SARDAR PATEL UNIVERSITY

M.COM(Integrated) (BUSINESS STUDIES) SEMESTER-II		
Paper Code	**Title of the Paper**	**Total Credit**
IB02CCOM53	**Business Mathematics & Statistics - II**	**4**
Course Objectives	To enhance analytical ability in students for processing data To Familiarize students with applications of Statistical techniques in business decision making.	

Course Description		
Unit	**Description**	**Weightage**
1	**Permutations and Combinations** Meaning, Fundamental Principles of Counting, Theorem based (without proof) on permutation and combination, Permutations when repetition is allowed, Circular permutations, Examples of Permutation and combination.	**25%**
2	**Co-ordinate Geometry** Cartesian Co-ordinate System, Distance between two points, slope of line, slopes of Parallel and perpendicular lines, Equations of a line for: - Two Pint Form – Point Sloe form – Intercept form – Two Intercept Form	**25%**
3	**Linear Programing Problem** LPP: Meaning, nature, limitations of LP, uses of LP, Definitions: solution, constrains, BFS, FS, objective functions solution of LPP by Graphical Method -Transportation Problem – N-W corner rule, Matrix Minima Method, Vogel's Approximation Method (Including unbalanced problem)	**25%**
4	**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%**

*Units will have the same Weightage in the evaluation as suggested in the course outline.

Teaching-Learning Methodology	• Lecture Method • Online Lectures • Group Discussion • Practical Problem Solving

Evaluation Pattern		
Sr.No.	**Details of the Evaluation**	**Weightage**
1.	Internal/Written Examination	**15%**
2.	Internal Continuous Assessment in the form of Practical , Viva-Voce, Quizzes, Seminars, Assignments, Attendance	**15%**
3.	University Examination	**70%**

* Students will have to score a minimum of 40 (Forty) Percent to pass the course.

Course Outcomes: Having Completed this course, the students will be able to	
1.	To have a proper understanding of mathematical applications in Economics, Finance, Commerce and Management Integrate international business concepts with functioning of global trade.
2.	Lead to the students to analyze any real life system with limited constrains and depict it in model form.
3.	Convert the problem into a mathematical model and solve it manually.

Suggested References:	
Sr. No	**References**
1.	Sancheti&Kapoor: Statistics: Theory, Methods and Applications, Sultan Chand & sons, New Delhi
2.	Kapoor, V.K.:Business Mathematics, sultan Chand and Sons, New Delhi
3.	Soni, R.S.: Business Mathematics, Pitamber Publishing Ho
https://ugcmoocs.inflibnet.ac.in/view_module_ug.php/311	
Subject : DISCRETE MATHEMATICS Module-13	