

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: M.A (Economics)**  
**Semester: IV**  
**Syllabus with Effect from: June - 2014**

<b>Paper Code: PA04CECO03</b>	<b>Total Credit: 4</b>
<b>Title Of Paper: Quantitative Economics</b>	

Unit	Description in detail	Weightage (%)
I	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.	30
II	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
III	Regression and its Application in Economic Analysis. Relationship between Attributes	25
IV	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.	20

**Basic Text & Reference Books:-**

- Ching A C; Fundamental Methods of Mathematical Economics Mcgraw Hills, New York.
- Gupta S C; Fundamentals of Applied Statistics. S.Chand & Sons. New Delhi.
- Grewal P S; Numerical Methods of Statistical Analysis. S P Pvt Ltd., New Delhi.
- Bose D.; An Introduction to Mathematical Economics. H P H. Bombay, Delhi
- Gupta C.B.; An Introduction to Statistical Methods, Delhi.
- Dave M.B & Dr. Pandya K, Quantitative Methods of Economics, Popular, Surat
- Patel R.K. & Patel L.B.; Business Statistic, C. Jamanadas Co. Ahmedabad.
- Patel Balubhai; Dhandhakiya Ankadashastra, Uni. Granthnirman Board, Ahmedabad.
- Zala M.L.; Arthshastrama Ganitshastra, Purbiti Prakashan, Vallabh Vidyanagar.
- Dr. Jaiswal M.C.; Arthvishayak Ankadashastra, Uni. Granthnirman Board, Ahmedabad.

