

Name:	 UPES UNIVERSITY WITH A PURPOSE
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2021

Course: Data Mining and Business Intelligence	Semester: I
Program: M.Tech. (Computer Science and Engineering)	Time : 03 hrs.
Course Code: CSDA 7001	Max. Marks: 100
Instructions: Attempt all questions	

SECTION A

S. No.	Question	Marks	CO
Q 1	Compare OLTP and OLAP.	4	CO1
Q2	Write the following commands for HDFS: a) Create a directory. b) Copy a file from one folder to another	4	CO2
Q3	Give the major tasks for data preprocessing.	4	CO3
Q4	Name and describe the modules of Weka.	4	CO4
Q5	Suppose two stocks A and B have the following values in one week: (2, 5), (3, 8), (5, 10), (4, 11), (6, 14). If the stocks are affected by the same industry trends, explain the technique to decide will prices rise or fall together. Also, show the computation steps.	4	CO4

SECTION B

Q 6	Discuss the techniques to handle missing and noisy data.	10	CO1
Q 7	Explain the concept hierarchy generation for nominal data giving example	10	CO3
Q 8	Explicate the various rules of association rule mining based on the dimensions of data involved in the rule set.	10	CO4
Q 9	Write short notes on: a) Web analytics and web mining b) Hadoop architecture	10	CO4

SECTION-C

Q10	For the following given transaction data set, generate rules using Apriori Algorithm. Consider the values of support=33% and Confidence=50%.	20	CO3
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1	Milk	Egg	Bread	Butter
2	Milk	Butter	Egg	Ketchup
3	Bread	Butter	Ketchup	
4	Milk	Bread	Butter	
5	Bread	Butter	Cookies	
6	Milk	Bread	Butter	Cookies
7	Milk	Cookies		
8	Milk	Bread	Butter	
9	Bread	Butter	Egg	Cookies
10	Milk	Butter	Bread	
11	Milk	Bread	Butter	
12	Milk	Bread	Cookies	Ketchup

OR

For the following medical diagnosis data, create decision tree:

Sore Throat	Fever	Swollen Glands	Congestion	Headache	Diagnosis
Yes	Yes	Yes	Yes	Yes	Strep throat
No	No	No	Yes	Yes	Allergy
Yes	Yes	No	Yes	No	Cold
Yes	No	Yes	No	No	Strep throat
No	Yes	No	Yes	No	Cold
No	No	No	Yes	No	Allergy
No	No	Yes	No	No	Strep throat
Yes	No	No	Yes	Yes	Allergy
No	Yes	No	Yes	Yes	Cold
Yes	No	No	Yes	Yes	Cold

