

B.E. (Information Technology) Seventh Semester (CBS)
Data Warehousing & Mining

P. Pages : 2

Time : Three Hours



AHK/KW/19/2346

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. Illustrate your answers whenever necessary with the help of neat sketches.

1. a) Define Decision Support System (DSS). What are the failures of pass-DSS. 6
b) Explain three tier architecture of Data warehouse with neat sketch. 7

OR

2. a) Differentiate between 6
i) Data warehouse and Data Mart.
ii) Operational Database system and Decision support system.
b) What is Data Mart? Give it's types and How it differs from data warehouse. 7
3. a) Find 6
i) Mean
ii) Standard deviation.
iii) Min-Max normalization.
iv) Z-score normalization
For the following data-set
30, 36, 47, 52, 52, 56, 60, 70, 70, 110.
b) What is data reduction? Explain different methods of data reduction. 7

OR

4. a) How data cleaning can be handled in preprocessing? 6
b) What are the major tasks of Data preprocessing? Explain in brief. 7
5. a) Describe STAR and SNOWFLAKE Schema with example. 7
b) Differentiate between OLAP and OLTP. 7

OR

6. a) What is data cube? Explain the operations of OLAP with example. 7

- b) Write any seven characteristics of OLAP. 7
7. a) Describe the classification of Data mining system. 7
- b) What are the various issues in Data mining. 6
- OR**
8. a) Explain architecture of data Mining-System. 7
- b) Differentiate between clustering and classification. 6
9. a) Explain Market basket analysis. 6
- b) Explain how frequent item set are generated using Apriori algorithm. 7
- OR**
10. a) Explain various kinds of association Rule mining. 7
- b) Explain Advantages and disadvantages of FP-growth tree. 6
11. a) Describe architecture of Hadoop ecosystem. 7
- b) Draw and explain map reduction technique with example. 7
- OR**
12. a) Explain two Approaches in development of BI system. 7
- b) Write short note on BI frame work 2020. 7
