

# END TERM EXAMINATION

SECOND SEMESTER [BBA/BBA(TTM)/BBA(B&I)]- MAY-JUNE 2009

Paper Code: BBA/BBA(TTM)/BBA(B&I)

Subject: Database Management System

Paper ID: 17108/ 50108/ 18108

(Batch: 2005-2008)

Time : 3 Hours

Maximum Marks :75

Note: Q.1 is compulsory. Attempt any 1 question from each unit.

- Q1. a. Explain Database end users. 3  
b. What is entity? Explain strong and weak entity. 3  
c. Define Insert, Update and Delete anomalies. 3  
d. Define aggregation and generalization. 3  
e. What do you mean by data independence? Explain physical and logical data independence 3

## Unit - I

- Q2. a. List the advantage of Database Management System over Traditional File Based System . 8  
b. What is data abstraction? Explain all three level of abstraction. 7

## OR

- Q3. a. Explain Different data models with their relative advantage. 8  
b. Who is Database Administrator (DBA)? Explain the role and responsibilities of DBA. 7

## Unit - II

- Q4. a. Explain 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Normal forms with example. Draw an E-R diagram for college database, also find out entities, their attributes and relationship among them, whose points are given below 10  
i. One student can opt one course but one course can opt by many students.  
ii. One course can be taught by many faculties and one faculty can taught many courses.  
iii. In a department there can be any number of faculty members but each faculty member belongs to one department only.  
iv. Many students can enrolled in one department but a student can not enrolled in more then one department.  
v. A student can have more then one local guardian but one guardian is assumed to be relate to one student only  
b. What is an attribute? Explain types of attribute used in E-R model with example. 5

## OR

- Q5. a. What are Basic Set Operations? Explain with example 8

- b. Define candidate key, primary key and alternate key.
- c. Define Domain constraint, Primary key constraint, and Referential Integrity constraints.

### Unit - III

- Q6.
- a. Explain 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Normal forms with example.
  - b. Define Functional Dependency.
  - c. What do you mean by Update, Insert and Delete anomalies? Discuss in detail

### OR

- Q7.
- a. Consider the relation Library (member\_id, member\_name, member\_address, book\_code, book\_name, issue\_date, return\_date), this relation stores information about issue and return of books in a library to its member. A member can be issued many different books but one copy of same book.
    - i. What anomalies can occur in the above relation
    - ii. What are the functional dependencies in the above relation
    - iii. Normalize the above relation up to 3<sup>rd</sup> normal form
  - b. Define tuple and attribute

### Unit - IV

- Q8.
- a. Consider the following table  
Employee(eid, name, sal, deptt, job)  
Write SQL for each of following:
    - i. Create Employee table.
    - ii. Add a attribute address in above table.
    - iii. Find the name of employee having maximum sal.
    - iv. Find the name of employee whose name begins with 's'.
  - b. Write the syntax of Insert and Delete command.
  - c. What are aggregate functions? Explain with example.

### OR

- Q9
- a. Write short note on data type used in MS-Access
  - b. Write steps to create report in MS-Access.