

Data Warehousing & Mining

P. Pages : 2

Time : Three Hours

**NRJ/KW/17/4637**

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) Explain three tier architecture of data warehouse with neat diagram. 7
- b) What do you mean by strategic Information Explain the factor that escalated the need for strategic information. 6

OR

2. a) Explain life cycle of Data Ware House with neat sketch. 7
- b) Differentiate between. 6
 - i) Data Ware House and Data Mart.
 - ii) Operational DB system and Decision support system.
3. a) Summarize the data preprocessing steps in brief. 7
- b) What is data reduction? Explain different methods of data reduction. 6

OR

4. a) Explain MIN-MAX normalization and Z-score normalization. 6
- b) What is Data cleaning? Explain different methods of Data cleaning. 7
5. a) What is OLAP? Discuss basic operations of OLAP with example. 8
- b) Define the following. 6
 - i) ROLAP ii) MOLAP iii) HOLAP

OR

6. a) Differentiate between OLTP and OLAP. 6
- b) Describe STAR and SNOWFLAKE scheme with example. 8
7. a) Draw and explain Knowledge Discovery process. 8
- b) What are the various issues in Data mining. 6

OR

8. a) Describe the classification of Data mining systems. 8
- b) Explain the application of Data Mining in. 6
- i) Market Research.
- ii) Healthcare Industry.
9. a) Explain how frequent Itemsets are generated using A priori Algorithm. 7
- b) Define following Terms. 6
- i) Frequent Itemset.
- ii) Closed Itemset.
- iii) Association Rules.

OR

10. a) Explain market Basket Analysis in Detail. 7
- b) Explain How support and confidence is used to find out Association rules. 6
11. a) Define Big Data. State its challenges. 5
- b) Describe the architectural component of Hadoop ecosystem. 8

OR

12. a) Draw and explain map reduction technique with Example. 10
- b) Write a note on important factors of BI. 3
