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

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NPTEL Video Course - Electrical Engineering - Circuit Theory
Subject Co-ordinator - Prof. S.C. Dutta Roy
Co-ordinating Institute - IIT - Delhi
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Review of Signals and Systems
Lecture 2 - Review of Signals and Systems
Lecture 3 - Network Equations; Initial and Final Conditions
Lecture 4 - Problem Session 1
Lecture 5 - Step, Impulse and Complete Responses
Lecture 6 - 2nd Order Circuits
Lecture 7 - Transformer Transform Domain Analysis
Lecture 8 - Problem Session 2
Lecture 9 - Network Theorems and Network Functions
Lecture 10 - Network Functions (Continued.)
Lecture 11 - Amplitude and Phase of Network Functions
Lecture 12 - Problem Session 3
Lecture 13 - Poles, Zeros and Network Response
Lecture 14 - Single Tuned Circuits
Lecture 15 - Single Tuned Circuits (Continued.)
Lecture 16 - Double Tuned Circuits
Lecture 17 - Double Tuned Circuits (Continued.)
Lecture 18 - Problem Session 4
Lecture 19 - Double Tuned Circuits (Continued.)
Lecture 20 - Concept of Delay and Introduction
Lecture 21 - Two-port Networks (Continued.)
Lecture 22 - Problem Session 5
Lecture 23 - Minor - 1
Lecture 24 - The Hybrid & Transmission Parameters of 2 ports
Lecture 25 - Problem Session 6
Lecture 26 - Two - port Network parameters
Lecture 27 - Two-port Interconnections
Lecture 28 - Interconnection of Two-port Networks (Continued.)
Lecture 29 - Problem Session 7
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Lecture 30 - Scattering Matrix
Lecture 31 - Scattering Parameters of a Two-port
Lecture 32 - Problem Session 8
Lecture 33 - Solutions of Minor - 2 Problems
Lecture 34 - Insertion Loss
Lecture 35 - Example of Insertion Loss and Elements
Lecture 36 - Elements of Realizability Theory (Continued.)
Lecture 37 - Positive Real Functions
Lecture 38 - Testing of Positive Real Functions
Lecture 39 - Problem Session 9
Lecture 40 - More on PRF's and their Synthesis
Lecture 41 - LC Driving Point Functions
Lecture 42 - LC Driving Point Synthesis (Continued.)
Lecture 43 - RC and RL Driving Point Synthesis
Lecture 44 - Problem Session 10
Lecture 45 - RC & RL One-port Synthesis (Continued.)
Lecture 46 - Elementary RLC One-port Synthesis
Lecture 47 - Properties and Synthesis of Transfer Parameters
Lecture 48 - Resistance Terminated LC Ladder
Lecture 49 - Resistance Terminated LC Ladder (Continued.)
Lecture 50 - Problem session 11
Lecture 51 - Network Transmission Criteria
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