Roll No 09oBCA121017

MCA - 501

MCA V Semester

Examination, December 2014

Data Warehousing and Mining

Time : Three Hours

Maximum Marks : 70

Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.

ii) All parts of each question are to be attempted at one place.

iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.

iv) Except numericals, Derivation, Design and Drawing etc.

Unit - I

1. a) What is Data Mining?
   b) Discuss various Data mining primitives.
   c) What are the steps of Data mining in the process of knowledge discovery?
   d) Define data warehousing? Also explain how data warehouse different from a database.

Or

Discuss major issues in Data mining.

Unit - II

2. a) Discuss issues related with data integration.
   b) Explain various OLAP operations.
   c) What are the differences between enterprise warehouse and virtual ware house?
   d) Briefly compare the snowflake schema fact constellation schema and star schema.

Or

Give a recommended approach for Data Warehouse development. Also explain how does the data mining and data warehouse work together?

Unit - III

3. a) What do you mean decision tree induction?
   b) Discuss the different steps in preprocessing data.
   c) Explain concept hierarchy with the help of suitable example.
   d) What is meant by dimensionality reduction? Discuss any two methods.

Or

Explain the following in detail:

i) Data integration and transformation
ii) Data reduction
iii) Discretization

Unit - IV

4. a) What do you understand by association rule mining?
   b) What is constraint based mining illustrate with an example.
   c) How can mine multilevel association rules efficiently using concept hierarchy.
   d) Discuss the single dimensional Boolean association rule mining for transactional database.

Or

Write and explain the algorithm for mining frequent itemsets without candidate generation.

Unit - V

5. a) What is outlier analysis? Explain.
   b) What do you meant by supervise learning? Give an example.
   c) Explain the working of K-mean algorithm for clustering.
   d) What is classification rule mining? Write and explain decision tree induction algorithm for classification.

Or

Explain the various factors to be considered when comparing classification methods.

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