

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

NPTEL Video Course - Mathematics - NOC:Descriptive Statistics with R Software

Subject Co-ordinator - Prof. Shalabh

Co-ordinating Institute - IIT - Kanpur

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

Lecture 1 - Introduction to R Software  
Lecture 2 - Basics and R as a Calculator  
Lecture 3 - Calculations with Data Vectors  
Lecture 4 - Built-in Commands and Missing Data Handling  
Lecture 5 - Operations with Matrices  
Lecture 6 - Objectives, Steps and Basic Definitions  
Lecture 7 - Variables and Types of Data  
Lecture 8 - Absolute Frequency, Relative Frequency and Frequency Distribution  
Lecture 9 - Frequency Distribution and Cumulative Distribution Function  
Lecture 10 - Bar Diagrams  
Lecture 11 - Subdivided Bar Plots and Pie Diagrams  
Lecture 12 - 3D Pie Diagram and Histogram  
Lecture 13 - Kernel Density and Stem - Leaf Plots  
Lecture 14 - Arithmetic Mean  
Lecture 15 - Median  
Lecture 16 - Quantiles  
Lecture 17 - Mode, Geometric Mean and Harmonic Mean  
Lecture 18 - Range, Interquartile Range and Quartile Deviation  
Lecture 19 - Absolute Deviation and Absolute Mean Deviation  
Lecture 20 - Mean Squared Error, Variance and Standard Deviation  
Lecture 21 - Coefficient of Variation and Boxplots  
Lecture 22 - Raw and Central Moments  
Lecture 23 - Sheppard's Correction, Absolute Moments and Computation of Moments  
Lecture 24 - Skewness and Kurtosis  
Lecture 25 - Univariate and Bivariate Scatter Plots  
Lecture 26 - Smooth Scatter Plots  
Lecture 27 - Quantile-Quantile and Three Dimensional Plots  
Lecture 28 - Correlation Coefficient  
Lecture 29 - Correlation Coefficient Using R Software

---

Get Digi-MAT (Digital Media Access Terminal) For High-Speed Video Streaming of NPTEL and Educational Video Courses in LAN

[www.digimat.in](http://www.digimat.in)

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

---

- Lecture 30 - Rank Correlation Coefficient
- Lecture 31 - Measures of Association for Discrete and Counting Variables - Part 1
- Lecture 32 - Measures of Association for Discrete and Counting Variables - Part 2
- Lecture 33 - Least Squares Method - One Variable
- Lecture 34 - Least Squares Method - R Commands and More than One Variables