



III SEMESTER MCA

END SEMESTER EXAMINATIONS NOV/DEC 2018

SUBJECT: DATA WAREHOUSING AND DATA MINING [MCA 5102]

REVISED CREDIT SYSTEM (22/11/2018)

Time: 3 Hours

MAX. MARKS: 50

Instructions to Candidates:

- Answer ALL FIVE FULL questions.
- Missing data may be suitable assumed.

1A.	Define data mining. Explain the sequence of steps in the Knowledge Discovery process with a neat diagram.	!
1B.	What are the various OLAP operations supported in data cubes? Give appropriate examples	
1C.	How can a nominal attribute be "value mapped" into a set of binary attributes? Give an example.	2
	Consider the table specified below, describing CARS and answer the following questions:	
	 Create a summary table, grouping by cylinders and display count of cars, average MPG, minimum weight and maximum displacement. 	
	ii. Create a contingency table with Number of Cylinders and Model Year.	
	iii. Find the correlation between Horse power and Weight and comment on the relationship between the variables.	
2A.	iv. Visualize the relationship between Horse power and Weight using a scatter plot.	

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	Names	Cylinders	Displa	cement	Horse- power	Weight	Acc	eleration	Model Year	Origin	MPG	
	Chevrolet	8	3	807	130	3504		12	1970	1	18	
	Plymouth Duster	6	1	198	95	2833		15.5	1978	1	20	
	Chevrolet Vega (SW)	4		140	72	2408		19	1971	1	22	
	Fiat 124B	4		88	76	2065		14.5	1971	2	30	
	Datsun 1200	4		72	69	1613		18		3	35	
	Buick Skylark 320	8		350	165	3693		11.5	1972		15	
	Ford Maverick	6		200	85	2587		16	1975		21	
	Volkswagen 1131	4	1000000	97	46	1835		20.5	1970		19	
	Toyota Corolla	4		71	65	1773		19	1973		31	
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	Given two data points X= (12, 4, 16, 7) and Y= (11, 5, 23, 5) .Represent them as a distance matrix using														nce		
3B.	i. Euclidean distance between the data points														3		
00.	ii. Manhattan distance between the data points.															•	
	iii. Minkowski distance between the data points using q = 3.																
3C.	Wh	at are	the a	dvant	ages	of the	k-mea	ns clu	stering t	technic	que?						
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	У	4	5	7	6	8	10	12	14	16	18	22	28	35	42		
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