

Course Outcomes
Class: FYBSc
Semester-I

Subject: USC1MT1: CALCULUS-I

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>define</u> Bounded set, Supremum and Infimum of a set
2	<u>determine</u> the convergence of sequences of real numbers
3	<u>examine</u> the properties of sequences of real numbers
4	<u>classify</u> the first order differential equation

Subject: USC1MT2: ALGEBRA-I

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>explain</u> the basic concepts of set theory.
2	<u>examine</u> the properties of functions and relations.
3	<u>apply</u> well-ordering properties, Induction theorems and Binomial theorem.
4	<u>analyse</u> properties of the divisibility.

Subject: USC1MTP: Mathematics Practical-I

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>explain</u> the properties of real number
2	<u>solve</u> the first order first degree differential equation
3	<u>examine</u> the properties of sets, functions and relations.
4	<u>solve</u> the problems by using Induction theorems, well ordering principle, binomial theorems and congruence relations

Subject: UVSC1NA1 : Numerical Analysis – I

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>solve</u> algebraic, transcendental and simultaneous systems of equations using numerical methods.
2	<u>find</u> numerical solutions of interpolating methods

Subject: UIKS1VM1 : Introduction to Vedic Mathematics

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>solve</u> basic maths speedily.
2	<u>explain</u> the contributions of Indian Mathematicians.
3	<u>understand</u> the concept of mathematical operations using various sutras.
4	<u>find</u> squares and cubes using Vedic sutras.

Subject:USEC1DA1: Data Analytics-I

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>describe</u> various data and its types
2	<u>describe</u> the measures of central tendency and dispersion
3	<u>classify</u> discrete and continuous probability distribution to various problems

Semester-II

Subject: USC2MT1: CALCULUS-II

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>evaluate</u> limit of a function
2	<u>examine</u> Continuity of a function
3	<u>identify</u> the differentiable function
4	<u>find</u> successive differentiation

Subject: USC2MT2: Discrete Mathematics

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>analyze</u> the properties of functions, relations and recurrence relations.
2	<u>solve</u> the recurrence relations.
3	<u>make use of</u> the preliminary counting to solve the problems.
4	<u>apply</u> the advanced counting methods to solve the problems.

Subject: USC2MTP: Mathematics Practical-II

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>evaluate</u> limit and continuity of a function
2	<u>apply</u> second derivative test to find local extrema
3	<u>make</u> use of the preliminary counting to solve the problems.
4	<u>apply</u> the advanced counting methods to solve the problems.

Subject: UVSC2NA1 : Numerical Analysis – II

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>solve</u> differential equations by using numerical methods.
2	<u>solve</u> integration by using numerical methods.
3	<u>apply</u> triangularization method, LU decomposition, cholesky method, power and inverse power method.

Subject: USC2DE1M: DIFFERENTIAL EQUATIONS

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>understand</u> basic concepts of Differential Equations
2	<u>classify</u> the first order differential equation.
3	<u>solve</u> second order linear differential equations by using variation of parameter.

Subject:USEC2DA2: Data Analytics-II

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>apply</u> sampling techniques
2	<u>estimate</u> the parameters
3	<u>apply</u> testing of hypothesis tools

Class: F.Y.B.Sc. I.T. / F.Y.B.Sc.C.S.
Semester I

Subject: UVSC1IST: Introduction to Statistics

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>recall</u> measure of central tendency.
2	<u>describe</u> the measures of dispersion
3	<u>classify</u> discrete and continuous probability distribution
4	<u>solve</u> various problems with help of probability

Semester II

Subject: UVSC2LAT: Linear Algebra

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>define</u> vector spaces and subspaces
2	<u>relate</u> matrices and linear transformation
3	<u>find</u> kernel and image of linear transformation
4	<u>explain</u> matrix representation

Class: SYBSc
Semester III

Subject: USC3MT1: Calculus-III

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>evaluate</u> limit of a functions of several variables
2	<u>examine</u> continuity of a functions of several variables
3	<u>identify</u> the differentiable functions
4	<u>apply</u> multivariable calculus in optimization problems

Subject: USC3MT1: Linear Algebra-I

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>define</u> vector spaces and subspaces
2	<u>relate</u> Matrices and linear transformations
3	<u>find</u> basis and dimension of a vector space over R
4	<u>evaluate</u> the determinant

Subject: USC3MT3: Discrete Mathematics

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>define</u> the basic concepts of graph theory
2	<u>examine</u> the properties and applications of graph
3	<u>analyze</u> the properties of permutation functions, Pascal's Identity, Circular Permutation and Stirling numbers.

4	<u>apply</u> Pigeonhole Principle, Binomial Theorem, Inclusion and Exclusion Principle.
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Subject: USC3MTP: Mathematics Practical

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>evaluate</u> limit, continuity and differentiability of functions of several variables.
2	<u>explain</u> properties of vector space, linear transformation and determinant
3	<u>classify</u> the different types of graphs and trees according to their properties.
4	<u>solve</u> the problems by using algorithms.

Course Outcomes
Class: SYBSc
Semester IV

Subject: USC4MT1: Calculus-IV

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>identify</u> Riemann integrability of functions
2	<u>apply</u> fundamental theorem to definite integrals
3	<u>define</u> Beta and Gamma functions
4	<u>examine</u> convergence of Improper Integrals

Subject: USC4MT2: Linear Algebra-II

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>explain</u> properties of inner product space
2	<u>determine</u> orthogonality in inner product space
3	<u>find</u> eigenvalues and eigenvectors
4	<u>identify</u> diagonalizable matrix

Subject: USC4MT3: Ordinary Differential Equation

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>recall</u> the methods to solve the first order differential equations.
2	<u>solve</u> second order linear differential equations by using variation of parameter, reduction method and method of undetermined coefficients
3	<u>apply</u> the power series method to find the solution of second order differential equations.

4	<u>solve</u> second order differential equations by using Laplace Transform
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Subject: USC4MTP: Mathematics Practical

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>determine</u> properties of Riemann integration , indefinite and improper integrals
2	<u>explain</u> properties of inner product space, eigenvalues , eigenvectors and diagonalizable
3	apply power series method and different techniques to find the solution of second order differential equations.
4	solve the differential equations by using Laplace Transform

Class: FYBCOM
Semester-I

Subject: UCM1MST: Business Mathematics

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>find</u> the derivatives of the functions
2	<u>determine</u> the interest and annuity
3	<u>solve</u> the problems by using matrices.
4	<u>find</u> the determinant, inverse of the matrices

Semester-II

Subject: UCM2MST: Business Statistics

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>explain</u> the data by using graphs
2	<u>apply</u> Summarization Measures to solve the examples.
3	<u>predict</u> the future values by using time series methods and will able to find index numbers.
4	<u>determine</u> the probability

Class: FYBCOM/FYBA
Semester-I

OPEN ELECTIVE: UOE1MSC1: Mathematics and statistics for competitive exams- I

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>develop</u> quantitative skills
2	<u>interpret</u> logical reasoning

Semester-II

OPEN ELECTIVE: UOE2MSC2: Mathematics and statistics for competitive exams- II

Sr. No.	Course Outcomes
	After completing the course, Student will be able to:
1	<u>solve</u> numerical problems for competitive exams
2	<u>apply</u> logical thinking