SARDAR PATEL UNIVERSITY
Programme: BBA (GENERAL)
Semester: II
Syllabus with Effect From: November/December-2011

Paper Code: UM02CBBA06	Total Credit:3
Title Of Paper: Business Mathematics-II	

Unit	Description in detail	Weighting (%)
I	**Permutations and Combinations** Meaning, Fundamental principle of counting, Theorem based (without proof) on permutation and combination, Permutations of things not all different, Permutations when repetition is allowed, Circular permutations, Examples of permutation and combination.	25 %
II	**Derivatives and Applications of derivatives** Derivatives of explicit, composite and implicit functions, Derivatives of exponential and arithmetic functions, Rules of differentiation(without proof), higher order derivatives, maxima and minima of a function in economic theory(demand, supply, consumption, revenue and cost function), Equilibrium price.	25 %
III	**Mathematics in finance** Compound interest, nominal and effective rates of interest, continuous compounding,Concept of present value and amount of a sum, Annuity (only for a fixed period of time), present value of annuity, sinking funds (with equal payments and equal time intervals)	25 %
IV	**Linear Programming** **LPP:** Meaning, nature, limitations of LP, Uses of LP, Definitions-solution, constraints, BFS, FS, Objective functions Solution of LPP by Graphical Method **Transportation Problem**- N-W corner rule, Matrix Minima Method, Vo Method including unbalanced problem **Assignment Problems**-simple Assignment problems in production function of management	25 %

Basic Text & Reference Books:
- Business Mathematics, V.K. Kapoor: Sultan Chand and sons, New Delhi.
- Business Mathematics, Allen R.G.D Macmillan India
- Business Mathematics, Allen R.G.D Pitamber Publication house
- Quantitative Techniques in Management, Vohra N.D. Tata McGrowHill, New Delhi.
- Mathematics for Management and computer Applications, Sharma J.K. Galgotia Pvt Ltd, New Delhi