary data Collection

Module 4: Data Processing and Analysis

(12 Hours)

- 4.1 Classification, Tabulation and Interpretation of Data, Using Graphs and Diagrams
- 4.2 Measures of Central Tendencies
- 4.3 Dispersion, Correlation and Percentage
- 4.4 Hypothesis Testing- t, Z, F and Chi Square Tests

Module 5: Report Writing and Evaluation

(12 Hours)

- 5.1 Meaning and General Format of Research Report
- 5.2 Documentation- Footnotes, Citation and Bibliography
- 5.3 Writing, Typing and Briefing the Research Report
- 5.4 Evaluation of a Research Report

- Best J.W. and Khan J.V.(2005)Research in Education, New Delhi, Prentice Hall India.
- Bhattacharya D.K. (2004) Research Methodology, New Delhi, Excel Books.
- Brymann, Alan and Carmer, D.(1995) Quantitative Data Analysis for Social Scientist, New York, Routledge Publication.
- Chandera A. and Saxena T.P. (2000) Style Manual, New Delhi, Metropolitan Book Comp. Ltd.
- Gautam N.C.(2004)Development of Research Tools, New Delhi, Shree Publishers.
- Hans Raj (1988) Theory and practice in Social Research, Kolhapur, Surject Publication.
- Kothari C.R. and Guarav Garg (2016) Research Methodology, New Delhi, New Age International Publishers.
- Krishnaswami O.R. and Rangnatham M. (2016), Mumbai, Himalaya Publishing House.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester Second

Course Code: HECOC 571

Course Title: Advanced Micro Economic Analysis - II (Major)

Curriculum Details (for 4 Credits)

Course pre-requisites:

- 1. **Basic Concepts in Economics**
- 2. Basic understanding in the Market Structure

Course Objectives:

- 1. To acquaint students with the nature of oligopoly market.
- 2. To give an idea about the managerial and pricing theories.
- 3. To familiarize students with the theories of distribution.
- 4. To give knowledge about the concept and theories of welfare.

Course Outcomes:

- 1. Students would understand the functioning of oligopoly.
- 2. Students will be able to know the managerial behaviour and pricing theories.
- 3. Students will have an idea about theories of distribution.
- 4. Learners will be familiar with the concept and theories of welfare.

Module 1: Costs and Revenue Concepts

(12 Hours)

- 1.1 Concepts of Cost: Private Cost Vs Social Cost, Accounting Cost Vs Economic Costs
- 1.2 Theory of Short-Run Costs: TFC, TVC, TC, AFC, AVC, AC, MC
- 1.3 Theory of Long-Run Costs: LAC, LMC, LTC
- 1.4 Revenue Concepts: TR, AR, MR, Revenue Curves in Imperfect Competition and Perfect Competition, Relationship between AR & MR

Module 2: Classical Models of Oligopoly

- 2.1 Types of Market: Perfect Vs Imperfect Market, Characteristics of Oligopoly
- 2.2 Collusive and Non-Collusive oligopoly
- 2.3 Models in Oligopoly: Cournot's model, Bertrand's model, Edgeworth model, Chamberlin model, Stackelberg's model,
- 2.4 Sweezy's kinked-demand model- Price Rigidity

Module 3: Managerial Behavioral and Pricing Theories of Firm

(12 Hours)

- 3.1 Objectives of business firms
- 3.2 Baumol's sales maximization model, Marris model of managerial enterprise, Williamson's managerial discretion theory.
- 3.3 Theory of limit pricing Bain's model, Sylos- Labini's model of limit pricing
- 3.4 Modigliani's model of limit pricing.

Module 4: Theories of Distribution

(12 Hours)

- 4.1 Marginal productivity theory, Product exhaustion theorem (Euler's theorem)
- 4.2 Theories of rent- Ricardian and Modern Theory
- 4.3 Theories of Wages -- Modern theory of wage
- 4.4 Theories of Interest Liquidity preference, Loanable funds theory ,Theories of Profit-Dynamic and Innovation theory

Module 5: Welfare Economics

(12 Hours)

- 5.1 Meaning of welfare economics, Individual and social welfare, economic welfare,
- 5.2 Pigou's criterion of welfare
- 5.3 Conditions of pareto optimality
- 5.4 New welfare economics Kaldor and Hicksion criterion of welfare, Value judgment and social welfare function, Scitovsky's paradox.

