NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

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NPTEL Video Course - Physics - Electromagnetic Theory (Prof. D.K. Ghosh)
Subject Co-ordinator - Prof. D.K. Ghosh
Co-ordinating Institute - IIT - Bombay
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Scalar field and its Gradient
Lecture 2 - Line and Surface Integrals
Lecture 3 - Divergence and Curl of Vector Fields
Lecture 4 - Conservative Field, Stoke's Theorem
Lecture 5 - Laplacian
Lecture 6 - Electric Field Potential
Lecture 7 - Gauss's Law, Potential
Lecture 8 - Electric Field and Potential
Lecture 9 - Potential and Potential Energy - I
Lecture 10 - Potential and Potential Energy - II
Lecture 11 - Potential and Potential Energy - III
Lecture 12 - Coefficients of Potential and Capacitance
Lecture 13 - Poission and Laplace Equation
Lecture 14 - Solutions of Laplace Equation - I
Lecture 15 - Solutions of Laplace Equation - II
Lecture 16 - Solutions of Laplace Equation - III
Lecture 17 - Special Techniques - I
Lecture 18 - Special Techniques - II
Lecture 19 - Special Techniques - III
Lecture 20 - Dielectrics - I
Lecture 21 - Dielectrics - II
Lecture 22 - Dielectrics - III
Lecture 23 - Equation of Continuity
Lecture 24 - a) Force between current loops b) Magnetic Vector Potential
Lecture 25 - Magnetic Vector Potential
Lecture 26 - Boundary Conditions
Lecture 27 - Magnetized Material
Lecture 28 - Magentostatics (Continued...), Time Varying Field (Introduction)
Lecture 29 - Faraday's Law and Inductance
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Lecture 30 - Maxwell's Equations
Lecture 31 - Maxwell's Equations and Conservation Laws
Lecture 32 - Conservation Laws
Lecture 33 - a) Angular Momentum Conservation b) Electromagnetic Waves
Lecture 34 - Electromagnetic Waves
Lecture 35 - Propagation of Electromagnetic Waves in a metal
Lecture 36 - Waveguides - I
Lecture 37 - Waveguides - II
Lecture 38 - Resonating Cavity
Lecture 39 - Radiation - I
Lecture 40 - Radiation - II
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