



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

Course Code	PA02CECO53	Title of the Course	Quantitative Economics - II
Total Credits of the Course	5	Hours per Week	5

Course Objectives	<ul style="list-style-type: none">• To make students able to use differentiation in economic analysis.• To explain the relationship between various types of variables.• To aware the students about various indexation methods and construction of the various types of indices.
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Course outline		
Unit	Unit Description	Weightage*
1.	Elements of Differential Calculus and their utility in Economic Analysis. Such as establishment of relationship between AR & MR; AC & MC; AR, MR & Elasticity; Optimisation conditions; Estimation of Elasticity & Marginal Value etc. Meaning of Differential Derivative, Rules of Differentiation, Second order Derivative, Partial Derivative, Total Derivative, Total Differential and their utility in Economic Theory.	25%
2.	Simple Correlation: types of Correlation, Scatter Diagrams, Coefficient of Correlation – Product Moment Method and Rank Correlation Method, Probable Error and Explanation of Co-Efficient of Correlation, And Its Application in Economics.	25%
3.	Regression and its Application in Economic Analysis. Relationship between Attributes	25%
4.	Index Numbers, Importance, Utilisation of Index Numbers in Economic Analysis, Problems in Construction of Index Numbers, Methods of Construction of various type Of Index Numbers.	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.
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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 :

1.	Use differentiation in economic analysis.
2.	Correlate the various events occurring in the economy.
3.	Differentiate and construct the various type of indices.

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.	Jaiswal M.C.; Arthvishayak Ankadashastra, University Granthnirman Board, Ahmedabad.