

**ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY: CHIRALA**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**LECTURE SCHEDULE**

**Subject: STATISTICS WITH R PROGRAMMING**      **Academic Year: 2018-19**  
**Name: Dr. S. INDRANEEL**      **Year & Sem/Section: II-I SEM 'C'**  
**No. of Lectures per week : 5+1\* (Tutorial)**

S. NO	DATE	UNITS	TOPICS
1	11/06/2018	I	<b>Introduction:</b> R programming overview
2	12/06/2018		How to run R
3	13/06/2018		R Sessions and Functions
4	14/06/2018		Basic Math in R
5	18/06/2018		R Variables
6	19/06/2018		R Data Types,
7	20/06/2018		Advanced Data Structures: Vectors
8	21/06/2018		Data Frames,
9	22/06/2018		Lists,
10	23/06/2018		Matrices
11	25/06/2018		<b>TUTORIAL</b>
12	26/06/2018		Arrays,
13	27/06/2018		Classes.
14	28/06/2018		<b>UNIT TEST -1</b>
15	29/06/2018		<b>REVISION USING PPT OR NPTEL VIDEOS-1</b>
16	30/06/2018	II	R Programming Structures, Control Statements
17	02/07/2018		<b>TUTORIAL</b>
18	03/07/2018		If-Else, Loops,
19	04/07/2018		Sample programs using Control statements
20	05/07/2018		Sample programs using Loops
21	06/07/2018		Looping Over Nonvector Sets,
22	07/07/2018		Arithmetic and Boolean Operators and values,
23	09/07/2018		<b>TUTORIAL</b>
24	10/07/2018		Default Values for Argument, Return Values,
25	11/07/2018		Deciding Whether to explicitly call return- Returning Complex Objects,
26	12/07/2018		Functions are Objective, No Pointers in R,
27	13/07/2018		Recursion
28	14/07/2018		A Quicksort Implementation-
29	16/07/2018		<b>TUTORIAL</b>
30	17/07/2018		Extended Example: A Binary Search Tree.
31	18/07/2018		<b>UNIT TEST -2</b>
32	19/07/2018		<b>REVISION USING PPT OR NPTEL VIDEOS-2</b>
33	20/07/2018	III	Doing Math and Simulation in R,
34	21/07/2018		Math Function, -Minima and Maxima
35	23/07/2018		<b>TUTORIAL</b>
36	24/07/2018		Extended Example Calculating Probability- Cumulative Sums and Products
37	25/07/2018		Calculus, Functions For Statistical Distribution,
38	26/07/2018		Sorting,
39	27/07/2018		Linear Algebra Operation on Vectors and Matrices
40	28/07/2018		Extended Example: Vector cross Product
41	30/07/2018		<b>TUTORIAL</b>
42	31/07/2018		Extended Example: Finding Stationary Distribution of

			Markov Chains
43	01/08/2018		Set Operation, Input /out put
44	02/08/2018		Accessing the Keyboard and Monitor
45	03/08/2018		Reading and writer Files
46	04/08/2018		REVISION USING PPT OR NPTEL VIDEOS-3
47	06/08/2018		REVISION
48	07/08/2018		REVISION
49	08/08/2018		REVISION
50	09/08/2018		REVISION
51	10/08/2018		REVISION
52	11/08/2018		REVISION
53	13/08/2018	IV	TUTORIAL
54	14/08/2018		Graphics
55	16/08/2018		Creating Graphs
56	17/08/2018		The Workhorse of R Base Graphics
57	18/08/2018		the plot() Function – Customizing Graphs
58	20/08/2018		TUTORIAL
59	21/08/2018		the plot() Function – Customizing Graphs
60	23/08/2018		Saving Graphs to Files
61	24/08/2018		REVISION USING PPT OR NPTEL VIDEOS-4
62	25/08/2018		UNIT TEST -3
63	27/08/2018	V	TUTORIAL
64	28/08/2018		Probability Distributions
65	29/08/2018		Normal Distribution
66	30/08/2018		Binomial Distribution
67	31/08/2018		Poisson Distributions
68	04/09/2018		Other Distributions
69	05/09/2018		Other Distributions
70	06/09/2018		Basic Statistics
71	07/09/2018		Correlation and Covariance
72	08/09/2018		T-Tests
73	10/09/2018	TUTORIAL	
74	11/09/2018	ANOVA	
75	12/09/2018	REVISION USING PPT OR NPTEL VIDEOS-5	
76	15/09/2018	UNIT TEST -4	
77	17/09/2018	VI	TUTORIAL
78	18/09/2018		Linear Models
79	19/09/2018		Simple Linear Regression-Multiple Regression
80	20/09/2018		Generalized Linear Models
81	22/09/2018		Logistic Regression
82	24/09/2018		TUTORIAL
83	25/09/2018		Poisson Regression
84	26/09/2018		other Generalized Linear Models-Survival Analysis
85	27/09/2018		Nonlinear Models
86	28/09/2018	Splines- Decision Trees- Random Forests	
87	29/09/2018		REVISION
88	01/10/2018		REVISION
89	03/10/2018		REVISION
90	04/10/2018		REVISION
91	05/10/2018		REVISION
92	06/10/2018		REVISION

93	08/10/2018		REVISION
94	09/10/2018		REVISION
95	10/10/2018		REVISION
96	11/10/2018		REVISION
97	12/10/2018		REVISION
98	13/10/2018		REVISION

<b>Text Books</b>	
1	The Art of R Programming, Norman Matloff, Cengage Learning
2	R for Everyone, Lander, Pearson
<b>References</b>	
1	R Cookbook, Paul Teetor, O'Reilly.
2	R in Action, Rob Kabacoff, Manning

**FACULTY MEMBER**

**HEAD OF THE DEPARTMENT**

SACET-CSE