

Semester: January 2024 – May 2024
Examination: In-Semester Examination

Maximum Marks: 30

Programme code: 1
Programme: B.Tech Computer Engineering

Name of the Constituent College:
K. J. Somaiya College of Engineering

Class: TY

Semester: VI (SVU 2020)

Name of the department:
COMP - Honours (DSA)

Course Code: 116h54C601

Name of the Course: Advanced Data Mining

Question No.			Max. Mark		
Q1	Trace the results of using the Apriori algorithm on the grocery store example with support threshold $s=33.34\%$ and confidence threshold $c=60\%$. Show the candidate and frequent itemsets for each database scan. Enumerate all the final frequent itemsets. Also indicate the association rules that are generated and highlight the strong ones, sort them by confidence.				
	Transaction ID	Items			
	T1	HotDogs, Buns, Ketchup	10		
	T2	HotDogs, Buns			
	Т3	HotDogs, Coke, Chips			
	T4	Chips, Coke			
	T5	Chips, Ketchup			
	Т6	HotDogs, Coke, Chips			
		OR			
	a) Compute DGI all calculationb) Compute DGI all calculation 1	window as show below. M estimated number of 1's the last k positions, k=5. Show is with explanation. M estimated number of 1's the last k positions, k=15. Show is with explanation.			
	At least one of size 8	Two of size 4 One of Two of size 2 size 1			

			gories of data mi	ning models? Explain or each category.	n at least two data	10	
Q3	Find the Clusters using Single link and Complete link hierarchical clustering methods. Use Euclidean distance and draw the dendogram.						
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				sing the Apriori algor		100.	
				HotDogs, Buns HotDogs, Coke, Chips, Coke			
				HotDogs, Buns HotDogs, Coke, Chips, Coke Chips, Ketchup HotDogs, Coke,			
				HotDogs, Buns HotDogs, Coke, Chips, Coke Chips, Ketchup HotDogs, Coke,			
				HotDogs, Buns HotDogs, Coke, Chips, Coke Chips, Ketchip HotDogs, Coke,			
	k=5. Show			HotDogs, Buns HotDogs, Coke Chips, Coke Chips, Ketchup HotDogs, Coke, window as show below			
				HotDogs, Buns HotDogs, Coke, Chips, Coke Chips, Ketchip HotDogs, Coke,			
				HotDogs, Buns HotDogs, Coke, Chips, Coke Chips, Ketchup HotDogs, Coke, window as show below S with explanation.			
		oositions, §		HotDogs, Buns HotDogs, Coke, Chips, Coke Chips, Ketchup HotDogs, Coke, window as show below it estimated number s with explanation. M estimated number			