

B.E. (Computer Technology) Eighth Semester (C.B.S.)  
**Data Warehousing & Mining**

P. Pages : 2

Time : Three Hours



**NRT/KS/19/3678**

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.
  8. Due credit will be given to neatness and adequate dimensions.
  9. Assume suitable data whenever necessary.
  10. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Name at least six characteristics features of data warehouse? Explain any three of them in detail. 7  
b) As a bank manager how would you decide whether to give loan to an applicant or not by using DM strategies. 7

**OR**

2. a) Differentiate between OLTP house and OLAP technology. 7  
b) What is the data Architecture of data operations? 7
3. a) What do you mean by Data mining? Explain KDD process. 8  
b) Describe the major issues of data mining. 5

**OR**

4. a) Write short note on. 7  
i) Data Reduction. ii) Data cleaning.  
iii) Data transformation.  
b) Draw and explain Architecture of data mining. 6
5. a) Differentiate between classification and prediction with suitable example. 7  
b) Write short note on Rule based classification with example. 7

**OR**

6. a) What is cluster Analysis? What are the requirements for cluster Analysis? 7  
b) Explain K-means clustering methods with suitable example. 7
7. a) Discuss the importance of Association rule mining. 5  
b) What do you mean by mining frequent patterns, Association and correlations? Elaborate by giving example. 8

**OR**

8. a) What do you mean by market basket Analysis and how it help in a supermarket. 8  
b) Define and describe improving efficiency of Apriori and FP growth algorithms. 5
9. Write short notes on. 13  
i) Text mining. ii) Web content mining.  
iii) Web structure mining. iv) Visual web data mining.

**OR**

10. a) What do you mean by web mining? Explain web usage mining. 6  
b) Differentiate between temporal and spatial data mining. 7
11. a) Describe in detail Big data technology and tools. 6  
b) What do you understand by Map-Reduce paradigm and the Hadoop. 7

**OR**

12. a) List the features of HDFS. Also explain the significance of secondary name node. 7  
b) What is big data analytics? What are the characteristics of big data? Also explain application areas of big data analytics? 6

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