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

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NPTEL Video Course - Mechanical Engineering - NOC: Conduction and Convection Heat Transfer (Prof. S. Chakrabor
Subject Co-ordinator - Prof. S. Chakraborty
Co-ordinating Institute - IIT - Kharagpur
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Introduction To Conduction
Lecture 2 - 1-D Steady State Conduction
Lecture 3 - Introduction To Convection
Lecture 4 - Conduction Equation: Internal Energy Form
Lecture 5 - Conduction Equation: C-P Form
Lecture 6 - Conduction Equation: Boundary Conditions And Problems
Lecture 7 - 1-D Steady State Conduction
Lecture 8 - Concept Of Thermal Resistance
Lecture 9 - 1-D Steady State Conduction - II
Lecture 10 - 1-D Steady State Conduction - II (Continued...)
Lecture 11 - Problems On 1-D Steady State Conduction - I
Lecture 12 - Problems On 1-D Steady State Conduction - I (Continued....)
Lecture 13 - Problems On 1-D Steady State Conduction - II
Lecture 14 - Conduction In Cylindrical Geometry
Lecture 15 - Critical Insulation Thickness
Lecture 16 - Critical Insulation Thickness (Continued...)
Lecture 17 - Problems On Conduction In Cylindrical Geomerty - I
Lecture 18 - Problems On Conduction In Cylindrical Geometry - I (Continued...)
Lecture 19 - Problems On Conduction In Cylindrical Geometry - II and Conduction in Spherical Geometry
Lecture 20 - Heat Transfer From Extended surfaces
Lecture 21 - Boundary Conditions at the FIN tip
Lecture 22 - Boundary Conditions at the FIN tip
Lecture 23 - Problems on Heat Transfer from Extended Surfaces
Lecture 24 - 2D Steady State Conduction
Lecture 25 - Separation of Variables Method for 2-D Steady State Conduction
Lecture 26 - Superposition Method for 2-D Steady State Conduction
Lecture 27 - Transient Conduction: Lumped Parameter Approach
Lecture 28 - Problems on Lumped Parameter Approach
Lecture 29 - Transient Conduction: Infinite Slab
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Lecture 30 - Transient Conduction: Semi - Infinite Slab - I
Lecture 31 - Transient Conduction: Semi - Infinite Slab - II
Lecture 32 - Introduction to Convection
Lecture 33 - Review of Fluid Mechanics - I
Lecture 34 - Review of Fluid Mechanics - II
Lecture 35 - Review of Fluid Mechanics - III
Lecture 36 - Review of Fluid Mechanics - IV
Lecture 37 - Review of Fluid Mechanics - V
Lecture 38 - Energy Conservation Equation - I
Lecture 39 - Energy Conservation Equation - II
Lecture 40 - Energy Conservation Equation - III
Lecture 41 - Thermal Boundary Layer - I
Lecture 42 - Thermal Boundary Layer - II
Lecture 43 - Energy Integral Equation - I
Lecture 44 - Energy Integral Equation - II
Lecture 45 - Internal Forced Convection - 1
Lecture 46 - Internal Forced Convection - 2
Lecture 47 - Internal Forced Convection - 3
Lecture 48 - Internal Forced Convection - 4
Lecture 49 - Internal Forced Convection - 5
Lecture 50 - Internal Forced Convection - 6
Lecture 51 - Viscous Dissipation - 1
Lecture 52 - Viscous Dissipation - 2
Lecture 53 - Natural Convection - 1
Lecture 54 - Natural Convection - 2
Lecture 55 - Natural Convection - 3
Lecture 56 - Natural Convection - 4
Lecture 57 - Condensation - I
Lecture 58 - Condensation - II
Lecture 59 - Boiling
Lecture 60 - Heat Exchangers - I
Lecture 61 - Heat Exchangers - II
Lecture 62 - Heat Exchangers - III
Lecture 63 - Heat Exchangers - IV
Lecture 64 - Heat Exchangers - V
Lecture 65 - Problems on Heat Exchangers
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