

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MCom (CA) DEGREE EXAMINATION DECEMBER 2024
(Third Semester)

Branch – **COMMERCE WITH COMPUTER APPLICATION**

DATA VISUALIZATION

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	What is the primary objective of using R? a) Data visualization only b) Statistical analysis and data visualization c) Machine learning only d) Data manipulation only	K1	CO1
	2	Which attribute does R provide for data structures? a) Flexibility b) Speed c) Security d) Scalability	K2	CO1
2	3	Which command saves the R workspace? a) save .image() b) save .workspace() c) save .data() d) save .file()	K1	CO2
	4	How do you remove a specific object in R? a) rm (object_name) b) remove object_name) c) delete (object_name) d) clear (object_name)	K2	CO2
3	5	What is a data frame in R? a) A homogeneous collection of data b) A heterogeneous collection of data c) A matrix with rows and columns d) A list of vectors	K1	CO3
	6	How do you create a list in R? a) list() b) c() c) vector() d) data .frame()	K2	CO3
4	7	What is the primary purpose of data visualization? a) To analyze data b) To communicate insights c) To identify patterns d) To predict outcomes	K1	CO4
	8	Which EDA technique is used to visualize the distribution of a single variable? a) Scatter plot b) Bar chart c) Histogram d) Box plot	K2	CO4
5	9	Which plot is used to compare categorical data across groups? a) Box plot b) Violin plot c) Bar chart d) Heat map	K1	CO5
	10	What is a common use for Hershey fonts? a) Body text in documents b) Headings and titles c) Plots and graphs d) Web design	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Identify the primary purpose of the R programming language.	K3	CO1
		(OR)		
	11.b.	List the Procedure to create a vector in R.		
2	12.a.	Identify the Importing data into R.	K3	CO2
		(OR)		
	12.b.	Analyze the implications of using c() with factors and numeric variables.		
3	13.a.	Examine the check if a package has built-in datasets.	K4	CO3
		(OR)		
	13.b.	Compare and contrast the performance of lists and data frames.		
4	14.a.	Create a bar chart to compare categorical data.	K3	CO4
		(OR)		
	14.b.	Classify the pie charts with other plot types.		
5	15.a.	Explain the role of clustering in multivariate data analysis.	K4	CO5
		(OR)		
	15.b.	Categorize the high-level plotting commands.		

SECTION -C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Compare and contrast R with other programming languages.	K4	CO2
2	17	Evaluate the impact of looping statements on code efficiency.	K3	CO2
3	18	Explain the list of structure on data analysis.	K4	CO3
4	19	Discuss the effectiveness of different plot customization techniques.	K6	CO4
5	20	Analyze the use of Hershey fonts in a real-world application.	K5	CO5

Z-Z-Z

END