

(Abstract)

M A Economics Programme (CBCSS) w.e.f 2020 admission in the University Department-Interchanging of Elective Course- "MAECO02E03-Economics of Growth and Development" in II semester and "MAECO04E06-Mathematical Economics" in IV semester - Modified Scheme, Syllabus of the programme w.e.f 2021 admission-Implemented-Order issued.

ACADEMIC C SECTION

Acad/C1/10376/2019

Dated: 23.08.2022

- Read:-
- 1.U.O.No.Acad/C1/10376/2019 dated 15.01.2021
 2. Minutes of the meeting of Department Council, Dept. of Economics, Dr. Janaki Ammal Campus, held on 09/12/2021
 3. Letter from Head of the Department, Dept. of Economics dated 12.08.2022 and 17.08.2022

ORDER

1. As per paper read(1) above, revised Scheme, Syllabus and Model question papers of the M A Economics programme (CBCSS) was implemented w.e.f 2020 admission, in the Department of Economics, Dr.Janaki Ammal Campus,Thalassery.
2. The Department Council, Dept. of Economics, held on 09/12/2021 resolved as per paper read(2), to interchange Elective Course "Economics of Growth and Development" in II semester and Mathematical Economics" in IV semester, w.e.f 2021 admission onwards.
3. Accordingly, the Head, Department of Economics, submitted the modified scheme, syllabus of MA Economics programme (CBCSS), for implementation with effect from 2021 admission, as per paper read(3) above.
4. The Vice Chancellor, after considering the matter in detail, and in exercise of the powers of the Academic Council conferred under section 11(l) of KU Act 1996 accorded sanction to implement modified Scheme, Syllabus of the programme by interchanging the Elective Course 'MAECO02E03-Economics of Growth and Development' in the IV semester and 'MAECO04E06-Mathematical Economics' in the II semester, for M A Economic programme (CBCSS) at the Department of Economics, Dr.Janaki Ammal Campus, Palayad, Thalassery, w.e.f 2021 admission, as detailed below.
MAECO02E03 - Mathematical Economics - II semester
MAECO04E06 - Economics of Growth and Development - IV semester
5. Modified Scheme and Syllabus for M A Economics programme(CBCSS) w.e.f 2021 admission in the University Department, is appended and uploaded in the University website. (www.kannuruniversity.ac.in)
6. The U.O read(1) above, stands modified to this extent.
Orders are issued accordingly.

Sd/-
BALACHANDRAN V K
DEPUTY REGISTRAR(ACAD)
FOR REGISTRAR

To: 1.The Head,Department of Economics,Dr. Janaki Ammal Campus,Palayad, Thalassery

Copy To: 1.PS to VC/PA to PVC/PA to R
2.The Examination Branch(through PA to CE)
3.The Web Manager(for uploading in the website)
4.SF/DF/FC



Forwarded / By Order

SECTION OFFICER

PROGRAMME STRUCTURE
MA ECONOMICS (2021 ADMISSION)

The distribution of the courses for the I Semester

Course Code	Course Title	Core/ Elective	Credit	Instructional hours/week	Internal Marks	End Sem. Marks	total
MAECO01C01	Paper 1. MicroEconomic Theory	Core course	4	4	40	60	100
MAECO01C02	Paper 2. MacroEconomic Theory	Core course	4	4	40	60	100
MAECO01C03	Paper3. Development Issues of Indian Economy With special reference to Kerala	Core course	4	4	40	60	100
MAECO01C04	Paper4. Quantitative Techniques for Economic Analysis	Computing Hard Core	4	4	40	60	100
			16	16	160	240	400

The distribution of the courses for the II nd Semester

Course Code	Course Title	Core/Elective	Credit	Instructional hours /week	Internal Marks	End Sem. Marks	total
MAECO02C05	Paper 5. International Economics	Core course	4	4	40	60	100
MAECO02E01	Paper 6. Research Methodology	Elective course	4	4	40	60	100
MAECO02E02	Paper7.Public Economics	Elective course	4	4	40	60	100
MAECO02E03	Paper8. Mathematical Economics	Elective course	4	4	40	60	100
			16	16	160	240	400

