M. B. A.

(SEM. III) EXAMINATION, 2008-09
DATABASE MANAGEMENT SYSTEM

Time : 3 Hours]   *[Total Marks : 100*

Note :   (i)   *Attempt* **all** *questions.*

(ii)   *All questions carry* **equal** *marks.*

(iii)   *Be precise in your answer.*

(iv)   **No** *second answer book will be provided.*

1   Attempt any **two** parts of the following :   10×2=20

(a)   Differentiate between a flat file system and a database. Also describe the components of DBMS.

(b)   Define the following :

(i)   Network Model

(ii)   Data independence.

(iii)   Sematic Data Model

(iv)   Advantage of DBMS.

(c)   (i)   What is the difference between an entity type and an entity instance ? Explain with example.

(ii) What do you mean by weak entity ? How are they represented in GR-diagram ? - Explain.

2 Attempt any **two** parts of the following : 10×2=20

(a) (i) What is the difference between clustered index and non-clustered index ?

(ii) Write short note on Hashing

(b) Explain the following in brief with suitable example :

(i) Relational Data Model

(ii) Triple Calculus Systems.

(c) Discuss various relational algebra operations with example.

3 Attempt any **two** parts of the following : 10×2=20

(a) Explain the purpose of Normalization and state the First, Second and Third Normal forms with example.

(b) (i) Explain Boyce Codd normal form with example.

(ii) Describe Integrity constraints in brief.

(c) Is JOIN an essential operation ? Can it be defined using the five primitive operations ? Explain with example.

4 Attempt any **two** parts of the following : 10×2=20

(a) If Employee E# = 156 and E# = 217 have changed their telephone numbers, write SQL statements in ORACLE to update the status in the Employee table.

(b) Why is a cursor used ? What is the difference between an implicit and an explicit cursor ?

(c) Write short note on Client / Server database environment.

5 Describe any **two** parts of the following with example : 10×2=20

(a) Object Oriented Data Model

(b) Data Warehousing

(c) Distributed Database.

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