Exam. Code : 206703

Subject Code : 4692

M.Sc. Computer Science 3rd Semester

DATA MINING AND WAREHOUSING

Paper : MCS-303

Time Allowed—3 Hours]   [Maximum Marks—100

Note :— Attempt **FIVE** questions, selecting at least **ONE** question from each Section. All questions carry equal marks. The **FIFTH** question may be attempted from any Section.

SECTION—A

1. What is Data Warehouse ? What are its different models ? Why we need a separate Data Warehouse ?
                                                                    20

2. (a) Difference between Operational Database Systems and Data Warehousing.   12

    (b) Explain Multidimensional Data Models in detail.
                                                                    8

SECTION—B

3. Discuss all steps for designing and construction of Data Warehouse in detail.   20

4. (a) Explain different types of OLAP servers. 12

(b) Differentiate between Online Transaction Processing and Online Analytical Processing.

8

SECTION—C

5. (a) Draw and explain 4-dimensional data cube with an example. 10

(b) Describe Data Warehouse Back-End Tools and Utilities in detail. 10

6. Discuss Indexing OLAP Data. Explain Bitmap Index and Join Index in detail. 20

SECTION—D

7. What do you mean by Data Mining ? Explain how one can use Predictive Modeling for data mining.

20

8. (a) Explain Data Mining Query Languages with syntax/query of at least one task. 10

(b) What are current trends in data mining ? Explain at least two application areas. 10