The distribution of the courses for the IIIrd Semester

Course Code	Course Title	Core/ Elective	Credit	Instructional hours /week	Internal Marks	End Sem. Marks	total
MAECO03C06	Paper 9. Environmental Economics	Core course	4	4	40	60	100
MAECO03C07	Paper 10. Political Economy	Core course	4	4	40	60	100
MAECO03C08	Paper11.Econometrics	Computing Hard Core	4	4	40	60	100
MAECO03E04	Paper 12. Population Studies	Elective course	4	4	40	60	100
MAECO03E05	Paper 13. Agricultural Economics	Elective course	4	4	40	60	100
			20	20	200	300	500

The distribution of the courses for the IV th Semester

Course Code	Course Title	Core/ Elective	Credit	Instructional hours /week	Internal Marks	End Sem. Marks	total
MAECO04C09	Paper 14. Financial Institutions and markets	Core course	4	4	40	60	100
MAECO04E06	Paper 15 .Economics of growth and development	Elective course	4	4	40	60	100
MAECO04E07	Paper16. Operations Research for Economic Analysis	Elective course	4	4	40	60	100
MAECO04O01- - MAECO04O04 OR Any other	Paper 17. Multidisciplinary/ Interdisciplinary soft core Courses/Mooc Course	Open Elective	4				100
MAECO04P01	Paper 18. Project	core	6	6		100	100
MAECO04V01	Viva	core	2			100	100
			24	18	120	380	600

Total credits of four semesters = 76 Total Marks = 1900

Head of the Department
Department of Economics
Kannur University, Thalassery Campus
P. O. Palayad-670661

MATHEMATICAL ECONOMICS

ELECTIVE COURSE

COURSE CODE – MAECO02E03

Course Objectives

This course helps to develop a mathematical base to economic students in applying various theories and issues of economics in the practical field. This course gives a consolidated knowledge of various mathematical formulations of theories related to micro, macro and behavioral economics. Course

Outcomes

1. This course enables the students to develop the analytical and mathematical skills related to various economic relationships.
2. Students gain knowledge to integrate economic theories with mathematical techniques
3. Students will get rigorous training in mathematical computations essential for studying and analyzing current economic issues.

Module – 1 (Review of concepts)

the concepts of set- mathematical relations and functions- higher order function of a single variable function of more than two independent variables- Use of graphs and diagrams- Differential Calculus limits-derivatives- basic rules- partial and total derivatives – Integral Calculus- integration by parts and integration by substitution- definite integral and indefinite integral.

Essential Reading

Allen R.G.D. 1956. Mathematical Economics. Macmillan Co. Ltd.

Allen R.G.D. 1967. Macroeconomic Theory. Macmillan Co. Ltd.

Birchenhall.C. and Grout.P. 1984. Mathematics for Modern Economics.

Philip Alien. Oxford: Harness and Noble Books.

J.M. Henderson and R.E. Quandt. 1980. Microeconomic Theory a Mathematical Approach. Me. Graw Hill International Ltd.

Supplementary Reading

Edward T. Dowling, 2011. Introduction to Mathematical Economics. Schaum's Outline.

Adam Ostaszewski and Kenneth Binmore, 1993. Mathematics in Economics: Models and Methods .

Module – II (Theory of Demand)

Maximization of utility - demand functions - Elasticity - Properties of demand functions - Slutsky equation - Direct and cross effects - Separable and additive utility functions - Homogeneous and homothetic utility functions - Indirect utility function - Duality in consumption - Roy's identity Linear expenditure systems - Constant elasticity models – The problem of choice involving risk – Expected utility - Risk and insurance

Essential Reading

Krishna K.L. (ed.). 1997. *Econometric Applications in India*. New Delhi: Oxford University Press. Amitabh Kundu, et. Al. 1976. *Input Output framework and Economic Analysis*. New Delhi: Centre for the study of Regional Development.
David. F. Heathfield and Soren Wibe. 1987. *Introduction to Cost and Production Function*. Macmillan Education Ltd.

