Name of Faculty : Er. Anju Godara, Assistant professor

Discipline : CSE
Semester : 6th
Subject : Data Analytic using R Language (PC/CSE/17-T)
Work Load (Lecture/Practical) per week (in hours): Lectures-03hours

Theory		Topic Covered Date and Remarks	
Lecture Day	Topic (Including Assignment/Test)	Date	HOD
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 fectorVector,Matrices		
8	Vector Access, vector creation		
9	Create Matrices		
10	List and data frames		
11	Introduction t to R packages		
12	Installation R packages		
	----------**Ist Minor Test**----------		
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 mappy		
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 S		
	----------**2nd Minor Test**----------		
25	Mean, mode		
26	Medium , Quantiles		
27	Five point summary		
28	Variance		
29	Correlation and convarience		
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		
	----------**3RD Minor Test**----------		