- Ahuja H.L. (2003) Advanced Economic theory: Microeconomic Analysis, 13th Edition, S.Chand and Co. Ltd. New Delhi.
- Chaturvedi, Gupta and Pal (2002) Business Economics: Text and Cases Galgotia Publishing Company, New Delhi
- Da Costa, G. C. (1980), Production, Prices and Distribution, Tata McGraw Hill, New Delhi.
- Gravelle, H. and Rees R. (2003), Microeconomics, 3rd Edition, Prentice Hall
- Henderson, J. M. and R. E. Quant (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- Koutsoyiannis, A. (1979), Modern Microeconomics, 2nd edition Macmillan Press, London.
- Mishra, S.K. and Puri, V.K. (2001): Advanced Microeconomic Theory, Himalaya Pub. Mumbai
- Pindyck, Robert S. and Rubinfield, Daniel L. (1998), Microeconomics, Prentice Hall
- Samuelson, P.A. and W.O. Nordhaus (1998), Economics, 16th Edition, Tata McGraw Hill, New Delhi
- Sen A. (1999) Microeconomics: Theory and Application, Oxford University Press, New Delhi.
- Stigler G. (1996) Theory of Price, 4th Edition, Prentice Hall of India, New Delhi.
- Verian H. (2000) Microeconomic Analysis, W.W Norton New York.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester Second

Course Code: HECOC 572

Course Title: Advanced Macro Economic Analysis - II (Major)

Curriculum Details (for 4 Credits)

Course pre-requisites:

- 1. Basic Knowledge in national income and its measurement.
- 2. Basic understanding about consumption, investment, inflation and business cycle.

Learning Objectives:

- 1. To acquaint students with the different aspects of money supply.
- 2. To make students aware about various approaches to demand for money.
- 3. To familiarize students about the forces determining interest rates, and the exchange rate.
- 4. To develop an understanding about the macroeconomic policy in an open economy.

Learning Outcomes:

- 1. Students would understand the different aspects of money supply.
- 2. Students will become familiar with the various approaches to demand for money.
- 3. Learners would know the forces determining interest rates, and the exchange rate.
- 4. Students will have an idea about the macroeconomic policy in an open economy.

Module 1 : Supply of Money

(12Hours)

- 1.1 Supply of Money- Meaning, Determinants and RBI's Approach
- 1.2 High powered money and money multiplier
- 1.3 The relation of Budget deficits and open economy to money supply
- 1.4 Measures to control of money supply

Module 2 : Demand for Money

- 2.1 Demand for Money- Meaning and Determinants
- 2.2 The Classical Approach to demand for money
- 2.3 Keynes's Liquidity Preference Approach
- 2.4 Post-Keynesian approaches to demand for money Baumol, Patinkin, Friedman and Tobin

Module 3: Theories of Interest Rate

(12 Hours)

- 3.1 Meaning and Classical View
- 3.2Neo-classical and Keynesian Views
- 3.3The IS-LM Model and its Extension with Government Sector and labour Market
- 3.4 Relative effectiveness of monetary and fiscal policies

Module 4: The Rational Expectation Hypothesis

(12 Hours)

- 4.1 Introduction
- 4.2 Adaptive Expectation Hypothesis
- 4.3 Rational Expectation Hypothesis
- 4.1 Stabilization Policy and Ratex Hypothesis

Module 5 : Macroeconomics in Open Economy

(12 Hours)

- 5.1 Open Economy Meaning and Nature
- 5.2 Concept of Exchange rate and Capital Mobility
- 5.3 Mundell-Fleming Model of Open Economy
- 5.4 Monetary Approach to Balance of Payments.

- Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York D souza Errol (2008) Macroeconomics: Person Publication, New Delhi.
- Dornbusch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc., New York
- Hall, R.E. and J.B. Taylor (1986), Macroeconomics, W.W. Norton, New York
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., NewDelhi.
- Blackhouse, R. and A. Salansi (Eds.) (2000), Macroeconomics and the Real World (2 Vols.), Oxford University Press, London.
- Branson, W. a. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row. New York.
- Heijdra, B. J. and V. Frederick (2001), Foundations of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
- Rao, V. K. R. V. (1983), India's National Income: 1950 to 1980, Sage Publications, New Delhi.
- Romer, D. L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
- Scarfe, B. L. (1977), Cycles, Growth and Inflation, McGraw Hill, New York.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester Second

Course Code: HECOC 573

Course Title: Statistical Methods-II (Major) Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Familiarity with basic calculations
- 2. Primary but not-mandatory mathematical understanding

Course Objectives:

- 1. To make student familiar with intermediate quantitative techniques
- 2. To equip students with concrete knowledge of statistical methods
- 3. To develop capability in students to use the hypothesis tests
- 4. To emphasize different new aspects in the statistical methods

Course Outcomes:

- 1. Course will be useful in understanding intermediate quantitative methods
- 2. Course will be useful for the application of different statistical techniques
- 3. Course will equip learners with choosing appropriate hypothesis testing
- 4. Course will help to interpret and analyze the data

Module 1: Probability

(12 Hours)

- 1.1 Definitions-Classical or a Priori Probability, Relative Frequency, Subjective & Axiomatic Approach to Probability, Types of Events
- 1.2 Theorem of Probability-Addition Theorem, Multiplication Theorem
- 1.3 Conditional Probability; Bayes Theorem
- 1.4 Binomial Distribution; Poisson Distribution; Normal Distribution

Module 2: Inferential Statistics-I

- 2.1 Procedure of testing Hypothesis, Errors in Testing Hypothesis
- 2.2 Test of Significance for Large Samples
- 2.3 Test of Significance for Small Samples (Parametric Tests)
- 2.4 Student's t-Distribution- One Samples t-test, Independent Samples t-test, Dependent Samples t-test

Module 3: Inferential Statistics-II

(12 Hours)

- 3.1 The F-test: Assumptions, Applications
- 3.2 One-Way Analysis of Variance
- 3.3 Two-Way Analysis of Variance
- 3.4 Non-Parametric Tests- Chi-Square, Sign Test, Mann-Whitney U Test

Module 4: Associative Statistics

(12 Hours)

- 4.1 Correlation: Meaning, Significance of Correlation; Correlation and Causation
- 4.2 Types of Correlation: Simple, Partial, Multiple, Linear, Non-Linear Correlation
- 4.3 Methods of Studying Correlation-Scatter Diagram Method, Graphic Methods, Karl Pearson's Coefficient of Correlation, Rank Correlation Coefficient
- 4.4 Calculation of Correlation in Time Series.

Module 5: Predictive Statistics

(12 Hours)

- 5.1 Regression: Meaning, Difference between Correlation and Regression
- 5.2 Regression Line, regression Equation
- 5.3 Standard Error of Estimate
- 5.4 Construction of Regression Equations

- Anderson, D. (2019), Statistics for Business and Economics, Cengage
- Bernstein, S. and Bernstein, R. (2020), Elements of Statistics-I Descriptive Statistics and Probability, McGraw Hill
- Bernstein, S. and Bernstein, R. (2020), Elements of Statistics-II Inferential Statistics, McGraw Hill
- Chitale, R. (2018), Statistical and Quantitative Methods, Nirali Publication, New Delhi
- Dalgaard, P. (2008), Introductory Statistics with R, Springer
- Das, N.G. (2017), Statistical Methods, 1st edition, McGraw Hill
- Gupta, S.P. (2012), Statistical Methods, S. Chand & Sons, New Delhi
- McKillup, S. (2011), Statistics Explained, Cambridge University Press
- Mishra, A. (2020), Theory of Statistical Hypothesis Testing, Notion Press, New Delhi
- Mishra, A. (2020), Theory of Statistical Estimation, Notion Press, New Delhi
- Szabat, K. and Viswanathan (2017), Business Statistics, 7th edition, Pearson
- बेलूरे, विशाल. (२०२२, एप्रिल-जून मराठी अर्थशास्त्र परिषद, मुंबई). प्रचरण विश्लेषणाद्वारे गृहीतकृत्यांची चाचणी : एक टिपण. *अर्थसंवाद, ४६*(१), ३८-४४.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester Second