Supplementary Reading

Michael Hoy. 2011. *Student's Solution Manual for Mathematics for Economics*.
Akira Takayama. 1993. *Analytical Methods in Economics*. Michael D. Intriligator. 1971. *Mathematical Optimization and Economic Theory*.

Module –III (Theory of Production)

Production function Cob-Douglas production function - CES production function - VES production function – Cost function: Derivation of cost as a function of output- Empirical cost function -.Input demand function

Essential Reading

Yamane, Taro (1975), *Mathematics for Economists*, PHI, New Delhi.
Allen, R.G.D.(1974), *Mathematical Analysis for Economists*, Macmillan Press, New Delhi. 3
Gupta, S.C.(1993) Amitabh Kundu, et. Al. 1976. *Input Output framework and Economic Analysis*. New Delhi: Centre for the study of Regional Development.
David. F. Heathfield and Soren Wibe. 1987. *Introduction to Cost and Production Function*. Macmillan Education Ltd.

Supplementary Reading

Chiang, A.C.(1986), *Fundamental Methods of Mathematical Economics*, McGraw Hill, New York.
Handry, A.T.(1999), *Operations Research*, PHI, New Delhi.
Layard, P.R.G. and Walters, A.W.(1978), *Microeconomic Theory*, McGrawHill, London.
Stigler, G.(1996), *Theory of Price*, PHI, New Delhi.
Varian, H.R. (2000), *Microeconomic Analysis*, W.W. Norton, New York.

Module - IV (Mathematical models related to Market and Behavioral Economics)

Perfect Competition- Monopoly and profit maximisation - Price discrimination - Taxation and monopoly – Multiple plant and multiple product monopoly - Revenue maximization monopoly - monopoly in the input market – Oligopoly-duopoly market- Cournot- Nash model – Stackelberg model - Sweezy model -Theory of games: Two person zero-sum game - Pure and mixed strategy – Saddle point theorem- Behavioral economics-concepts - Bounded rationality decision making model – models of prospect and nudge theory

Essential Reading

J.M. Henderson and R.E.Quandt.1980.Microeconomic Theory a Mathematical Approach.Me. Graw Hill International Ltd.
Sydsaeter, Knut and Peter Hammond.2002.Essential Mathematics for Economic Analysis.England : Prentice Hall: Harlow.
Eugene Silberberg.1990. The Structure of Economics a Mathematical Analysis (Second Edition). Mc Graw Hill International (ed).
Cunningham, Lawrence A. 2002. Behavioral Finance and Investor Governance. Washington & Lee Law Review.
Diamond, Peter; Vartiainen, Hannu (2012). Behavioral Economics and Its Applications.Princeton University Press.
Hens, Thorsten; Bachmann, Kremena (2008). Behavioural Finance for Private Banking.Wiley Finance Series.

Supplementary Reading

Alpha C . Chiang- Kevin Wainwright. 2005. Fundamental Methods of Mathematical Economics. Lawrence E. Blume, Carl P. Simon .1994.Mathematics for Economists.
Shleifer, Andrei (1999). Inefficient Markets: An Introduction to Behavioral Finance. New York: Oxford University Press.
Thaler, Richard H (2016). "Behavioral Economics: Past, Present, and Future". American Economic Review.
Thaler, Richard H.; Mullainathan, Sendhil (2008). "Behavioral Economics". In David R. Henderson (ed.). Concise Encyclopedia of Economics (2nd ed.).
Hogarth, R. M.; Reder, M. W. (1987). Rational Choice: The Contrast between Economics and Psychology. Chicago: University of Chicago Press.
Kahneman, Daniel; Tversky, Amos (1979). "Prospect Theory: An Analysis of Decision under Risk". Econometrica.

ECONOMICS OF GROWTH AND DEVELOPMENT
ELECTIVE COURSE
COURSE CODE – MAECO04E06

Objectives

The course covers concept, measurement and indicators of economic growth and development, important theories on economic growth and development, role of agriculture, industry and technology in economic development, international aspects of economic development, planning experiences of India and Kerala and financial inclusion and economic development.

