

Time: 3 Hours

DECEMBER 2015

Max. Marks: 100

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE:

- Question 1 is compulsory and carries 28 marks. Answer any FOUR questions from the rest. Marks are indicated against each question.
- Parts of a question should be answered at the same place.

- Q.1**
- Briefly explain “data granularity” with the help of example
 - Differentiate between Data Warehouse and Data Mart.
 - List the applications of Data Mining.
 - Define a Data warehouse. Compare OLTP and OLAP systems.
 - Discuss OLAP operations in the multidimensional data model.
 - Explain different indexing techniques for OLTP data
 - Explain different types of OLAP servers (7×4)
- Q.2**
- What are the various Star Schema Keys? Explain with the help of an example. (9)
 - Explain Data cleaning, Data Integration and Data transformation. (9)
- Q.3**
- What do you mean by data reduction? What are the strategies of the data reduction? (9)
 - Define Data mining. Draw and explain the architecture of typical data mining system. (9)
- Q.4**
- What is ETL (Extraction /Transformation /Loading) process? Discuss in brief. (9)
 - How does data mining relate to information processing and online analytical processing? (9)
- Q.5**
- What is metadata? Explain metadata repository. (9)
 - Explain how Rule-based classification is used in data mining? (9)
- Q.6**
- What is cluster analysis? Explain major categorization of clustering Methods. (9)
 - How is data warehouse different from database? Justify your answer. (9)
- Q.7** Write short note on : (3×6)
- Data Mining for the Retail Industry
 - Statistical Data Mining
 - Constraint Based Association mining