

Roll No.

67064

MCA Regular (2nd Sem.) w. e. f.

Examination – May, 2012

DATA BASE MANAGEMENT SYSTEMS

Paper : MCA-204

Time : Three hours]

[Maximum Marks : 80

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

UNIT – I

1. Differentiate :

- (i) Database & File Processing System,
- (ii) Procedural & Non-procedural DML,
- (iii) Two tier & three tier client server architecture.

2. (a) Explain different types of constraints on relationship types.

- (b) What is recursive relationship type ? Explain with example.

UNIT – II

- 3. (a) Discuss entity integrity and referential integrity constraint. Why is each considered important ?
 - (b) What is a view and how is it defined ? What are the problems that may arise when a view is updated ?
- 4. What is relation calculus ? Explain its different types and how an expression is said to be safe in relation calculus.

UNIT – III

- 5. Describe the six clauses in the syntax of SQL query and specify what type of constructs can be described in each clauses ? And which of six clauses are required and which are optional ?
- 6. (a) Explain the properties of decomposition. Why are these so important ?
 - (b) Define fourth normal form. When is it violated ? Why is it useful ?

UNIT – IV

- 7. (a) What is Schedule ? Define the concept of recoverable, cascadeless and strict schedule and compare these in terms of recoverability.
 - (b) Write short note on transaction support in SQL.

8. Write notes on the following :

- (i) Conflict equivalence,
 - (ii) Lock conversion,
 - (iii) Concurrency without locking,
 - (iv) Deadlock prevention.
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