Bachelor of Business Administration-Information System Management
BBA-(ISM) SEMESTER- I

Course Code	UM01IDBBS01	Title of the Course	Business Mathematics – I
Total Credits of the Course	04	Hours per Week	04

Course Objectives:	1 To develop and enhance analytical ability in students for processing and interpreting statistical data. 2 To familiarize students with applications of Mathematical and Statistical methods in business management decision making problems

Course Content

Unit	Description	Weightage* (%)
1.	**Function , Limit** Concept of a function of single variable (linear, quadratic and exponential function only),Types of a function,Domain, co-domain and range of a function, concept of limit of a function, Rules of limit, Simple exampleswhere f (x) is in a polynomial or rational function of two polynomials.	25%
2.	**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.	25%
3.	**Set Theory & Determinants** Set Theory: Sets, Subsets, equality of two sets, null set, universal set, power set Complement of a set, union and intersection of sets, differenceof two sets. Venn diagram (Concept only), Laws of algebra of sets De' Morgan laws and Cartesian product of two sets. Determinants : Meaning, Determinants and their basicproperties of determinant(Without Proof, without examples), Cramer's Method(For two variables)	25%

4.	**Matrix** Types of matrices: Square, null, identity, transpose of Matrices, Symmetric, skew symmetric, Singular, non-singular, inverse, Adjoint of amatrix. Matrices- scalar multiplication, Addition, Subtraction,Multiplication. Solution of a system of two and three linear equations usingmatrix.	25%

Teaching-Learning Methodology	Lectures, Assignments, Quiz and Seminars

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	To analyze and interpret mathematical and statistical methods and develop and enhance analytical ability for processing and interpreting statistical data.
2.	Understand applications of Mathematical and Statistical methods in business management decision making problems

Suggested References	
Sr. No.	References

1.	(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.

Online resources: https://youtu.be/Dstf6uzWcY4?list=PLFClNVOTycUW5YpwtaTnV2x

https://youtu.be/DY3AEUdznwc?list=PLFClNVOTycUW5YpwtaTnV2x

https://youtu.be/VM3_86Algkw?list=PLFClNVOTycUW5YpwtaTnV2x-NJCZVnulG

https://youtu.be/owsh077YeVA?list=PLFClNVOTycUW5YpwtaTnV2x-NJCZVnulG

https://youtu.be/vTM-EE9EyV8?list=PLFClNVOTycUW5YpwtaTnV2x-NJCZVnulG

https://youtu.be/jpRMMBFzPjY?list=PLFClNVOTycUW5YpwtaTnV2x-NJCZVnulG

https://youtu.be/-AgOoFeccRU?list=PLFClNVOTycUW5YpwtaTnV2x-NJCZVnulG

https://www.youtube.com/watch?v=duZ4MVh5VX0&list=PLFClNVOTycUXOnNYGc

https://youtu.be/duZ4MVh5VX0?list=PLFClNVOTycUXOnNYGc70DheoGDqnU8ufA

https://youtu.be/0Fddg6iyZFM?list=PLFClNVOTycUXOnNYGc70DheoGDqnU8ufA

https://youtu.be/0Fddg6iyZFM?list=PLFClNVOTycUXOnNYGc70DheoGDqnU8ufA

https://youtu.be/0h8Cf3TAvIc?list=PLFClNVOTycUXOnNYGc70DheoGDqnU8ufA

https://youtu.be/0h8Cf3TAvIc?list=PLFClNVOTycUXOnNYGc70DheoGDqnU8ufA

https://youtu.be/t4zGxq_Uv5E?list=PLFClNVOTycUXOnNYGc70DheoGDqnU8ufA

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