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

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NPTEL Video Course - Mathematics - NOC: Probability and Statistics
Subject Co-ordinator - Prof. Somesh Kumar
Co-ordinating Institute - IIT - Kharagpur
Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable
Lecture 1 - Sets, Classes, Collection
Lecture 2 - Sequence of Sets
Lecture 3 - Ring, Field (Algebra)
Lecture 4 - Sigma-Ring, Sigma-Field, Monotone Class
Lecture 5 - Random Experiment, Events
Lecture 6 - Definitions of Probability
Lecture 7 - Properties of Probability Function - I
Lecture 8 - Properties of Probability Function - II
Lecture 9 - Conditional Probability
Lecture 10 - Independence of Events
Lecture 11 - Problems in Probability - I
Lecture 12 - Problems in Probability - II
Lecture 13 - Random Variables
Lecture 14 - Probability Distribution of a Random Variable - I
Lecture 15 - Probability Distribution of a Random Variable - II
Lecture 16 - Moments
Lecture 17 - Characteristics of Distributions - I
Lecture 18 - Characteristics of Distributions - II
Lecture 19 - Special Discrete Distributions - I
Lecture 20 - Special Discrete Distributions - II
Lecture 21 - Special Discrete Distributions - III
Lecture 22 - Poisson Process - I
Lecture 23 - Poisson Process - II
Lecture 24 - Special Continuous Distributions - I
Lecture 25 - Special Continuous Distributions - II
Lecture 26 - Special Continuous Distributions - III
Lecture 27 - Special Continuous Distributions - IV
Lecture 28 - Special Continuous Distributions - V
Lecture 29 - Normal Distribution
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Lecture 30 - Problems on Normal Distribution
Lecture 31 - Problems on Special Distributions - I
Lecture 32 - Problems on Special Distributions - II
Lecture 33 - Function of a random variable - I
Lecture 34 - Function of a random variable - II
Lecture 35 - Joint Distributions - I
Lecture 36 - Joint Distributions - II
Lecture 37 - Independence, Product Moments
Lecture 38 - Linearity Property of Correlation and Examples
Lecture 39 - Bivariate Normal Distribution - I
Lecture 40 - Bivariate Normal Distribution - II
Lecture 41 - Additive Properties of Distributions - I
Lecture 42 - Additive Properties of Distributions - II
Lecture 43 - Transformation of Random Variables
Lecture 44 - Distribution of Order Statistics
Lecture 45 - Basic Concepts
Lecture 46 - Chi-Square Distribution
Lecture 47 - Chi-Square Distribution (Continued...), t-Distribution
Lecture 48 - F-Distribution
Lecture 49 - Descriptive Statistics - I
Lecture 50 - Descriptive Statistics - II
Lecture 51 - Descriptive Statistics - III
Lecture 52 - Descriptive Statistics - IV
Lecture 53 - Introduction to Estimation
Lecture 54 - Unbiased and Consistent Estimators
Lecture 55 - LSE, MME
Lecture 56 - Examples on MME, MLE
Lecture 57 - Examples on MLE - I
Lecture 58 - Examples on MLE - II, MSE
Lecture 59 - UMVUE, Sufficiency, Completeness
Lecture 60 - Rao - Blackwell Theorem and Its Applications
Lecture 61 - Confidence Intervals - I
Lecture 62 - Confidence Intervals - II
Lecture 63 - Confidence Intervals - III
Lecture 64 - Confidence Intervals - IV
Lecture 65 - Basic Definitions
Lecture 66 - Two Types of Errors
Lecture 67 - Neyman-Pearson Fundamental Lemma
Lecture 68 - Applications of N-P Lemma - I
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Lecture 69 - Applications of N-P Lemma - II

Lecture 70 - Testing for Normal Mean

Lecture 71 - Testing for Normal Variance

Lecture 72 - Large Sample Test for Variance and Two Sample Problem

Lecture 73 - Paired t-Test

Lecture 74 - Examples

Lecture 75 - Testing Equality of Proportions

Lecture 76 - Chi-Square Test for Goodness Fit - I

Lecture 77 - Chi-Square Test for Goodness Fit - II

Lecture 78 - Testing for Independence in rxc Contingency Table - I

Lecture 79 - Testing for Independence in rxc Contingency Table - II
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