SARDAR PATEL UNIVERSITY
Programme & Subject: B.Com (Honours)
(3 Years)
Semester: II
Syllabus with effect from: December - 2015

Paper Code: UB02CCOH05	Total Credit: 3
Title Of Paper: Business Mathematics - II	

Unit	Description in Detail	Weightage (%)
I	**Differentiation and Applications** Definition of derivative, working rules of derivative (without proof), Derivatives of explicit, composite and implicit functions (without involving trigonometric functions), Second derivative, Maxima and Minima of a function	25%
II	**Permutations and Combinations** Meaning, Fundamental principle of counting, Theorem based on permutation and combination (without proof), Permutations of things not all different, Permutations when repetition is allowed, Circular permutations, Examples of permutation and combination	25%
III	**Co-ordinate Geometry** Distance between two points in R2, Slope of a line, Slopes of parallel and perpendicular lines, Area of a Triangle, area of a quadrilateral, Slope of a line, standard equations of a line, General form $\dfrac{y - y_1}{y_1 - y_2} = \dfrac{x - x_1}{x_1 - x_2}$, $y = mx + c$, $y - y_1 = m(x - x_1)$ $\dfrac{x}{a} + \dfrac{y}{b} = 1$	25%
IV	**Linear Programming Problems** Introduction, meaning, nature and scope of Operation Research, Linear programming problem, Applications of LPP, Methods of solving LPP, Graphical method (without involving unbounded solution) Assignment problems-nature, meaning, Hungarian method of solving assignment problems.	25%

Basic Text & Reference Books:-

- Allen R.G.D.: Basic Mathematics, Macmillan, New Delhi.
- Kapoor, V.K.: Business Mathematics, Sultan Chand and sons, New Delhi.
- Loomba, Paul: Linear Programing, Tata Mc Graw Hill, New York.
- Sharma J.K.: Mathematics for Management and computer application, Galgotia Publications Pvt. Ltd, New Delhi.
- Soni, R.S.: Business Mathematics, Pitamber publishing House.
- Vohra N.D.: Quantitative Techniques in Management, Tata McGraw Hill, New Delhi.