Outcome

The course helps the students to identify the development issues and also the basic requirements for economic development of underdeveloped and developing countries.

MODULE-1 GROWTH, DEVELOPMENT AND THEORIES

Growth and Development -An overview-The Historical Records; Kuznet's characteristics- Concept and measurement of economic growth and development-Indicators of Development- – National Income- Percapita Income-Diamensions of Development gap-PQLI –HDI –HPI-Gender Related Development Index(GDI) – Gender Empowerment Measure(GEM) –Multi Dimensional Poverty Index –Inequality and development-Kuznet's hypothesis-Lorenz Curve-Gini-Co-efficient- Sen's Entitlement and Capabilities Approach-Development as freedom-Basic need approach Problems of Development

Essential Reading

J.R. Hicks. 1965.Capital and Growth. New Delhi: OUP.
Gunnar Myrdal.1968. Asian Drama: An Inquiry In to the Poverty of Nations. II Vol. New York: Pantheon.
World Bank Development Reports for various years.
UNDP.Human Development Reports for various years.
Debraj Ray. 2001. Economics of Development. New Delhi: Oxford University Press.
AmartyaSen. 1999. Development as Freedom. New Delhi: Oxford University Press.
Agalwal and S.P. Singh (Ed). 1985. The Economics of Underdevelopment. Delhi: OUP, Delhi.
J.N. Bhagwati (Ed). 1985. Dependence and Interdependence- Essays in Development Economics. Vol-1&2,. Bombay: OUP.
Michel P Todaro. 1973. Economics for Developing World. London:Longman.
Dreze Jean and Sen Amartya. 1993.Hunger and public Action. Delhi: OUP.

Supplementary Reading

Vandana Desai and Robert B Potter. 2008. The Companion to development studies-II edn. A hodder viva edn,. New Delhi: Viva books Pvt Ltd
H L Ahuja. 2016. Development Economics. Edited by S.Chand.

MODULE-II THEORIES OF GROWTH AND DEVELOPMENT

Classical Theories-Cambridge Growth models- Neo- Classical Growth models- Endogeneous Growth models- Development paradigms- Modernist-Paradigms- Partial theories of growth and development
The stages of growth: Rostow – Surplus Labour :Lewis-Big Push :Rosenstein Rodan- Balanced Growth: Nurkse – Unbalanced Growth: Hirschman – Critical Minimum Effort Thesis:Leibenstein
Low Level Equilibrium Trap: Nelson- Dual Economy Model: Fei and Ranis Model–Circular and Cumulative Causation : Myrdal- Todaro model.

Essential Reading

Gerald M Meier and James E Rench (Ed).2005 Leading Issues in Economic Development.8th Edition.

A.P.Thirwall. 2003.Growth and Development with Special Reference to Development Economics.

Palgrave. Michael P. Todaro, and Stephen C. Smith. 2004. Economic Development, 8th Edition.

Hentry Wan (JR).1971. Economic Growth.penguin books.

Bakul H Dholakya and Raveendra H Dholakya. 1998. Theory of Economic Growth and Technical Progress- An Introduction.Delhi: MacMillian.

Hywd G Jones. 1976. An Introduction to Modern Theory of Economic Growth. McGraw Hill.

Supplementary Reading

Yujiro Hayami and Yoshihisa Godo. 2005. Development Economics (3rd Edn). New Delhi: Oxford University Press.

Todaro and S.C. Smith. 2005. Economic development. 8th Edition.Person Education. Delhi: Indian branch.

MODULE-III AGRICULTURE, INDUSTRY, CAPITAL AND TECHNOLOGY IN DEVELOPMENT

Role of Industrialization in Development –factors inhibiting –policies for Industrialisation, agriculture and Economic Development – Agricultural policy in Developing countries – complementary role of industry and agriculture in Development- Globalisation and agriculture- Capital and Developmentstages of capital formation- sources-Importance of ICOR--Role of technology in development– Choice of techniques – Significance of capital saving and labour saving techniques- role of Intermediate technology- Issues related to transfer of technology.

