

Please write your Exam Roll No.)

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# END TERM EXAMINATION

FOURTH SEMESTER [MCA]-MAY-2008

**Paper Code:MCA-202**  
**Paper Id:44202**

**Subject:Data Warehousing and Data Mining**  
**(Batch:2004-2006)**

**Time : 3 Hours**

**Maximum Marks : 60**

**NOTE: Attempt any five questions:-**

- Q1. Attempt **any two** of the following:
- (a) What is a data warehouse? Explain different characteristics of a data warehouse? (6)
  - (b) Data warehouse is the only viable means to resolve the information crisis and to provide strategic information. List four reasons to support this and explain them. (6)
  - (c) Describe five differences between operational database and data warehouse. (6)
- Q2. (a) Explain different types of data used in the data warehouse. (6)
- (b) What do you mean by strategic information? What are different characteristics of strategic information? For a commercial bank, name five types of strategic information. (6)
- Q3. (a) Explain past decision support-system. Why the entire past were attempts by IT to provide strategic information failed? (6)
- (b) Explain information package diagram with suitable example? (6)
- Q4. (a) You are the vice president of marketing for a nation wide appliance manufacturer with three production plants. Describe the three different ways you will tend to analyze your sales. What are the business dimensions for your analysis? Make a star schema. (8)
- (b) A dimension table is wide. A fact table is deep. Explain. (4)
- Q5. (a) Describe slowly changing dimensions. What are the three types? Explain each type with suitable example. (6)
- (b) What is factless fact table? Design a star schema with a factless fact table to track patients in a hospital by diagnostic procedure and time. (6)
- Q6. (a) Explain different OLAP operations with suitable example? (6)
- (b) What are the essential differences between the MOLAP and ROLAP models? Also list few similarities? (6)
- Q7. Attempt **any two** of the following:-
- (a) Discuss the role of data mining in data warehousing. (6)
  - (b) Explain different data mining activities in details? (6)
  - (c) How is data mining different from OLAP? Explain briefly. (6)
- Q8. Write short notes on **any three**:- (4x3=12)
- (a) Decision Tree
  - (b) Snowflake Schema
  - (c) Dimensional Modeling
  - (d) Aggregate fact tables