

May 2005

Bachelor of Computer Application (BCA) Examination
IV Semester

Data Base Management System

Time 3 Hours]

[Max marks50]

Note: Attempt any five questions. Each question carries equal marks.

- 1 (a) Define 3 Level Architecture of DBMS
(b) Define Schema and Sub schema.
2. Draw E-R Diagram for a Departmental Store after determining the entities of interest and the relationship that exist between these entities. Also construct a tabular representation of the entities and the relationship. Are there any attributes (or collection of attributes) in each entity set that would be uniquely identify and instance of the entity set.
- 3 (a) Explain the multivalued dependency with the help of example
(b) What is triggers? Explain the function of cursor .
- 4 Consider the following relational database, where the primary are underlined give an expression in the relational algebra of the following queries :

Relation database:

Employee (Person-name, Street, City)

Works (Person-name, Company-name, Salary)

Company (Company-name, City)

Manager (Person-name, Manager-name)

Queries:

- (a) Find the Name of all employees who work for First Bank Corporation
- (b) Find the Name and City of residence of all employee who work for First bank Corporation and earn more than 10,000/-
- (c) Find the name of all employee who earn more than every employee of small bank corporation
- (d) Find the name of all employee who live in same city as the company for which they work.
- 5 Explain the following terms:
(a) Joint Dependency, (b) Super key, (c) Natural Join, (d) Recovery.
- 6 Explain any two:
(a) Codd's 12 Rules, (b) Function of DBA, (c) Encryption Technique.

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