Paper Code: CC1

Paper Name: Calculus, Geometry & Vector Analysis

Course Outcomes: After completing the course, students will be able to

CO1: Define the differentiability of a function at a point, at an interval or in the entire domain of its definition. Remember the quadric surfaces like cones, cylinders, ellipsoids, and hyperbolas.

CO2: Understand the higher-order derivatives of functions like trigonometric, exponential, logarithmic, hyperbolic, etc. Explain about the Indeterminate forms & L ' Hospital rule.

CO3: Solve the volume of revolution & surface area of revolution of a solid about some axis or line. Apply the L'Hospital rule for different limits.

CO4: Categorize the nature of a conic by evaluating the canonical forms. Analyze the limits & differentiability of vector functions.

CO-PO-PSO MAPPING

CC1																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	1	1	2	3	2	3	1	2	1	2	2	3	2	2	3
CO2	3	1	2	3	2	1	2	1	3	2	2	3	3	2	2	2
CO3	3	2	3	2	2	2	2	2	2	2	2	2	2	2	1	2
CO4	2	1	2	3	2	1	2	1	2	2	2	2	2	2	2	3
	2.75	1.25	2	2.5	2.25	1.5	2.25	1.25	2.25	1.75	2	2.25	2.5	2	1.75	2.5

Paper Code: CC2

Paper Name: Algebra

Course Outcomes: After completing the course, students will be able to

CO1: Define De-Moivre's theorem for rational indices. Recall Descartes's rule of signs, and Sturm's theorem. Define Euclid's theorem. Define rank of a matrix. Define prime numbers.

CO2: Explain the row-echelon form of a matrix. Demonstrate the Chinese Remainder theorem. Illustrate exponential, logarithmic, trigonometric & hyperbolic functions of complex variables.

CO3: Solve cubic equation by Cardan's method & biquadratic equation by Ferrari's method. Apply Descarte's rule of signs & Sturm's theorem on some equations. Construct the row-echelon form of a matrix.

CO4: Examine whether a relation defined on a set is an equivalence relation. List the roots of a cubic & a biquadratic equation. Analyze the condition of invertibility of a matrix.

CO-PO-PSO MAPPING

CC2																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	1	2	3	2	1	3	1	2	2	1	2	3	2	2	3
CO2	3	1	3	3	2	2	2	2	3	2	3	2	3	3	3	3
CO3	3	1	3	3	2	1	2	2	2	2	2	3	2	2	2	2
CO4	3	2	2	3	2	1	2	1	2	2	3	2	3	2	3	3
	3	1.25	2.5	3	2	1.25	2.25	1.5	2.25	2	2.25	2.25	2.75	2.25	2.5	2.75

Paper Code: CC3

Paper Name: Real Analysis

Course Outcomes: After completing the course, students will be able to

CO1: Define the concept of interior points, limit points, isolated points, dense sets, convergence of a sequence and series.

CO2: Analyse the relation between the limit point of a set and the limit of a convergent sequence.

CO3: Evaluate the limits of some important sequences: $\left\{n^{\frac{1}{n}}\right\}, \left\{x^{\frac{1}{n}}\right\}, \{a^{x_n}\}, \left\{\left(1+\frac{1}{n}\right)^n\right\}$

CO4: Analyse the convergence of a series using Cauchy criterion, comparison test, limit comparison test, ratio test, Cauchy's n-th root test, Kummer's test and Gauss test, Leibniz test.

CO-PO-PSO MAPPING

CC3																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	3	2	2	3	1	2	0	3	1	3	3	3	2	2	3
CO2	3	2	3	3	2	1	3	0	2	1	3	2	3	3	3	3
CO3	3	1	3	3	1	1	3	1	2	1	3	2	2	2	1	2
CO4	3	1	3	3	2	1	3	0	2	2	2	2	3	3	2	3
	3	1.75	2.75	2.75	2	1	2.75	0.25	2.25	1.25	2.75	2.25	2.75	2.5	2	2.75

Paper Code: CC4

Paper Name: Group Theory-I

Course Outcomes: After completing the course, students will be able to

CO1: Remember elementary properties of group. Define cyclic groups, order of an element Recall properties of permutations.

CO2: Illustrate the Normal subgroups, Quotient groups and group homomorphism. Demonstrate Lagrange's theorem and Fermat's little theorem.

