

# LESSON PLAN OF MATHEMATICS

Name of College:- CH. BANSI LAL GOVT. P.G. COLLEGE LOHARU (BHIWANI)

Academic Session:- 2023-24

Semester:- B.Sc.3rd Sem

Subject:- Differential equations

Teacher name:- Seema

	LESSON PLAN OF Differential equations
<b>August:</b>	
	Introduction to Syllabus and Pattern
	Geometrical meaning of a differential equation, exact differential equations
<b>September:</b>	Integral factors,
	Reduction to exact diff. equations
	First order higher degree equations solutions,
	Lagrange equations, Clairaut equations
	Singular solutions
	Orthogonal trajectories
<b>October:</b>	
	Linear differential equations with constant coefficients,
	Solution by variation of parameter
	Homogeneous linear ordinary differential equations
	Partial differential equations introduction
<b>November:</b>	Solutions of linear and non linear partial differential equations of 1 <sup>st</sup>



# Ch. Bansi Lal Govt. College, Loharu

## Summary of Lesson Plans

Name of the Assistant/ Associate Professor : Seema

Class and Section : B.A./B.Sc 3 year (5th Semester)

Subject : Statics and Dynamics

Academic Session :- 2023-24

Month	Name of Assistant Professor	Subject	Topics/ Chapters to be covered	Academic activity to be organized	Topic of Assignments/ Tests to be given to the students
August	Dr. Seema	Maths	Friction, Centre of Gravity. Virtual work.		
September			Forces in three dimensions, Poinsot's central axis. Wrenches, Null lines and planes.		
October			Definitions of Conservative forces and Impulsive forces. Projectile motion of a particle in a plane. Vector angular velocity.		
November / December			General motion of a rigid body. Central Orbits, Kepler laws of motion. Motion of a particle in three dimensions.		

# Ch. Bansi Lal Govt. College, Loharu

## Summary of Lesson Plans

Name of the Assistant/ Associate Professor : Seema

Class and Section : B.A./B.Sc 3 year (6th Semester)

Subject : Real Analysis

Academic Session :- 2023-24

Month	Name of Assistant Professor	Subject	Topics/ Chapters to be covered	Academic activity to be organized	Topic of Assignments/ Tests to be given to the students
	Dr. Seema	Maths			
February			Riemann integral, Integrability of continuous and monotonic functions, The fundamental theorem of integral calculus, Mean value theorems of integral calculus.		
March			Improper integral and their convergence, Comparison tests, Abel's and Dirichlet's tests, Frullani's integral, Integral as a function of a parameter. Continuity, Differentiability and integrability of an integral of a function of a parameter..		
April			Definition and examples of metric spaces, neighbourhoods, limit points, interior points, open and closed sets, closure and interior, boundary points, subspace of a metric space, equivalent metrics, Cauchy sequences, completeness, Cantor's intersection theorem, Baire's category theorem, Contraction principle.		
May			Continuous functions, uniform continuity, compactness for metric spaces, sequential compactness, Bolzano-Weierstrass property, total boundedness, finite intersection property, continuity in relation with compactness, connectedness, components, continuity in relation with connectedness		

