

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, FEBRUARY 2009

Computer Science

CS 305 D—DATA WAREHOUSING AND MINING

(2005 admission onwards)

Time : Three Hours

Maximum : 80 Marks

Part A

*Answer any **five** questions.
Each question carries 8 marks.*

1. Explain the three possible approaches to Data Warehousing.
2. (a) What is R-OLAP ? How is it different from Multidimensional OLAP ?
(5 marks)
(b) List the functional characteristics of MD-OLAP. (3 marks)
3. Data Warehouse is said to be *Subject oriented, time-varying and non-volatile*. Explain.
4. (a) What is Data Mining ? (3 marks)
(b) Explain *Data Characterization and Data Discrimination*. (5 marks)
5. (a) Explain "concept description". (4 marks)
(b) Write short note on "attribute oriented distribution". (4 marks)
6. Give a brief account of "Mining descriptive Statistical Measures in Large Databases".
7. Discuss Data Mining System Products and Research.
(5 x 8 = 40 marks)

Part B

*Answer any **four** questions.
Each question carries 10 marks.*

8. (a) Discuss the different Dimensions of a Data Warehouse Environment Architecture.
(b) Discuss objectives and base techniques of requirements modeling.
(5 + 5 = 10 marks)
9. (a) Explain Base techniques for Temporal Data Modeling.
(b) Discuss Multidimensional Data Analysis. (5 + 5 = 10 marks)

Turn over

10. (a) What is Data Cleaning ?
(b) With example explain Snowflake and Star models.
(c) Explain the steps needed for a successful Data Mining run.

(2 + 5 + 3 = 10 marks)

11. (a) Discuss the classification of Data Mining systems.
(b) Explain "Sequential Pattern Detection".

(7 + 3 = 10 marks)

12. Discuss in detail "Analysis of Attribute Relevance".

13. Discuss trends in Data Mining.

(4 x 10 = 40 marks)