Essential Reading

Debraj Ray. 2001. Economics of Development. New Delhi: Oxford University Press.

Gerald M Meier and James E Rench (Ed).2005 Leading Issues in Economic Development.8th Edition.

A.P.Thirwall. 2003.Growth and Development with Special Reference to Development Economics. Palgrave.

Michael P. Todaro, and Stephen C. Smith. 2004. Economic Development. 8th Edition.
Henry Wan (JR).1971. Economic Growth.penguin books
Bakul H Dholakya and Raveendra H Dholakya. 1998. Theory of Economic Growth And Technical Progress- An Introduction. Delhi: MacMillan.
Hywd G Jones. 1976. An Introduction to Modern Theory of Economic Growth. McGraw Hill.
Agalwal and S.P. Singh (Ed). 1985. The Economics of Underdevelopment. Delhi: OUP.
Michel P Todaro. 1923. Economics for Developing World. London: Longman.
D.Nayyar (Ed). 1994. Industrial Growth and stagnation: The debate in India. Oxford University Press
J.Bhagawati and Padma Desai.1970.Planning for Industrialisation.Oxford University Press.

Supplementary Reading

Yujiro Hayami and Yoshihisa Godo. 2005. Development Economics (3rd Edn). New Delhi: Oxford University Press. M.P.D
Todaro and S.C.Smith . 2005. Economic development. 8th Edition.Person Education. Delhi: Indian branch.
Vandana Desai and Robert B Potter. 2008. The Companion to development studies-II edn. A hodder viva edn., New Delhi: Viva books Pvt Ltd H L
Ahuja. 2016. Development Economics. Edited by S.Chand.

MODULE-IV INTERNATIONAL ASPECTS OF DEVELOPMENT AND PLANNING

Role of foreign trade, foreign capital and foreign aid in the Development process- Private foreign Investment –MNCs and Development issues- Public foreign Investment – foreign aid and Development –Tied aid and Untied aid - International Agencies and development- IMF-IBRD IFC ADB and UNDP-Rationale for planning –Types, Tools and techniques in planning-Indian Planning Experiences- NITI Aayog- Micro level planning- Decentralized planning experience in Kerala – Development Plans at the local level in Kerala- Role of micro credit –SHGs- Contributions of Grameen Banks: Examples of Bangladesh and Kerala —Kudumba Sree in the development process

Essential Reading

Debraj Ray. 2001. Economics of Development. New Delhi: Oxford University Press.
Gerald M Meier and James E Rench (Ed).2005 Leading Issues in Economic Development.8th Edition.
A.P.Thirwall. 2003.Growth and Development with Special Reference to Development Economics.Palgrave.
Michael P. Todaro, and Stephen C. Smith. 2004. Economic Development. 8th Edition.
Hywd G Jones. 1976. An Introduction to Modern Theory of Economic Growth. McGraw Hill.
Agalwal and S.P. Singh (Ed). 1985. The Economics of Underdevelopment. Delhi: OUP, Delhi.
J.N. Bhagwati (Ed). 1985. Dependence and Interdependence- Essays in Development Economics. Vol-1&2., Bombay: OUP.
Michel P Todaro. 1923. Economics for Developing World. London:Longman.
Sukhomoy Chakraborty. 1998. Development Planning –Indian Experience. Delhi: OUP.

Sukhmoy.Chakrawarti.1998. Development Planning: The Indian Experience. India: OUP.

Supplementary Reading

Yujiro Hayami and Yoshihisa Godo. 2005. Development Economics (3rd Edn). New Delhi: Oxford University Press.

M.P.D Todaro and S.C.Smith . 2005. Economic development. 8th Edition. Person Education. Delhi: Indian branch.

Vandana Desai and Robert B Potter. 2008. The Companion to development studies-II edn. A hodder viva edn,. New Delhi: Viva books Pvt Ltd

H L Ahuja. 2016. Development Economics. Edited by S.Chand.