CO3: Apply necessary and sufficient condition of subgroups and Normal subgroups. Solve various problems on Isomorphism theorems

CO4: Categorize the set of all Congruences on a group. Analyse Lagrange's theorem and Cayley's theorem.

CO-PO-PSO MAPPING

CC4																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	2	2	2	3	1	2	0	2	1	3	3	3	2	1	3
CO2	3	1	3	3	2	1	3	1	3	1	2	2	2	1	1	2
CO3	2	2	3	3	3	2	3	1	2	2	2	2	3	2	2	3
CO4	3	1	2	3	3	1	2	0	2	1	3	2	2	3	2	2
	2.75	1.5	2.5	2.75	2.75	1.25	2.5	0.5	2.25	1.25	2.5	2.25	2.5	2	1.5	2.5

Paper Code: CC5

Paper Name: Theory of Real Functions

Course Outcomes: After completing the course, students will be able to

CO1: Define limit of a function, continuity of a function, differentiability of a function. Recall algebra of limits for functions, algebra of continuous functions, algebra of differentiable functions.

CO2: Explain Sequential criterion for limits & continuity, Darboux's theorem & Rolle's theorem for differentiability.

CO3: Solve one sided limits, both sided limits, find point of continuity & point of differentiability of some important functions.

CO4: Examine discontinuity of function & classify types of discontinuity.

CO-PO-PSO MAPPING

CC5																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	2	3	3	3	1	2	1	2	2	3	2	3	2	2	3
CO2	3	1	2	2	3	2	2	1	2	2	2	3	3	2	2	3
CO3	3	1	3	3	2	2	3	1	2	2	3	2	3	2	3	3
CO4	3	1	2	2	2	1	2	1	2	2	2	2	2	2	2	2
	3	1.25	2.5	2.5	2.5	1.5	2.25	1	2	2	2.5	2.25	2.75	2	2.25	2.75

Paper Code: CC6

Paper Name: Ring Theory & Linear Algebra-I

Course Outcomes: After completing the course, students will be able to

CO1: Define Ring, Integral domain, field. Recall vector subspaces in R^n. Remember Linear span, basis and dimension of a vector space

CO2: Demonstrate linear transformation of vector spaces. Understand ring homomorphism. Compare maximal ideals and prime ideals.

CO3: Solve the characteristic equation to find eigenvalues and then find the eigenvectors of a matrix. Utilize Caley-Hamilton theorem to find inverse of a matrix.

CO4: Analyse congruence of rings, 1st, 2nd and 3rd isomorphism theorems on Rings.

CO-PO-PSO MAPPING

CC6																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	1	2	2	3	1	2	0	3	1	3	3	3	2	2	3
CO2	3	2	3	3	2	2	3	2	2	1	2	2	3	3	2	2
CO3	3	2	3	3	3	1	3	2	2	2	3	2	2	3	3	2
CO4	3	2	3	3	2	2	3	0	3	1	2	2	2	3	2	3
	3	1.75	2.75	2.75	2.5	1.5	2.75	1	2.5	1.25	2.5	2.25	2.5	2.75	2.25	2.5

Paper Code: CC7

Paper Name: ODE & Multivariate Calculus-I

Course Outcomes: After completing the course, students will be able to

CO1: Understand the formation of ordinary differential equation.

CO2: Solve 1st & 2nd Order linear and nonlinear ordinary differential equations.

CO3: Apply various analytic methods to obtain Solutions of 1^{st} and 2^{nd} order diff equation which occur is science & Engineering.

CO4: Analyse the method of Characteristics to understand and Concepts related to Science & Engineering.

CO-PO-PSO MAPPING

CC7																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	1	2	2	3	1	2	1	2	2	2	3	3	2	2	3
CO2	3	2	3	3	3	1	3	2	2	3	3	2	3	3	3	3
CO3	3	2	3	3	2	1	2	2	2	1	2	2	3	2	2	2
CO4	3	2	3	2	2	2	3	1	2	1	3	2	2	3	3	2
	3	1.75	2.75	2.5	2.5	1.25	2.5	1.5	2	1.75	2.5	2.25	2.75	2.5	2.5	2.5

Paper Code: CC8

Paper Name: Riemann Integration & Series of Functions

Course Outcomes: After completing the course, students will be able to

CO1: Define the concept of partition and refinement of partition, upper Darboux sum, lower Darboux sum, negligible set, pointwise and uniform convergence of a series of functions.

