

**ITM(SLS) BARODA UNIVERSITY**  
**SCHOOL OF COMPUTER SCIENCE, ENGINEERING AND TECHNOLOGY**

**B.Tech CSE/AI/IT/CS**  
**Semester:1**

**Subject:R Programming for Data**  
**Course Code: C21X0C3**  
**Unit wise Question Bank**

Unit 1	
Sr.No	Question
1	Explain various operators in R.
2	Compare Arithmetic and Logical Operators in R.
3	Explain various features of R language.
4.	Compare Arithmetic and boolean operators in R.
5.	Explain following functions in R with examples. 1. round() 2. sqrt() 3. abs() 4. cos() 5. exp()
Unit 2	
1	Explain Datatypes in R.
2	Write various rules for variable declaration in R.
3	Define data structure. Explain following data structures in R with example. 1. Vector 2. Matrix 3. List 4. Data frame 5. Factor
4	Explain in detail about the data frame and matrix in R.
5	Compare Matrix and List data structures in R.

6	Explain rbind() and cbind() functions in R. When you have to use rbind() and cbind()?
7	Write the code to merge two lists in R.
8	Explain following predefined lists in R. 1. letters 2. month.abb 3. month.name 4. LETTERS
9.	How to perform slicing of a dataframe in R?
10	How to perform subset operation of a dataframe in R with subset() function.?
11	What is a factor? How would you create a factor in R?
<b>Unit 3</b>	
1	How Does R handle missing values ? Explain with an example.
2	Differentiate between R script and Markdown file.
<b>Unit 4</b>	
1	Explain descriptive statistics.
2	Explain the central tendency of a data using the following functions in R. mean() median() mode()
3.	What are different measures of variability.?
4.	Explain various functions in R. range() quantile() IQR()
5	What is variance of the data? How to calculate variance in R.
6	Explain standard deviation of the data using sd() function in R.

7	Define skew and Kurtosis. Compare skewness and kurtosis of dataset? Which functions are used in R to calculate the skewness and kurtosis of the dataset
8	Compare following R functions. <ol style="list-style-type: none"><li>1. describe()</li><li>2. describeBy()</li><li>3. summary()</li></ol>
9	Explain correlation of different variables in R using cor() functions.