Printed Pages : 2   CS – 031

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

PAPER ID : 1042   Roll No. [ ][ ][ ][ ][ ][ ][ ][ ]

B. Tech.

(SEM. VIII) EXAMINATION, 2006-07

DATA MINING & WAREHOUSING

Time : 3 Hours]   [Total Marks : 100

Note :   Attempt all the questions.

1   Attempt any **four** parts of the questions :
  (a)   What is data warehouse? What are the goals of a data warehouse?
  (b)   What do you mean by Granularity? What is partitioning?
  (c)   Compare and contrast OLTP and data warehouse.
  (d)   How are data marts different from date warehouse? What are the different types of data marts?
  (e)   Data consolidation is data modelling activity. This statement is true or not. Justify.
  (f)   Explain cluster systems with suitable example.

2   Attempt any **two** of the following :
  (a)   What are the different components of a data warehouse? Explain with the help of a diagram.
  (b)   What is metadata and why is it important? Discuss the multidimensional data.

(c) How mapping the data warehouse to a multiprocessor architecture is done?

3 Attempt any **two** of the following :

(a) What is on-line transaction processing (OLTP)? Describe the evolution of OLTP. What are the critical features of OLTP systems?

(b) Describe different Reporting and Query Tools and Applications.

(c) How Artificial Intelligence is used in Data warehousing. Explain with suitable examples.

4 Attempt any **four** of the following :

(a) What is data mining? Describe the evolution of data mining.

(b) What is difference between verification and discovery?

(c) What are advantages of data mining? Explain.

(d) What are non linear regression method? Give two examples.

(e) What are technologies used in data mining?

(f) What do you mean by decision trees? Explain.

5 Attempt any **two** of the following :

(a) Give E.F. Codd's 12 Guidelines for OLAP.

(b) What are genetic algorithms? Explain taking one algorithm.

(c) Discuss Data visualization with reference to Data Mining.