CO2: Analyse the properties of integrability of sum, scalar multiple, product, quotient, modulus of Riemann integrable functions.

CO3: Test the convergence of improper integral using Comparison test, M-test, Abel's test and Dirichlet's test.

CO4: Evaluate the radius of convergence of power series.

CO-PO-PSO MAPPING

CC8																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	1	2	2	3	1	2	0	2	2	3	3	3	2	2	3
CO2	3	1	3	3	2	2	3	0	3	1	3	2	2	3	3	2
CO3	3	1	3	3	3	1	3	1	2	1	3	2	3	3	3	3
CO4	2	2	2	3	2	2	2	1	3	1	3	3	2	3	2	2
	2.75	1.25	2.5	2.75	2.5	1.5	2.5	0.5	2.5	1.25	3	2.5	2.5	2.75	2.5	2.5

Paper Code: CC9

Paper Name: PDE & Multivariate Calculus-II

Course Outcomes: After completing the course, students will be able to

CO1: Define Lagrange's auxiliary equations & Charpit's auxiliary equations.

CO2: Classify second order linear differential equations as hyperbolic, elliptic or parabolic.

CO3: Apply Charpit's method for solving non-linear first order partial differential equations.

Solve the vibrating string problem, the heat conduction problem.

CO4: Evaluate Cauchy problem of finite & infinite string. Determine volume & surface area by multiple integrals.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	3	2	1	2	2	3	2	2	3	3	3	2
CO2	3	1	3	3	2	2	3	1	2	2	2	3	3	3	3
CO3	3	1	3	3	3	2	3	2	3	2	2	3	3	3	2
CO4	3	1	3	3	3	2	3	2	3	2	2	3	3	3	2
	3	1.25	2.75	3	2.5	1.75	2.75	1.75	2.75	2	2	3	3	3	2.25

Paper Code: CC10

Paper Name: Mechanics

Course Outcomes: After completing the course, students will be able to

CO1: Discusses equilibrium conditions and stability for static & dynamic cases.

CO2: Understand rectilinear motion and Planer motion in a Cartesian and polar co-ordinates Explain linear momentum and angular momentum principle.

CO3: Make use of energy test of stability condition of stability of a perfectly rough heavy body lying on a fixed body.

CO4: Analyses the motion under attractive inverse square law. Inspect vertical motion under gravity in a resisting medium.

CO-PO-PSO MAPPING

CC10																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	2	1	2	2	2	1	2	1	2	2	2	2	2	2	2	2
CO2	2	1	1	2	2	1	1	1	2	2	2	2	2	2	2	2
CO3	2	1	2	3	2	1	2	1	2	2	2	2	3	2	2	3
CO4	2	2	2	2	2	2	2	1	2	2	2	2	2	3	3	2
	2	1.25	1.75	2.5	2	1.25	1.75	1	2	2	2	2	2.25	2.25	2.25	2.25

Paper Code: CC11

Paper Name: Probability & Statistics

Course Outcomes: After completing the course, students will be able to

CO1: Define Sigma field, axioms of Probability, recall Conditional probability, Bay's theorem. Remember Bernoulli trials, and Random variables.

CO2: Demonstrate Probability mass function, Probability density function. Compare discrete and Continuous random variables.

CO3: Construct moment generating functions for different distribution. Find mean, variance, etc., by Expectation.

CO4: Analyse weak and strong law of large numbers, compare point estimation and interval estimation.

CO-PO-PSO MAPPING

CC11																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	2	3	2	3	2	3	2	3	2	3	3	3	3	3	3
CO2	3	2	3	3	2	2	3	1	2	2	3	2	2	3	3	2
CO3	3	1	2	3	3	2	3	2	3	2	3	3	3	2	2	3
CO4	3	2	3	3	2	1	3	1	2	2	3	2	2	3	3	2
	3	1.75	2.75	2.75	2.5	1.75	3	1.5	2.5	2	3	2.5	2.5	2.75	2.75	2.5

Paper Code: CC12

Paper Name: Group Theory-II & Linear Algebra-II

Course Outcomes: After completing the course, students will be able to

CO1: Define automorphism, inner automorphism, Fundamental theorem of finite abelian groups. Recall Cauchy's theorem for finite abelian groups. Define dual space, double dual, Cayley-Hamilton theorem.

CO2: Explain External direct product & its properties. Explain automorphism groups of finite & infinite cyclic groups. Classify Quadratic forms according to their nature.

