

**B.Tech (Computer Science and Information Technology)  
common with B.Tech (Information Technology)  
Scheme of Studies/Examination w.e.f 2021-22**

**Semester 8**

Sr. No.	Category	Course Code	Course Title	Hours per week			Total Contact Hrs. per week	Credit	Examination (Marks)				Duration of Exam (Hours)
				L	T	P			Internal Assessment	Theory	Practical	Total	
1	Professional Core Course	PCC-IT-402G	R Programming	3	0	0	3	3	25	75		100	3
2	Professional Core Course	PCC-IT-403G	Big Data Analysis	3	0	0	3	3	25	75		100	3
3	Open Elective Course	Refer to Annexure OEC-II	Open Elective-II	3	0	0	3	3	25	75		100	3
4	Professional Core Course	LC-IT-420G	R Programming Lab	3	0	0	3	3	25		25	50	3
5	Professional Core Course	LC-IT-4212G	Big Data Analysis Lab	0	0	2	2	1	25		25	50	3
6	Project	PROJ-IT-424G	Project-III	0	0	8	4	4	50		50	100	3
<b>TOTAL CREDIT</b>								<b>17</b>	<b>175</b>	<b>225</b>	<b>100</b>	<b>500</b>	

**NOTE:**

Choose one subject from open Elective – II. List of elective subjects is attached as annexures.

## R Programming LAB

Course code	LC-IT-420 G				
Category	Professional Core Course				
Course title	R Programming- LAB				
Scheme and Credits	L	T	P	Credits	
	0	0	3	3	
Class work	25 Marks				
Practical	25 Marks				
Total	50 Marks				
Duration of Exam	03 Hours				

### List of experiments in r programming

1. Study of basic Syntaxes in R
2. Implementation of vector data objects operations
3. Implementation of matrix, array and factors and perform va in R
4. Implementation and use of data frames in R
5. Create Sample (Dummy) Data in R and perform data manipulation with R
6. Study and implementation of various control structures in R
7. Data Manipulation with dplyr package
8. Data Manipulation with data.table package
9. Study and implementation of Data Visualization with ggplot2
10. Study and implementation data transpose operations in R.

  
27/5/22