

10. (A) Explain Apriori algorithm for frequent item sets using candidate generation. 9
 (B) Explain mining multilevel association rules from transaction databases. 4
11. (A) Draw and explain map reduce technique with example. 10
 (B) Write a note on characteristics of Big data. 4

OR

12. (A) Describe architecture of Hadoop. Also give its challenges and applications. 10
 (B) Write a note on important factors of BI. 4

Faculty of Engineering & Technology
Seventh Semester B.E. (Infor. Tech.) (C.B.S.) Examination
DATA WAREHOUSING & MINING

Time—Three Hours] [Maximum Marks—80

INSTRUCTIONS TO CANDIDATES

- (1) All questions carry marks as indicated.
 (2) Solve Question No. **1 OR** Question No. **2**.
 (3) Solve Question No. **3 OR** Question No. **4**.
 (4) Solve Question No. **5 OR** Question No. **6**.
 (5) Solve Question No. **7 OR** Question No. **8**.
 (6) Solve Question No. **9 OR** Question No. **10**.
 (7) Solve Question No. **11 OR** Question No. **12**.
 (8) Assume suitable data wherever necessary.
1. (A) Explain three tier architecture of data warehouse with neat sketch. 7
 (B) Describe the failure of past decision support system. 6

OR

2. (A) What is data mart ? How it differs from data warehouse ?
7
(B) Explain life-cycle of data warehouse with neat sketch.
6
3. (A) Summarize the data preprocessing steps in brief. 5
(B) What is data reduction ? Explain different methods of data reduction. 8

OR

4. (A) What is data transformation ? Explain the different methods of transformation. 9
(B) What are different measures of data dispersion ?
4
5. (A) Describe the STAR and SNOWFLAKE scheme with neat sketch. 7
(B) Explain various types of OLAP operations with example. 7

OR

6. (A) Discuss the architecture of HOLAP in detail with the help of suitable diagram. 4
(B) Write a short note on web based OLAP. 4
(C) What is the difference between OLAP & OLTP ?
6
7. (A) Explain the architecture of data mining with neat diagram. 9
(B) List out the data mining issues. 4

OR

8. (A) Describe the classification of data mining systems. 5
(B) Explain the application of data mining in (any **TWO**) :
(i) Financial Institute
(ii) Retail Industry
(iii) Telecommunication Industry. 8
9. (A) Explain market basket analysis in detail. 7
(B) Write a short note on association rule mining. 6

OR