Applied Mathematics 1 - Playlist

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Unit 1

GGSIPU New Syllabus II Maths 1 II Unit 1 - Topics Review
Partial Derivative of 1st and 2nd order - Concept
Partial Derivative of 1st and 2nd order II Numericals
Partial Derivative of 1st and 2nd Order || Numericals Part2
Chain Rule II Total Derivative II Diff. of Composite Function
Introduction to Differentiation of Implicit Function Theory – Gradient
Partial Derivative - Change of Independent Variables
Exact Differential Equation - Concept & Numericals
Exact differential Equation – Numericals
Maxima and Minima of a Function of Two Variables II Saddle Point
Lagrange's method of Undetermined Multipliers
Differentiation under Integral Sign II Leibnitz's Rule II Numericals
Jacobians II Chain Rule JJ' = 1 II Jacobian of Implicit Function
Jacobians II Jacobians to determine Functional Dependence II Numericals

Unit 2

Ordinary Differential Equation - Concept II
Geometric Meaning of y' = f(x,y) II Direction Fields II ODE
Euler's Method - Numerical Solution of ODE
Eulers method (Numerical Practice) II Numerical Solution of Differential Equation
Solving ODE of Order 1 - Review of all Methods
Solving ODE - Variable Separable Form
Exact Differential Equation- Concept & Numericals
Exact differential Equation – Numericals
Solving Homogeneous Differential Equation Reducible to Exact Form II Integrating factor
Solving Non-Homogeneous D.E. Reducible to Exact Form II Integrating factor