Reg. No. : | | | | | | | | | | | |

M 7915

M.C.A. DEGREE EXAMINATION, MAY/JUNE 2009.

Elective

MC 1630 — DATA WAREHOUSING AND DATA MINING

(Regulation 2005)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Distinguish between clustering and classification.

2. What are the steps in Data mining?

3. Explain the purpose of data reduction.

4. Differentiate descriptive data mining from predictive data mining.

5. List criteria for comparing classification and prediction methods.

6. List the general features of partitioning methods in clustering.

7. What is a data cube?

8. What is Data mart?

9. What is a spatial database?

10. What is text mining?

PART B — (5 × 16 = 80 marks)

11. (a) Discuss the following :

(i) Multimedia data mining. (4)

(ii) Classification of Data Mining Systems according to kinds of knowledge mined. (4)

(iii) Performance issues in Data Mining. (8)

Or

(b) (i) 'Data mining is a multi-disciplinary field'. Justify. (6)

(ii) What are the major components of a Data Mining System? Explain the role of each component. (10)

12. (a) Discuss the following :

(i) Basic methods for data cleaning. (8)

(ii) Data transformation. (8)

Or

(b) (i) With suitable example explain Attribute - Oriented Induction. (6)

(ii) Define the terms 'support' and 'confidence' in association rule mining. (2)

(iii) With the help of a simple example, explain the process of association rule mining. (8)

13. (a) (i) Explain tree pruning. (4)

(ii) Explain the working of Bayesian classifier. (12)

Or

(b) (i) With suitable example, explain k-Medoids algorithm. (10)

(ii) What are the two types of hierarchical clustering methods? Explain. (6)

14. (a) (i) Distinguish between OLTP and OLAP. (5)

(ii) Explain the need for Data Warehouse. (5)

(iii) Discuss the process of Data Warehouse design. (6)

Or

(b) (i) With suitable example explain concept hierarchies. (4)

(ii) Discuss the various OLAP operations in the Multidimensional Data Model. (12)

15. (a) (i) Explain in detail any one application of data mining. (8)

(ii) Discuss social impacts of Data Mining. (8)

Or

(b) (i) Give a short account of mining the WWW. (8)

(ii) Discuss the important features of DB Miner. (8)
