

COURSE OUTCOME

Mathematics

	Semester	Course Code	Course Title	Outcome
Mathematics Honours	Semester-I	MATH-H-CC-T-1	Calculus & Analytical Geometry	Ability to understand basic calculus and 2-dimensional and 3-dimensional Geometry.
		MATH-H-CC-T-2	Algebra	Ability to solve certain algebraic equation.
		MATH-H-GE-T-1	Algebra & Analytical Geometry	Ability to understand preliminary algebraic and geometric problems.
	Semester-II	MATH-H-CC-T-3	Real Analysis	To learn the basic properties of real numbers. Also, to solve certain problems related to sequences and series.
		MATH-H-CC-T-4	Differential equation	Ability to create and solve ordinary and partial differential equation.
		MATH-H-GE-T-2	Calculus & Differential equations	To understand the different analytic concepts and to solve elementary ODE & PDE.
	Semester-III	MATH-H-CC-T-5	Theory of Real & Vector functions	To understand certain types of real and vector functions and analyze these equations.
		MATH-H-CC-T-6	Group theory-I	Ability to understand group theory and also different subgroup. Also to solve some abstract problems.
		MATH-H-CC-T-7	Numerical Methods	To solve different types of problems by certain types of numerical methods. Also to solve some numerical problems by C or Python programming.
		MATH-H-GE-T-1	Algebra & Analytical Geometry	Ability to understand preliminary algebraic and geometric problems.
		MATH-H-SEC-T-1	Programming in 'C'	Ability to understand that how to solve some numerical problems by C and some theory related to 'C' programming.
	Semester-IV	MATH-H-CC-T-8	Ring Theory and Linear Algebra	To understand ring, subring and field. Also to understand certain linear transformation, eigen value, eigen vector, etc.
		MATH-H-CC-T-9	Multivariate Calculus & Tensor Analysis	To learn Calculus in Plane and to understand partial differentiation and double integral. Also to understand basic Tensor theory.
MATH-H-CC-T-10		Linear Programming Problems & Game Theory	To solve some linear programming problems by certain methods such as simplex method, Big-M method, etc. Also to solve some game problem by northwest-corner method, least cost method, etc. Also to understand Travelling salesman problems, two-person zero sum games, etc.	

		MATH-H-GE-T-2	Calculus & Differential equations	To understand the different analytic concepts and to solve elementary ODE & PDE.
		MATH-H-SEC-T-2	Graph Theory	Ability to understand preliminary graph theory.
	Semester-V	MATH-H-CC-T-11	Riemann Integration and Series of Functions	Ability to understand Riemann Integral theory and to solve some integral problems by Riemann integration. Also to solve some series of functions by certain methods.
		MATH-H-CC-T-12	Mechanics	Ability to acquire preliminary knowledge about mechanics.
		MATH-H-DSE-T-1A	Group Theory-II	Ability to understand briefly the group theory and to solve the abstract problems.
		MATH-H-DSE-T-1B	Partial differential equations & Laplace Transforms	Ability to create and solve partial differential equations and to understand the Laplace transformation.
		MATH-H-DSE-T-2A	Number Theory	Ability to understand preliminary number theory.
		MATH-H-DSE-T-2B	Differential Geometry	Ability to understand different types of manifolds and their theories and examples.
		Semester-VI	MATH-H-CC-T-13	Metric Spaces and Complex Analysis
	MATH-H-CC-T-14		Probability & Statistics	To understand probability theory and statistics.
	MATH-H-DSE-T-3A		Fuzzy set Theory	Ability to acquire basic knowledge about Fuzzy set.
	MATH-H-DSE-T-3B		Bio-Mathematics	Ability to understand the basic concept of Bio-Mathematics.
	MATH-H-DSE-T-4A		Point Set Topology	Ability to acquire the introductory concept of Topology and understand the different types of topological spaces.
	MATH-H-DSE-T-4B		Mechanics-II	To understand briefly the mechanical problems and to solve certain type of mechanical problems.
Mathematics PCC	Semester-I	MATH-G-CC-T-01	Algebra & Analytical Geometry	Ability to understand preliminary algebraic and geometric problems.
	Semester-II	MATH-G-CC-T-02	Calculus & Differential equations	To understand the different analytic concepts and to solve elementary ODE & PDE.
	Semester-III	MATH-G-CC-T-03	Real Analysis	To learn the basic properties of real numbers. Also, to solve certain problems related to sequences and series.
		MATH-G-SEC-T-1	Logic and Sets	Ability to understand theories related to Logic and Set.
	Semester-IV	MATH-G-CC-T-04	Linear Programming problems & Game Theory	To solve some linear programming problems by certain methods such as simplex method, Big-M method, etc. Also to solve some game problem by northwest-corner method, least cost method, etc. Also to understand Travelling salesman problems, two-person zero sum games, etc.

	Semester-V	MATH-G-SEC-T-2	Graph Theory	Ability to understand preliminary graph theory.
		MATH-G-DSE-T-1	Group Theory and Linear Algebra	To understand group, subgroup. Also to understand certain linear transformation, eigen value, eigen vector, etc.
		MATH-G-SEC-T-3	Theory of Probability	Ability to understand probability theory.
	Semester-VI	MATH-G-DSE-T-2	Numerical Methods	To solve different types of problems by certain types of numerical methods
		MATH-G-SEC-T-4	Programming in 'C'	Ability to understand that how to solve some numerical problems by C and some theory related to 'C' programming.