Printed Pages : 3

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NMCA-E13

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

PAPER ID : 214431

Roll No. ☐☐☐☐☐☐☐☐☐☐

M.C.A.

(SEM-IV) THEORY EXAMINATION 2014-15

DATA WAREHOUSING & MINING

Time : 3 Hours]   *[Total Marks : 100*

Note: Attempt <u>all</u> questions. All questions carry equal marks.

1. Attempt <u>any four</u> parts   5×4=20

   a) What is Data Warehouse? Explain the two tier architecture of Data Warehouse.

   b) Explain Data Marts withits advantages.

   c) Draw a three tiered second generation client/server computing model. What are the main functions of server?

   d) What do you mean by data cleaning? Describe important types of data cleaning approaches.

e) Explain Clustering and Regression with example.

2. Attempt any four parts 5×4=20

a) Explain Data Cube aggregation model.

b) Describe various phases of data transformation. List the important types of transformation engines and explain any one of them.

c) Explain these terms.

   i) MOLAP

   ii) RLOP

d) What is Z-score normalization?

e) What is the role of Statistics in Data Mining.

3. Attempt any two parts : 10×2=20

a) Why business organizations consider data warehousing as a critical need? Write and explain various phases involved in building of data warehouse.

b) What is decision tree? Explain it with an example. Describe the ID3 decision tree algorithm in brief.

c) Write and briefly explain twelve guidelines for OLAP selection.

4. Attempt any two parts : 10×2=20

a) What is neural network? How does this make prediction? Describe the back propagation in neural network.

b) Compare hierarchical clustering and non-hiearchial clustering algorithms. Explain the advantages and disadvantages of them over each other.

c) Distinguish between the Supervised & Un-supervised Learning with an example.

5. Describe any two parts: 10×2=20

a) Multimedia Databases.

b) Role of genetic algorithm in data mining.

c) Web Data mining.

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