CO3: Make use of Gram-Schmidt orthonormalization process. Make use of second derivative test for critical pointof a function of several variables. Apply Sylvester's law of inertia. Construct Hessian Matrix.

CO4: Evaluate minimal polynomial of a matrix. Determine eigenspaces of a linear operator. Determine Jordan canonical form of a matrix.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	3	2	3	1	3	0	2	0	0	3	3	3	3
CO2	3	1	2	1	2	1	2	1	1	1	0	2	3	2	2
CO3	3	0	2	3	3	0	2	0	1	2	1	2	3	3	2
CO4	3	0	3	3	2	0	3	2	1	2	1	3	2	2	2
	3	1	2.5	2.25	2.5	1	2.5	1.5	1.25	1.6667	1	2.5	2.75	2.5	2.25

Paper Code: CC13

Paper Name: Metric Space & Complex Analysis

Course Outcomes: After completing the course, students will be able to

CO1: Define the concept of open balls, open sets, boundary points, interior points, limit points, closure of a set, diameter of a set, compact sets, connected sets.

CO2: Understand Cantor's intersection theorem, Heine-Borel theorem, Banach Fixed point Theorem and its applications.

CO3: Solve complex integration along a contour using upper bounds for moduli of contour integrals, Cauchy-Goursat theorem, Cauchy integral formula.

CO4: Determination of the limits of complex valued functions and radius of convergence of power series using Cauchy-Hadamard theorem.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	2	2	3	1	3	0	1	1	1	3	3	3	3
CO2	3	1	3	2	3	1	3	0	1	1	0	2	3	3	3
CO3	3	0	3	3	2	0	3	1	2	1	0	2	3	2	2
CO4	2	0	2	3	2	0	2	0	2	1	0	2	2	3	3
	2.75	1	2.5	2.5	2.5	1	2.75	1	1.5	1	1	2.25	2.75	2.75	2.75

Paper Code: CC14

Paper Name: Numerical Methods

Course Outcomes: After completing the course, students will be able to

CO1: Solve the initial value problem by using Numerical techniques upto a desired degree of accuracy

CO2: Calculate roots of algebraic or transcendental equations upto a desired degree of accuracy.

CO3: Asses the approximation techniques to formulate and apply appropriate Strategy to solve real world problems.

CO4: Evaluate the integration using Numerical techniques upto a desired degree of accuracy.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	3	2	3	2	2	3	3	3	3
CO2	3	2	3	3	3	1	3	2	2	2	3	3	3	3	3
CO3	3	1	3	3	3	2	3	2	3	2	2	3	3	3	2
CO4	3	2	3	3	3	2	3	2	3	2	3	3	3	2	3
	3	1.75	3	3	3	1.75	3	2	2.75	2	2.5	3	3	2.75	2.75

Paper Code: SEC-A

Paper Name: C Programming Language

Course Outcomes: After completing the course, students will be able to

CO1: Describe Architecture of Computer.

CO2: Define the code, expressions, Statements and functions in C.

CO3: Write a C program using computer operations, functions, Expressions, Statements in C

CO4: Evaluate various types of problems using C-program.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	3	2	2	2	3	3	3	2	3	3	2	2
CO2	3	2	3	3	3	2	3	3	3	3	2	3	3	3	3
CO3	3	2	3	3	3	2	3	3	3	3	2	3	3	3	3
CO4	3	3	3	3	3	2	3	3	3	2	3	3	3	2	3
	3	2.25	2.75	3	2.75	2	2.75	3	3	2.75	2.25	3	3	2.5	2.75

Paper Code: SEC-B

Paper Name: Scientific computing with SageMath

Course Outcomes: After completing the course, students will be able to

CO1: Use of SageMath as a Calculator

CO2: Create graphical representations of functions like plotting of polynomial functions, trigonometric functions, functions with asymptotes, polar functions.

CO3: Create programs for average of integers, mean, median, mode, factorial, checking primes, checking next primes, finding all primes in an interval, finding gcd, lcm, etc.

CO4: Evaluate determinant, inverse of a given real square matrix (if it exists), solving a system of linear equations, finding roots of a polynomial using inbuilt functions.