Course Code: HECOE 571

Course Title: Mathematical Economics-II(*Major Elective*) Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Familiarity with elementary mathematical methods
- 2. Basic knowledge of economic theory behind mathematical applications

Learning Objectives:

- 1. To make students aware about the determination of price in various markets.
- 2. To acquaint students to understand the conditions of market equilibrium.
- 3. To develop an understanding of the game theory.
- 4. To equip students to about linear programming and input-output analysis.

Learning Outcomes:

- 1. Students will be familiar with the conditions of market equilibrium.
- 2. Students would understand mathematical aspect of determination of income and its fluctuations.
- 3. Learner's understanding about the game theory will be developed.
- 4. Students will have compatible knowledge of the linear programming and input-output analysis.

Module1: Price Determination in Various Markets

(12 Hours)

- 1.1 Price determination in perfect competition
- 1.2 Price determination in monopoly, monopolistic competition
- 1.3 Price determination in duopoly and oligopoly
- 1.4 Price determination in monopsony and bilateral monopoly

Module 2: Market Equilibrium

- 2.1 Single Commodity Market Equilibrium
- 2.2 Two Commodity Market Equilibrium
- 2.3 Lagged market equilibrium.
- 2.4 Walrasian General Equilibrium Systems

Module 3: Game Theory

(12Hours)

- 3.1 Meaning and Basic Concepts in Game Theory
- 3.2 Pure Strategies -Saddle Point Solution and Dominance Rule
- 3.3 Mixed Strategies and Solutions of Game
- 3.4 Game Theory and Prisoner's Dilemma

Module 4: Linear Programming

(12Hours)

- 4.1 Linear Programming- Meaning and Characteristics
- 4.2 Graphical Method for Maximization and Minimization
- 4.3 Simplex method for Maximization and Minimization
- 4.4 Applications of Linear Programming in Economics

Module 5: Input-output Analysis

(12 Hours)

- 5.1 Concept of Input-Output Analysis
- 5.2 Open and Closed Systems
- 5.3 Hawkins-Simon Conditions
- 5.4 Leontief's Dynamic System, Testing Consistency of Planning Models

- Allen, R.G.D. (1976), Mathematical Economics, Macmillan, London.
- Abel, A., B.S. Bernanke and B. Mcnabb (1998), Macroeconomics, Addison Wesley, Massachusetts.
- Arrow, K.J. and M. Intrilligater (1982), Handbook of Mathematical Economics, volumes I, II, III, Amsterdam
- Barro, R.J. and H. Grossman (1976), Money, Employment and Inflation, Oxford University Press, Oxford.
- Bose D.(2007), An Intrduction to Mathematical Economics, Himalaya Publishing House, New Delhi.
- Chung, J, W. (1993), utility and production: Theory and Applications, Basil Blackwell, London
- Chiang A. C. (2005), Fundamental method of Mathematical Economics, Mc-Graw Hill, new York
- Henderson J.M. and R. E. Quandt (1980), microeconomic theory; A Mathematical Approach, Mcgraw Hill, New Delhi.
- Hadley, G. Linear Programming, Addison Weslay Publishing Co, Massachusetts
- Mankiw, N.G. and D. Romer (Eds.) (1991), New Keynesian Economics (2 Vols.), MIT Press, Cambridge, Mass
- Mustafi, C.K. (1992), Operations Research: Methods and Practice, Wiley Eastern, New Delhi.
- शेवाळे,आनंद., आणि बेल्रे,विशाल. (२०२२).*गणितीय अर्थशास्त्र व अर्थमिती* (प्रथमआवृत्ती). विद्या बुक्स पब्लिशर्स, औरंगाबाद.



