SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.25)
Syllabus with effect from the Academic Year 2021-2022

MASTERS OF ARTS (ECONOMICS)
MA (Economics) Semester – I

Course Code	PA01CECO53	Title of the Course	Quantitative Economics - I
Total Credits of the Course	5	Hours per Week	5

Course Objectives	• Familiarise the students with the forms of function and equation. • To explain the economic models using basic mathematics. • To make the students understand the usage of matrices and measures of central tendency and dispersion in economic analysis.

Course outline

Unit	Unit Description	Weightage*
1.	Concept and their application in Economic Analysis of; (a.) Economic Model (b) Diagram (c) Equation- its types (d) Function – its types and (f.) Inequality –Linear programming and it's Graphical solution.	25%
2.	Elements of Matrix, Algebra and their application in Economic Analysis; Cramer's Rule; Inverse Matrix; Leontief Input- Output Analysis.	25%
3.	Set Theory: Types of Sets, Venn Diagrams; Elements of Probability– Laws of Probability, Random Variable, Mathematical Expectations – Property of Binomial and Normal Distribution.	25%
4.	Method of Data Collection and Presentation of Data; Frequency Distribution; Measures of Central Tendency- Measures of Dispersion and their Application in Economics Analysis. Lorenz Curve.	25%

Teaching-Learning Environment	The course would be taught/learnt through various means like lectures, discussions, writing assignments, viva-voce, seminars presentations, browsing online-resources relevant to the content, participating in co-curricular, extra-curricular activities.

Evaluation Pattern

Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance, Participation in co-curricular and extra-curricular activities	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, student should be able to :

M. A. Economics Semester - 1

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat
(Reaccredited with 'A' Grade by NAAC (CGPA 3.25)
Syllabus with effect from the Academic Year 2021-2022

1.	Discriminate the various forms of function and equation.
2.	Express the economic models using basic mathematics.
3.	Use matrices and measures of central tendency and dispersion in economic analysis.

Suggested References:	
Sr. No.	Reference Books / Research papers / Reports / Any reference material used for teaching / learning the content in the course outline
1.	Ching A C; Fundamental Methods of Mathematical Economics, Mcgraw Hills, New York.
2.	Gupta S C; Fundamental of Applied Statistics. S. Chand & Sons, New Delhi.
3.	Grewal P S; Numerical Methods of Statistical Analysis, S P Pvt. Ltd., New Delhi.
4.	Bose D.; An Introduction to Mathematical Economics, H P H. Bombay, Delhi.
5.	Gupta C.B.; An Introduction to Statistical Methods, Delhi.
6.	Dave M.B & Dr. Pandya K, Quantitative Methods of Economics, Popular, Surat (Gujarati)
7.	Patel R.K. & Patel L.B.; Business Statistic, C. Jamanadas Co. Ahmedabad.
8.	Patel Balubhai; Dhandhakiya Ankadashastra, University Granthnirman Board, Ahmedabad.
9.	Zala M.L.; Arthshastrama Ganitshastra, Purbiti Prakashan, Vallabh Vidyanagar.
10.	Dr. Jaiswal M.C.; Arthvishayak Ankadashastra, University Granthnirman Board, Ahmedabad.

M. A. Economics Semester - 1