

**Data Warehousing & Mining**

P. Pages : 2

Time : Three Hours



**NKT/KS/17/7498**

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) What do you mean by strategic Information? Explain the factor that escalated the need for strategic information. **7**  
b) Explain Data Warehousing life cycle with neat sketch. **6**

**OR**

2. a) Explain the components of Data Warehousing in detail. **9**  
b) What is Metadata? State and explain its categories. **4**
3. a) What is the need of Data preprocessing. Explain in brief? **6**  
b) What is data transformation? Explain different methods of data transformation by Normalization. **8**

**OR**

4. a) What is Data Integration? Explain correlation analysis for Numeric & Nominal Data. **8**  
b) Write short note on Discretization and concept Hierarchy Generation. **6**
5. a) What is OLAP? Discuss basic operations of OLAP with example. **8**  
b) Define the following with example. **6**  
i) ROLAP ii) MOLAP  
iii) HOLAP

**OR**

6. a) Differentiate between OLAP and OLTP. **6**  
b) Explain OLAP characteristics along with major features and functions. **8**
7. a) List and explain the major issues of data mining. **7**  
b) Describe the classification of Data Mining System. **6**

**OR**

8. a) What are several stages involved in knowledge data discovery process. **6**
- b) Write short note on:
- i) Data Mining in Retail Industry. **3**
- ii) Data Mining functionalities. **4**
9. a) Explain various kinds of association rule mining. **6**
- b) Explain Market Basket Analysis with example. **7**

**OR**

10. a) Define the following with example. **6**
- i) Frequent Item Sets.
- ii) Closed Item Sets.
- iii) Association rules.
- b) Explain Apriori algorithm for Frequent Item Sets. **7**
11. a) What is BI? Explain important factors of BI. **6**
- b) Explain the core components of Hadoop. **7**

**OR**

12. a) Draw and explain BI architecture. **8**
- b) What is Big-data? What are the different characteristics of Big data. **5**

\*\*\*\*\*