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

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NPTEL Video Course - Electrical Engineering - NOC:DC Power Transmission Systems
Subject Co-ordinator - Prof. Krishna S
Co-ordinating Institute - IIT - Madras
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Course contents
Lecture 2 - Introduction
Lecture 3 - Historical developments
Lecture 4 - Power semiconductor devices
Lecture 5 - General converter configuration
Lecture 6 - Choice of converter configuration
Lecture 7 - Choice of converter configuration
Lecture 8 - Converter configuration for pulse number equal to 6
Lecture 9 - Analysis of 6 pulse LCC neglecting inductance
Lecture 10 - Analysis of 6 pulse LCC neglecting inductance
Lecture 11 - Analysis of 6 pulse LCC neglecting inductance
Lecture 12 - Fourier series - Part 1
Lecture 13 - Fourier series - Part 2
Lecture 14 - Analysis of 6 pulse LCC neglecting inductance
Lecture 15 - Analysis of 6 pulse LCC neglecting inductance
Lecture 16 - Definitions
Lecture 17 - Commutation margin angle in a 6 pulse LCC neglecting inductance - Part 1
Lecture 18 - Commutation margin angle in a 6 pulse LCC neglecting inductance - Part 2
Lecture 19 - Instantaneous power on AC and DC sides in a 6 pulse LCC neglecting inductance
Lecture 20 - Average power on AC and DC sides in a 6 pulse LCC neglecting inductance
Lecture 21 - 6 pulse LCC with inductance
Lecture 22 - 2 and 3 valve conduction mode of 6 pulse LCC
Lecture 23 - 2 and 3 valve conduction mode of 6 pulse LCC
Lecture 24 - 2 and 3 valve conduction mode of 6 pulse LCC
Lecture 25 - 2 and 3 valve conduction mode of 6 pulse LCC
Lecture 26 - Extinction angle
Lecture 27 - Extinction angle
Lecture 28 - 3 and 4 valve conduction mode of 6 pulse LCC
Lecture 29 - Analysis of 3 and 4 valve conduction mode of 6 pulse LCC - Part 1
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Lecture 30 - Analysis of 3 and 4 valve conduction mode of 6 pulse LCC - Part 2
Lecture 31 - Analysis of 3 and 4 valve conduction mode of 6 pulse LCC - Part 3
Lecture 32 - 3 valve conduction mode of 6 pulse LCC
Lecture 33 - Commutation margin angle
Lecture 34 - Normalization
Lecture 35 - Characteristics of 6 pulse LCC - Part 1
Lecture 36 - Characteristics of 6 pulse LCC - Part 2
Lecture 37 - Steady state analysis of a general LCC - Part 1
Lecture 38 - Steady state analysis of a general LCC - Part 2
Lecture 39 - Steady state analysis of a general LCC - Application to 6 pulse LCC
Lecture 40 - 6 pulse LCC with resistance included on the AC side
Lecture 41 - 6 pulse LCC with resistance, inductance and voltage source on the DC side - Part 1
Lecture 42 - 6 pulse LCC with resistance, inductance and voltage source on the DC side - Part 2
Lecture 43 - Power factor
Lecture 44 - Capacitor commutated converter - Part 1
Lecture 45 - Capacitor commutated converter - Part 2
Lecture 46 - 12 pulse LCC - Part 1
Lecture 47 - 12 pulse LCC - Part 2
Lecture 48 - Modes of operation of 12 pulse LCC
Lecture 49 - Purposes of transformer
Lecture 50 - Applications of DC transmission
Lecture 51 - Types of DC link
Lecture 52 - Types of DC link
Lecture 53 - DC link control
Lecture 54 - DC link control
Lecture 55 - Considerations that influence selection of control
Lecture 56 - Converter control characteristics
Lecture 57 - MTDC systens
Lecture 58 - Types of MTDC systems
Lecture 59 - Non-characteristic harmonics
Lecture 60 - Effect of firing angle errors
Lecture 61 - Problems with harmonics
Lecture 62 - Single tuned filter
Lecture 63 - Design of single tuned filter - Part 1
Lecture 64 - Design of single tuned filter - Part 2
Lecture 65 - Double tuned and damped filters
Lecture 66 - Reactive power requirement
Lecture 67 - Comparison of AC and DC transmission
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