CO-PO-PSO MAPPING

SEC-B																
CO/PO/PSO	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**	**PO10**	**PO11**	**PO12**	**PSO1**	**PSO2**	**PSO3**	**PSO4**
CO1	3	2	2	2	2	2	2	3	3	3	2	3	2	1	1	2
CO2	2	2	3	3	2	2	3	3	2	2	2	2	2	2	2	2
CO3	3	3	3	3	2	2	3	3	3	2	3	2	2	3	1	2
CO4	2	2	2	3	2	2	2	3	2	2	2	2	2	1	1	2
	2.5	2.25	2.5	2.75	2	2	2.5	3	2.5	2.25	2.25	2.25	2	1.75	1.25	2

Paper Code: DSE-A1

Paper Name: Bio Mathematics

Course Outcomes: After completing the course, students will be able to

CO1: Describe Bio-Mathematical model such as Population growth model and epidemic model.

CO2: Explain steady states and linear stability analysis of Biologically meaningful steady states of Lotka -Volterra Predator-prey model.

CO3: Formulate Epidemic models (SI, SIR, SIRS) and find basic reproduction number.

CO4: Evaluate modified Predator-Prey model introducing logistic growth term for the Prey and other Predator models, their steady states and linear stability analysis.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	3	3	2	2	2	2	3	3	3	2
CO2	3	2	3	3	3	3	3	2	3	2	2	3	3	3	3
CO3	3	2	3	3	3	2	3	2	3	2	3	3	3	3	3
CO4	3	2	3	3	3	2	3	3	3	2	3	3	3	3	3
	3	2	3	3	3	2.5	3	2.25	2.75	2	2.5	3	3	3	2.75

Paper Code: DSE-A2

Paper Name: Mathematical Modelling

Course Outcomes: After completing the course, students will be able to

CO1: Describe and solve Bessel's equation and Legendre's equation. Describe Monte Carlo simulation.

CO2: Evaluate Laplace transform and inverse transform.

CO3: Solve initial value problem up to second order using Laplace transform and inverse transform. Generate random numbers using middle square method and linear congruence method.

CO4: Create a simulation model to determine the area under a curve, volume under a surface.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	2	2	2	1	2	0	2	2	1	2	2	1	1
CO2	2	0	1	3	2	1	2	0	2	1	0	2	2	1	1
CO3	2	0	2	3	2	1	1	0	3	1	0	3	3	1	1
CO4	2	2	2	3	3	3	2	2	3	2	1	3	2	2	2
	2.25	1.5	1.75	2.75	2.25	1.5	1.75	2	2.5	1.5	1	2.5	2.25	1.25	1.25

Paper Code: DSE-B1

Paper Name: Linear Programming & Game Theory

Course Outcomes: After completing the course, students will be able to

CO1: Explain the concept of convex sets, basic and non-basic feasible solutions, LPP, type of strategies.

CO2: Understand the feasibility conditions, optimality conditions, Hungarian method, simplex method &two-phase method.

CO3: Solve LPP using simplex method, two phase method, and game problem using graphical method & algebraic method

CO4: Analyze the relation between primal problem and dual problem.Analyze the inter relation between theory of games and LPP.Formulate LPP from daily life involving equations.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	2	3	3	2	3	1	2	1	1	2	3	2	2
CO2	3	1	3	3	2	1	3	0	2	1	0	2	2	2	2
CO3	3	0	3	3	2	2	3	1	2	0	0	3	3	2	3
CO4	2	0	3	2	2	1	3	1	3	0	1	3	2	3	3
	2.75	1	2.75	2.75	2.25	1.5	3	1	2.25	1	1	2.5	2.5	2.25	2.5

Paper Code: DSE-B2

Paper Name: Advanced Mechanics

Course Outcomes: After completing the course, students will be able to

CO1: Define Concepts, principles and governing equations of motion of a dynamical system.

CO2: Discuss the solutions of equations of motion of a dynamical system.

CO3: Solve various types of problems in Mechanics, using various methods.

CO4: Interpret the results obtained from solving various problems analytically.

CO-PO-PSO MAPPING

CO/PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	1	3	2	2	1	2	1	2	2	2	3	3	2	2
CO2	3	2	3	3	2	2	3	2	2	2	2	3	3	2	2
CO3	3	2	3	3	3	2	3	2	3	2	3	3	3	3	3
CO4	3	2	3	3	3	3	3	2	3	2	3	3	3	3	3
	3	1.75	3	2.75	2.5	2	2.75	1.75	2.5	2	2.5	3	3	2.5	2.5