B.E.(Computer Science & Engineering) Semester Seventh (C.B.S.)

Data Warehousing & Mining

P. Pages : 2 **KNT/KW/16/7487**

Time : Three Hours * 0 8 3 7 * Max. Marks : 80

Notes : 1. All questions carry marks as indicated.
2. Solve Question 1 OR Questions No. 2.
3. Solve Question 3 OR Questions No. 4.
4. Solve Question 5 OR Questions No. 6.
5. Solve Question 7 OR Questions No. 8.
6. Solve Question 9 OR Questions No. 10.
7. Solve Question 11 OR Questions No. 12.

1. a) State different criterion on which data mining systems can be categorized and write a note on each of them. **8**

b) Explain the major issues in Data Mining. **6**

OR

2. a) Explain major Tasks in Data preprocessing. **8**

b) Write short note on Discretization & concept Hierarchy Generation. **6**

3. a) Explain three tier Data warehousing architecture with diagram. **7**

b) Explain all OLAP operations in the multidimensional Data model. **6**

OR

4. a) What is Data cube computation? What are the efficient methods for Data cube computation. **7**

b) Differentiate between. **6**

i) Datamart & Data warehouse.

ii) OLTP & OLAP.

5. a) What is the process of generating association rules from frequent item sets? Explain with example? **7**

b) Explain various kinds of association rule mining. **6**

OR

6. a) Explain Apriori algorithm for frequent Item sets. **7**

b) Explain constraint – Based association mining in short. **6**

7.	a)	What is Back propagation? Explain classification by Back propagation with example.	**8**
	b)	Explain support vector machine in short.	**6**

OR

8.	a)	Why is Bayesian classification called naïve? Briefly outline the major ideas of naive Bayesian classification.	**7**
	b)	What are the different issues regarding classification & prediction.	**7**
9.	a)	What is clustering? Briefly describe the approach of clustering in partitioning method.	**7**
	b)	What do you mean by Hierarchical clustering approach? Explain agglomerative and divise Hierarchical clustering.	**6**

OR

10.	a)	Illustrate and explain Grid Based clustering.	**7**
	b)	Give any one application to explain clustering as major data mining function.	**6**
11.	a)	Explain constraint -Based sequential pattern mining for transactional databases.	**6**
	b)	Explain sequence pattern mining for Biological data in short.	**7**

OR

12.	a)	Write short note on.	
		i) Graph mining.	**4**
		ii) Social Network Analysis.	**4**
		iii) Mining Time-series Data.	**5**

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