



**VR Siddhartha Engineering College**  
**Department of Information Technology**



**Course Code: 20BS4101**  
**ASSIGNMENT-1 QUESTION BANK**  
**A.Y:2021-22/Sem-2**

Q.No	Question	Course Outcome	BTL
1	a List out various data types available in R Language?	CO1	Understand
	b Create a function to calculate the average, median and mean for a numeric vector age in employee database	CO1	Apply
2	a Illustrate with an example NA and NULL?	CO1	Understand
	b Define variable and write a short note on it. How do you assign value to variable in R and how do you remove variable.	CO1	Understand
	c Create a data frame that stores the name, age, designation of the employee. Find how many employees are working in each designation?	CO1	Apply
3	a Write a short note on R Studio Tools?	CO1	Understand
	b Create two vectors that stores the details of name and gender of the employees. Find how many male and female employees are present	CO1	Apply
	c What kind of operations can be performed on vectors and dataframes	CO1	Understand
4	a With an example write a short note on Lists and matrices	CO1	Understand
	b Explain about control statements in R. Find the cube and square of a given number using while and for loops	CO1	Understand
	c Write R code to define the function by using if-else $F(x)=x \quad \text{if } x < 1/2$ $=(1-x) \quad \text{if } 1/2 < x < 1$ $=0 \quad \text{otherwise}$	CO1	Apply
5	a Explain various ways of reading data into R	CO1	Understand
	b Write a short note on command line interface	CO1	Understand
	c With examples write a short note on Base Graphs and ggplot2	CO1	Understand
6	a Write a short note on the following with examples. (i) nchar()	CO1	Understand

		(ii) length() (iii)Factor Vectors		
	b	With examples write a short note on arrays	CO1	Understand