

Satyug Darshan Institute of Technology, Faridabad		
	Programme: BCA-DS	Year:/Semester: 4th
	Subject Name : R-Programming	Subject Code: PEC-CS-D-501(I)
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Unit -1		
Short Questions		
S. No.	Questions	Bloom Taxonomy
1	Define Data mining? Explain about data mining features.	KL1
2	List features of warehousing which make it different from information processing	KL1
3	Define are outliers? List any two methods to deal with outliers.	KL1
	Define the following.	KL1
	(i) Database	KL1
	(ii) Data warehouse	KL1
	(iii) Data mining	KL1
4	Explain the type of data mining	KL2
5	Explain ETL process in data mining	KL2
6	Explain primary and secondary data	KL2
7	List the characteristic of Data warehousing.	KL1
8	List the type of data collection	KL1
Long Questions		
S. No.	Questions	Bloom Taxonomy
1	Define Data mining. Explain about data mining on what kind of data.	KL1
2	Explain is KDD. Explain about data mining as a step in the process of knowledge discovery.	KL1
3	Discuss how to classify data mining systems.	KL1
4	Discuss about Data Mining Task primitives with examples	KL2
5	Explain in detail about Data mining functionalities.	KL2
6	Describe about Major issues in Data mining.	KL2
7	Write in brief about Data cleaning.	KL3
8	Write short notes:	KL3
	(a) Data Integration	
	(b) Data Transformation methods	
9	Explain is Data reduction in detail.	KL2
10	Describe about Data discretization	KL1
11	Write about Dimensionality reduction methods	KL3
12	Compare OLTP and OLAP	KL3
13	Discuss the following a) Star schema b) snow flake schema c) Fact constellation schema	KL2

14	Explain about the Three-tier data warehouse architecture with a neat diagram	
15	Explain the following in OLAP a)Roll up operation b)Drill Down operation c)Slice operation d)Dice operation e)Pivot operation	KL2
Unit -2		
Short Questions		
S. No.	Questions	Bloom Taxonomy
1	Explain the advantages of FP-Growth algorithm?	KL1
2	Discuss the applications of association analysis.	KL1
3	Discuss how we overcome the draw backs of Apriori algorithm.	KL1
4	Explain feature extraction with its methods.	KL2
5	Explain feature Selection with its methods.	KL2
6	Differentiate between Batch Gradient Descent and Stochastic Gradient Des	KL3
7	Expalin techniques of feature extraction .	KL2
Long Questions		
S. No.	Questions	Bloom Taxonomy
1	What is a Data Frame? Write an R program to create a data frame using two given vectors. Also explain what kind of operations can be performed on a data frame?	KL3
2	How to create a list in R and demonstrate all the ways of accessing a list component.	KL2
3	How do you calculate the mean, median, and standard deviation of a numeric vector in R?	KL2
4	Explain the following functions: dnorm, qnorm, pnorm and rmorm.	KL4
5	How can you compute the correlation between two variables in R?	KL2
Unit -3		
Short Questions		
S. No.	Questions	Bloom Taxonomy
1	Describe conditional, posterior probability with example.	KL2
2	Describe Bayesian network.	KL2
3	Discuss the term bias and variance. Explain bias- variance trade-off .	KL1
4	Explain naïve bayesian classification.	KL2
5	Explain Classification and regression .	KL2
6	Explain support vectors in SVMs.	KL2
Long Questions		
S. No.	Questions	Bloom Taxonomy
1	Write a program in R to find the sum of all even numberm (5) from 1 to 100	KL2
2	Explain about sort() and order() functions with (5) examples.	KL2
3	Write an R script to calculate factorial of a number using for loop.	KL4
4	Write and explain about Classification by Back propagation Algorithm.	KL3
5	Discuss about Naïve Bayesian Classification.	KL2

6	Explain decision tree induction algorithm for classifying data tuples and with suitable example	KL2
7	Describe the data classification process with a neat diagram. How does the Naive Bayesian classification works? Explain.	KL2
8	Explain prediction. And also explain about Linear regression method.	KL2
9	Discuss about Accuracy and Error measures.	KL2
10	Write a note attribute selection measure.	KL2
11	Explain the key feature in genetic algorithm.	
Unit -4		
Short Questions		
S. No.	Questions	Bloom Taxonomy
1	List the type of Machine learning.	KL1
2	Discuss is Time-series data.	KL1
3	Discuss the different component of time-series.	KL1
4	Discuss single point and two-point crossover.	KL1
5	Discuss outliers.	KL1
6	Explain data streams with example.	KL2
7	Discuss mining time series data	KL1
Long Questions		
S. No.	Questions	Bloom Taxonomy
1	Discuss the taxonomy used in web mining.	KL1
2	Describe why concept hierarchies are useful in data mining.	KL2
3	Explain mining data streams and methodologies used for stream data processing.	KL2
4	Explain Bayesian belief network and conditional independence with example.	KL2
5	Explain social network Analysis in detail.	KL2
6	Describe class imbalance problem in data.	KL2
7	Explain graph mining and web mining.	KL2
8	Explain temporal mining and web mining.	KL4
9	Define Frequent pattern mining in stream data.	KL2
10	Explain Web Mining in detail.	KL2
11	Explain recent trends in Distributed Warehousing and Data Mining	KL2