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester Second

Course Code: HECOE 572

Course Title: Economics of Growth and Development-II(Major Elective) Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Basic understanding of terminologies from micro economics
- 2. Basic understanding of terminologies from macro economics

Course Objectives:

- 1. To make student aware with the development process in India
- 2. To furnish the students with economic planning in India
- 3. To highlight the major policies of Indian Government for development
- 4. To equip students with obstacles and way out to development in India

Course Outcomes:

- 1. This course is useful in understanding the development process in India
- 2. This course is useful in understanding overall profile of the planning in India
- 3. This course is useful in understanding the major policies by the government in India
- 4. This course is useful in understanding the dimension of planning and policies in India

Module 1: Models of Economic Growth-I

(12 Hours)

- 1.1 Harris and Todaro's Model of Migration
- 1.2 Harrod-Domar Model
- 1.3 Mrs. Joan Robinson's Model of Economic growth
- 1.4 Kaldor Model of Growth

Module 2: Models of Economic Growth-II

- 2.1 R.M. Solow Model
- 2.2 Model of Technical Change- Hicksian View on Neutrality
- 2.3 Model of Technical Change- Harrod's View on Neutrality
- 2.4 Endogenous Growth Model

Module 3: Economic Planning

(12 Hours)

- 3.1 Planning-Meaning, Objectives and Types
- 3.2 Physical and financial planning, Structural and functional planning, Centralized and decentralized planning
- 3.3 Socialistic and capitalistic planning, Direction and Inducement Planning, Flexible and Rigid Planning
- 3.4 Democratic and Totalitarian Planning, Permanent and Emergency Planning, Regional, National and International Planning, Comprehensive and Partial Planning.

Module 4: Development of Planning in India

(12 Hours)

- Planning in India since 1950- performance and evaluation
- Strategies of planning in India 4.6
- Economic Reforms- First Phase 1985-86, Second Phase (1990-91 onward); Achievements of New Economic policy
- 4.8 Criticism on New Economic Policy; Indian growth rate after reforms

Module5: Government Major Policies for Development

(12 Hours)

- 5.1 Mahatma Gandhi National Rural Employment Guarantee Act
- 5.2 Jawaharlal Nehru National Urban Renewal Mission
- 5.3 Mid Day Meal Scheme, National Rural Livelihood Mission
- 5.4 NITI Ayog and Recent Plans by the Government

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Bagchi, A. (1982), The Political Economy of Underdevelopment, Cambridge University Press
- Bardhan, P. and C. Udry (eds) (2000), 1st edition, Readings in Development Economics, The MIT Press
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
- Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge University Press, Cambridge, Mass.
- Dasgupta, P. (1993), An Enquiry into Well-being and Destitution, Clarendon Press, Oxford.
- Debraj Ray (1999), Economics of Development, Oxford India Paperbacks
- Meier, G. and J. Rauch (2004), Leading Issues in Economic Development, 7th edition, Oxford University Press
- Ray, D. (1998), Development Economics, Princeton University Press
- Thirlwall, A.P. (2006), Growth and Development, 8th edition, Palgrave MacMillan



Faculty of Humanities Major in Economics

Post Graduate -First Year Programme, Semester Second

Course Code: HECOF 571

Course Title: Field Project (FP) Curriculum Details (for 4 Credits)

Course Pre-requisites:

- 1. Basic understanding of field and institutional visits
- 2. Primary interest in fieldwork, field visits and survey

Learning Objectives:

- 1. To provide field/market/industry exposure to the students
- 2. To provide practical knowledge to the learner through field visits and survey

Learning Outcomes:

- 1. Learners will be equipped with real field work experience.
- 2. Learner will have field and industry exposure and work experience.

This course includes field based activities for 4 credits that include case studies related to economic issues of an individuals or institutions, making of village economic profile and reporting of industrial visits.