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

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NPTEL Video Course - Electrical Engineering - NOC: Signals and Systems
Subject Co-ordinator - Prof. Kushal K. Shah
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable
                                         MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Real and Complex Number
Lecture 2 - Sinusoid and Phasor
Lecture 3 - Limits and Continuity
Lecture 4 - Differentiation and Integration
Lecture 5 - Lâ Hospitalâ s Rule
Lecture 6 - LTI System Examples; Impedance
Lecture 7 - Dirac Delta function; Impulse
Lecture 8 - Continuous and Discrete Time Systems
Lecture 9 - Even Signal; Odd Signal
Lecture 10 - Orthogonality of Signals
Lecture 11 - Shifting and Scaling in Continuous Time - I
Lecture 12 - Shifting and Scaling in Continuous Time - II
Lecture 13 - Shifting and Scaling in Discrete Time
Lecture 14 - Signal and Noise
Lecture 15 - Signals in the Physical World
Lecture 16 - Signals and Sensory Perception
Lecture 17 - Frequency Domain Representation
Lecture 18 - Definition of Fourier Transform
Lecture 19 - Fourier Transform
Lecture 20 - Dirichlet Conditions
Lecture 21 - Inverse Fourier Transform
Lecture 22 - Fourier Transform
Lecture 23 - Frequency-Time Uncertainty Relation
Lecture 24 - Fourier Transform
Lecture 25 - Fourier Transform
Lecture 26 - Fourier Transform
Lecture 27 - Fourier Transform
Lecture 28 - Fourier Transform
Lecture 29 - Fourier Transform
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Lecture 30 - Fourier Transform of Noise
Lecture 31 - Types of Noise
Lecture 32 - Overview of Systems and General Properties
Lecture 33 - Linearity and Time Invariance
Lecture 34 - LTI System Examples
Lecture 35 - Frequency Response of RLC circuits - I
Lecture 36 - Frequency Response of RLC circuits - II
Lecture 37 - LCCDE Representation of Continuous-Time LTI Systems
Lecture 38 - Frequency Domain Representation of LCCDE Systems
Lecture 39 - Time Domain Representation of LTI Systems
Lecture 40 - Continuous-Time Convolution Integral
Lecture 41 - Continuous-Time Convolution
Lecture 42 - Continuous-Time Convolution
Lecture 43 - Continuous-Time Convolution
Lecture 44 - LTI Systems
Lecture 45 - LTI Systems
Lecture 46 - LTI Systems
Lecture 47 - Fourier Transform in Complex Frequency Domain
Lecture 48 - Laplace Transform
Lecture 49 - Laplace Transform
Lecture 50 - Laplace Transform
Lecture 51 - Laplace Transform
Lecture 52 - Laplace Analysis of LTI Systems
Lecture 53 - Laplace Analysis of RLC Circuits - I
Lecture 54 - Laplace Transform
Lecture 55 - Laplace Transform
Lecture 56 - Laplace Transform
Lecture 57 - Laplace Analysis of LTI Systems
Lecture 58 - Laplace Analysis of LTI Systems
Lecture 59 - Laplace Analysis of First Order RLC Circuits
Lecture 60 - Laplace Analysis of Second Order RLC Circuits
Lecture 61 - Fourier Transform of Periodic Signals
Lecture 62 - Fourier Series Representation in Continuous-Time
Lecture 63 - Fourier Series Properties - I
Lecture 64 - Fourier Series Properties - II
Lecture 65 - LTI System Response for Periodic Input Signal
Lecture 66 - Fourier Series in Continuous-Time
Lecture 67 - Fourier Series in Continuous-Time
Lecture 68 - Discrete-Time Convolution Sum
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Lecture 69 - Discrete-Time Convolution Sum Examples and Properties
Lecture 70 - LCCDE Representation of Discrete-Time LTI Systems
Lecture 71 - Impulse Train Sampling
Lecture 72 - Reconstruction of Continuous-Time Signal
Lecture 73 - Nyquist Sampling Theorem and Aliasing
Lecture 74 - Fourier Transform of Sampled Signals
Lecture 75 - DTFT
Lecture 76 - DTFT Properties I
Lecture 77 - DTFT Properties II
Lecture 78 - DTFT Properties III
Lecture 79 - DTFT
Lecture 80 - DTFT in Complex Frequency Domain
Lecture 81 - Z-Transform
Lecture 82 - Z-Transform Properties I
Lecture 83 - Z-Transform Properties II
Lecture 84 - Z-Transform Properties III
Lecture 85 - Z-Transform
Lecture 86 - Z-Transform
Lecture 87 - Block Diagram Representation
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