NPTEL Video Course - Mathematics - NOC:Numerical Methods

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Co-ordinating Institute - IIT - Roorkee

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 30 - Numerical differentiation - Part VI (Method of undetermined coefficients and Derivatives with ur
Lecture 31 - Numerical Integration - Part I (Methodology of Numerical Integration and Rectangular rule)
Lecture 32 - Numerical Integration - Part II (Quadrature formula and Trapezoidal rule with associated errors)
Lecture 33 - Numerical Integration - Part III (Simpsons 1/3rd rule with associated errors)
Lecture 34 - Numerical Integration - Part IV (Composite Simpsons 1/3rd rule and Simpsons 3/8th rule with exam
Lecture 35 - Numerical Integration - Part V (Gauss Legendre 2-point and 3-point formula with examples)
Lecture 36 - Introduction to Ordinary Differential equations
Lecture 37 - Numerical methods for ODE-1
Lecture 38 - Numerical Methods - II
Lecture 39 - R-K Methods for solving ODEs
Lecture 40 - Multi-step Method for solving ODEs