Name of Faculty   :   **Er. Anju Godara ,Assistant**
professor Discipline   :   **CSE**
Semester   :   **6ᵗʰ**
Subject   :   **Data Analytic 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
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		
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		
	----------------------------Ist 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		
42	Bayesian predictive models		
43	----------------------------2ⁿᵈ Minor Test-----------------------		
44	Web threats for organisations		
45	Social computing		
46	Associated challenges		