Department of Mathematics

Session-2022-23

Lesson plan (Semester 1)

Prof. Dalvinder Singh, Prof. Kirti Bhagirath & Prof. Jagjit Singh

Weeks	Paper 1: Calculus	Paper 2: Partial Differential Equation	Paper 3: Linear Algebra
1	Limit and Continuity of a Function	Order & degree of differential equation	Rank of a matrix
2	Limit and Continuity of a Function	Differential equation of first order and first degree	Linear dependence and Independence of
3	Differentiability of Functions	Exact differential equation	Linear Equations
4	Successive differentiation	Linear equation with constant coefficients	Eigen Values and Cayley-Hamilton theorm
5	Successive differentiation	Linear equation with variable coeffecients	Eigen Values and Cayley-Hamilton
6	Concavity and convexity, Asymptotes	Differential Operator Method	Vector Spaces
7	Curve Tracing	Solution of differential equation in series	Vector Spaces
8	Curve Tracing	Bessel's equations, Functions and their Properties	Basis and dimension
9	Limit and Continuity of a Functions of Two	Legengre's equations, Functions and their	Linear Transformation
10	Partial Derivatives,	Legengre's equations, Functions and their	Linear Transformation
11	Maxima and Minima	Hyper Geometric equations, Functions and their	Linear Transformation and Matrices
12	Taylor's Theorem	Hyper Geomtricequations, Functions and their	Linear Transformation and Matrices
13	MST	MST	MST
14	Revision	Revision	Revision

Principal
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Dr. Dalvinder Singh
Head of Department

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Lesson plan (Semester 2)

Prof. Dalvinder Singh, Prof. Kirti Bhagirath & Prof. Jagjit Singh

Weeks	Paper 1: Calculus	Paper 2: Partial Differential Equation	Paper 3: Analytic Geometry
1	Integral Calculus	Partial Differential Equation of First Order	The General Equation of Second Degree
2	Integral Calculus	Partial Differential Equation of First Order but of any degree	Polar Equation of a Cone
3	Integral Calculus	Partial Differential Equation of First Order but of any degree	Polar Equation of a Cone
4	Vector Algebra	Partial Differential Equation of Second Order and Higher Degree	Oblique Axes
5	Vector Algebra	Partial Differential Equation of Second Order and Higher Degree	Oblique Axes
6	Vector Algebra	Homogeneous Partial Differential Equation with Constant Coefficients	Sphere
7	Vector Integration	Homogeneous Partial Differential Equation with Constant Coefficients	Sphere
8	Vector Integration	Non-Homogeneous Partial Differential Equation with Constant Coefficients	Sphere
9	Gauss Theorem	Homogeneous Partial Differential Equation with Constant Coefficients	The Cone
10	Green Theorem	Heat, Wave and Laplace Equation	The Cone
11	Stokes Theorem	Heat, Wave and Laplace Equation	The Cylinder
12	Surface Area and Surface Integral	Two Dimension Laplace Equation	The Cylinder
13	MST	MST	MST
14	Revision	Revision	Revision

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