Roll No. .....

Printed Pages : 2

36158

BT-6/M–18

DATA WAREHOUSE AND DATA MINING

Paper–IT-310N

Time allowed : 3 hours] *[Maximum marks : 75*

Note : *Student will be required to attempt five questions in all, selecting at least one question from each unit.*

Unit–I

1. (a) What is Data warehouse ? Why data warehousing is important for decision support ? 5

   (b) Present a diagrammatic representation of a typical architecture and main components of a data warehouse. 10

2. (a) Discuss various principles of data warehousing required to design a data warehouse. 5

   (b) What is Multidimensional Data Model ? Discuss the types of attributes and tables used in a multidimensional data model. Illustrate with the help of an example. 10

Unit–2

3. (a) Discuss various issues in designing a business information warehouse. 10

   (b) How is data warehousing technology related to data mining technology ? 5

4. (a) Explain various obstacles in the implementation of a data warehouse. 8

   (b) How can you justify the implementation of a data warehouse as a requirement for organization ?

Unit–3

5. (a) "Data Mining is a multi-disciplinary field." Discuss. 5

   (b) What is difference between data mining and a normal query environment ? What can data mining do that SQL can't? Discuss. 5

   (c) What is the role of data mining in KDD process ? 5

6. (a) "All patterns are not interesting." Comment. What makes a pattern interesting ? 6

   (b) Explain the development of data cube technology. 9

Unit–4

7. What do you mean by 'Data Pre-Processing' ? Why it is necessary ? Explain the methods for data integration and transformation. 15

8. (a) What do you understand by 'Association Rule Mining' in transactional databases ? 5

   (b) Write short notes on the following :

   (i) Analytical characterization.

   (ii) Constraint based association. 2×5=10