SWARNANDHRA
COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi,Accredited by
NAAC with "A" Grade – 3.32 CGPA,Recognized under 2(f) & 12(B) of UGC Act 1956,
Approved by AICTE, New Delhi,Permanent Affiliation to JNTUK, Kakinada
Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF INFORMATION TECHNOLOGY
TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
20IT7J04	R PROGRAMMING	VII	IT	3 Periods	2023-2024	03-07-2023

COURSE OUTCOMES

1	Study and use basic fundamental concepts to solve the real world problem using R programming language.
2	Design and implement the solution using scalar, vectors, matrices and statistical problems in R program.
3	Design and implement the program using data frame, list to provide the solution for various problem.
4	Study about factors and tables and to solve statistical problems.
5	Minimize and maximize functions, simulation and visualization and statistical analysis using R.

Experiment Number	Experiment	Contact Hours
1	Installing R and RStudio Basic functionality of R, variable, data types in R	3
2	a) Implement R script to show the usage of various operators available in R language. b) Implement R script to read person's age from keyboard and display whether he is eligiblefor voting ornot. c) Implement R script to find biggest number between two numbers. d) Implement R script to check the given year is leap year ornot.	3
3	a) Implement R Script to create a list. b) Implement R Script to access elements in the list. c) Implement R Script to merge two or more lists. Implement R Script to perform matrix operation	3
4	Implement R script to perform following operations: a) various operations on vectors b) Finding the sum and average of given numbers using arrays. c) To display elements of list in reverse order. d) Finding the minimum and maximum elements in the array.	3

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LAB SCHEDULE PLAN

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5	a) Implement R Script to perform various operations on matrices b) Implement R Script to extract the data from dataframes.	3
6	a) Write an R script to find basic descriptive statistics using summary, str, quartile function on mtcars & cars datasets. b) Write an R script to find subset of dataset by using subset (), aggregate () functions on iris dataset	3
7	a) Implement R Script to create a Pie chart, Bar Chart, scatter plot and Histogram (Introduction to ggplot2 graphics) b) Implement R Script to perform mean, median, mode, range, summary, variance, standard deviation operations.	3
8	Implement R Script to perform Normal, Binomial distributions.	3
	CUMULATIVE PROPOSED PERIODS	**24**

		Name	Signature with Date
i.	Faculty	Mr. M.N.V.L. Naryaana	
ii.	Module Coordinator	Dr. RVVSV Prasad	
iii.	Programme Coordinator	Dr. RVVSV Prasad	

Principal

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