AMRUTVAHINI COLLEGE OF ENGINEERING, SANGAMNER
DEPARTMENT OF INFORMATION TECHNOLOGY

Exam-:PRELIM	Subject: - Data Science and Visualization	Code:
Semester: I	Year: 2022-23	Marks:70
Class: TE IT	Pattern:-2020-21	Time: 2:30 Hour

Note: Solve Q1 or Q2. Solve Q3 or Q4 Solve Q5 or Q6 Solve Q7 or Q8

Q.No		Question	Marks	CO	BT level
Q1	A	Explain Basic Clustering Methods	5M	CO-3	3
	B	Describe the evaluation of association rules.	6M	CO-3	2
	C	Write short note on K-means and Apriori algorithm	6M	CO-3	2
		OR			
Q2	A	Write short note on linear regression method and classification.	5M	CO-3	3
	B	Explain Naive Bayes Method and its types	6M	CO-3	3
	C	Define Clustering and requirements for cluster analysis.	6M	CO-3	1
Q3	A	Define Entropy and explain use of entropy in decision tree.	5M	CO-4	1
	B	Explain Decision Tree and define Root, branch, leaf node	6M	CO-4	3
	C	Write short note Random forest.	6M	CO-4	2
		OR			
Q4	A	Write short note on neural network and explain architecture of Neural Network.	5M	CO-4	2
	B	Explain Back propagation with the help of diagram.	6M	CO-4	3
	C	Why to use Map-Reduce? Explain with word count and matrix multiplication	6M	CO-4	4
Q5	A	Define Data Visualization and its challenges	6M	CO-5	1
	B	Explain Dashboard with its types and evaluation	6M	CO-5	3
	C	Explain types of Data virtualization.	6M	CO-5	3
		OR			
Q6	A	Explain dashboard design and principles.	6M	CO-5	3

	B	Explain display media for dashboard.	6M	CO-5	3
	C	Explain Visualization Techniques with Plots, Graphs, Networks, Hierarchies, Reports.	6M	CO-5	3
Q7	A	Describe Need of data modeling.	6M	CO-6	3
	B	Explain Multidimensional data models.	6M	CO-6	3
	C	What is Mapping of high dimensional data into suitable visualization method.	6M	CO-6	2

OR

Q8	A	What is data modeling.	6M	CO-6	2
	B	Explain clustering study of High dimensional data.	6M	CO-6	3
	C	Explain Multidimensional data models.	6M	CO-6	3