Roll No.....

Total No. of Questions : 09] [Total No. of Pages : 02

Paper ID [MC401]

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MCA (Sem.- 4th) MAY-2008

RDBMS - II (MCA-401)(N2)

Time : 03 Hours Maximum Marks : 60

Instruction to Candidates:

1) Attempt any one question from each sections **A**, **B**, **C** and **D**.
2) Section - E is **Compulsory**.

Section - A

(1 × 10 = 10)

Q1) a) What is data abstraction? Explain how program data independence differs from program operation independence.

b) State and explain the design and implementation issues for active databases.

Q2) a) Discuss the importance of requirements collection and analysis phase.

b) How would a view integration tool work? Design a sample modular architecture for such a tool.

Section - B

(1 × 10 = 10)

Q3) a) Discuss timestamp ordering protocol for concurrency control. How does strict timestamp ordering differ from basic timestamp ordering?

b) What is multiple granularity locking? Under what circumstances is it used?

Q4) a) Explain MPMD Multiple-site processing, Multiple site data.

b) Explain Homogeneous and Heterogeneous DBMS.

Section - C

(1 × 10 = 10)

Q5) a) What is Client/Server architecture? Explain.

b) Explain the implementation issues of client/server architecture.

Q6) a) Explain Two-Tier client/server architecture for DBMS.

b) Explain the different forces that drive client/server architecture.

Section - D

(1 × 10 = 10)

Q7) a) What considerations play a major role in the design of a warehouse?

b) List the open issues and research problems in data warehousing.

Q8) a) Define and explain the term OLAP (Online Analytical Processing).

b) Write a short note on data mining.

Section - E

(10 × 2 = 20)

Q9) a) What is database life cycle?

b) What is schema?

c) What is logical data independence?

d) What is MPSB?

e) What is client?

f) What is super key?

g) What is check constraint?

h) What is the need of concurrency control?

i) What is data mining?

j) What are distributed databases?