

**SARDAR PATEL UNIVERSITY**  
**Programme: BBA (GENERAL)**  
**Semester: II**  
**Syllabus with Effect from: Nov./Dec., 2019**

<b>Paper Code: UM01DBBA52</b>	<b>Total Credit:3</b>
<b>Title of paper: BUSINESS MATHEMATICS – II</b>	

UNIT	DESCRIPTION	WEIGHTAGE
1	<b>Permutations and Combinations</b> 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%
2	<b>Co-ordinate Geometry</b> Cartesian Co-Ordinate System, Distance between two points, Slope of line, Area of triangle, slopes of Parallel and perpendicular lines, Equations of a line for : -Two Point Form -Point slope form -Intercept form -Two intercept form	25%
3	<b>Linear Programming Problem</b> -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, Vogel's Approximation Method (including unbalanced problem)	25%
4	<b>Derivatives and Applications of derivatives</b> 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)	25%

**Reference Books:**

- (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 House.
- (4) Vohra N.D.: Quantitative Techniques in Management, Tata McGraw Hill, New Delhi.