Printed Pages : 4

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 214431

Roll No. [ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

MCA
(SEM. IV) THEORY EXAM. 2014-15
DATA WAREHOUSING AND MINING

Time : 3 Hours]   [Total Marks : 100

Note : Attempt the questions as indicated.

Q1. Attempt any *four* questions from the following :   5x4=20

(a)   How is a data warehouse different from a database? How they are similar?

(b)   Explain the different schemas for Multidimensional Data-bases.

(c)   What is Data Mart? List the advantages of Data Mart.

(d) What are the areas in which data warehouses are used in present and in future?

(e) Explain the client server computing model. Also list the advantages of client server computing model.

(f) Explain Distributed DBMS and its advantages.

Q2. Attempt any *four* questions from the following : 5x4=20

(a) Explain 3-Tier Data warehouse architecture with clean figure.

(b) List OLAP operations in Multidimensional Data model and explain with an example.

(c) Define Association Rule Mining. How market analysis forms the Association rules? Discuss the basic concepts.

(d) How does clustering differ from classification?

(e) What are the fields in which clustering techniques are used?

(f) Define Artificial Intelligence and its areas of application.

Q3. Attempt any *two* questions from the following :   10x2=20

(a) Explain Bayesian classification and rule based classification. Give an example for any one classification and explain in detail.

(b) Differentiate between OLAP and OLTP.

(c) Describe neural network techniques for data mining. What are the major difficulties in using these techniques?

Q4. Attempt any *two* questions from the following :   10x2=20

(a) What are the various issues in data mining? Explain.

(b) What is decision tree? Explain how classification is done using decision tree induction.

(c) What is KDD process? Explain each of its steps in detail.

Q5. Attempt any two of the following :   10x2=20

(a) Discuss the genetic algorithms as data mining techniques. What are the main difficulties in using these techniques?

(b) Write the differences between the Nearest Neighbour Data mining techniques and clustering.

(c) Write short notes on any *three* the following

   i) Web Data Mining

   ii) Multi Media database

   iii) Data Visualization

   iv) Application of Data Mining

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