

Name of Faculty : Er. Anju Godara ,Assistant
 professor Discipline : CSE
 Semester : 6th
 Subject : Data Analtic using R Language (CSE-307-
 L) Lesson Plan Duration :
 Work Load (Lecture/Practical) per week (in hours): Lectures-02hours

Theory		Topic Covered Date and Remarks		
Lecture Day	Topic (Including Assignment/Test)	Date	Hod	Director-principal
1	Introduction to R programming			
2	Goals of R Language			
3	Advantages and disadvantages			
4	Environment for R			
5	Data Types in R			
6	R Objects			
7	Creating and manipulating objects like vector, Matrix			
8	Vector Access, vector creation			
9	Create Matrices			
10	List and data frames			
11	Introduction to R packages			
12	Installation R packages			
13	Sub setting matrices and data frame			
14	Vectorised operations for matrix			
15	Vectorised operations for matrices			
16	Control structure in R			
17	If-else statements			
18	For and while loop			
19	Loop functions like lapply, apply, sapply and mapply			
20	Writing user define function			
21	Getting data in and out of R			
22	Basic descriptive statistics			
23	Data type for data analysis			
24	Data type and their mapping to R objects			
	—————1st Minor Test—————			
25	Mean, mode			
26	Median, Quantiles			
27	Five point summary			
28	Variance			
29	Correlation and covariance			
30	Normal distribution			
31	Uniform distribution using R			
32	Hypothesis testing			
33	Chi-square test			
34	Students T test			
35	Exploratory data analysis			
36	Visualizing data through various plot and charts			
37	Bar charts			
38	Histogram, frequency			
39	Polygon			
40	Scatter plot, box plot			
41	Applying KNN			
42	Bayesian predictive models			
43	—————2nd Minor Test—————			
44	Web threats for organisations			
45	Social computing			
46	Associated challenges			

