

(Please write your Exam Roll No.)

Exam Roll No. ....

## END TERM EXAMINATION

SECOND SEMESTER [BBA] MAY- JUNE 2017

**Paper Code: BBA-108**

**Subject: Database Management System**

**BBA (B&I)-108**

**BBA (TTM)-108**

**BBA (MOM)-108**

**Time: 3 Hours**

**Maximum Marks: 75**

**Note: Attempt any five questions including Q.No1 which is compulsory.**

**Select one question from each unit.**

- Q1 Write short notes on **any five:-** (5x3=15)
- Generalization and Specialization
  - Types of Keys
  - Logical and Physical Independence
  - Functional Dependencies
  - Types of constraints
  - Strong and weak entity

### UNIT-I

- Q2 (a) Compare files management system and database management system. (7)
- (b) Compare the three record based data models with diagram. Which model is best and why? (8)
- Q3 (a) Explain three level architecture of Database management System. What is the role of mapping? (8)
- (b) What is the role of DBA, Data Manager, file Manager, and Disk Manager? (7)

### UNIT-II

- Q4 (a) What are the Integrity rules? Explain with example. (5)
- (b) A company has several departments. Each department has supervisors and at least one employee. Employee must be assigned to one department. There are many projects under one department and each employee is assigned to more than one project. (10)
- Identify the entities in the above case.
  - What are the relationships between the identified entities?
  - Draw an E-R Diagram to demonstrate the connectivity between the various entities.

- Q5 (a) Explain the 12 CODD rules for relational model. (8)
- (b) What are the different type of keys and attribute in the relational model? Explain with example. (7)

### UNIT-III

- Q6 (a) What are the possible functional dependencies, which can exist in a database? (7)
- (b) What are the different type of anomalies occurred in relations? Explain with example. (8)

- Q7 (a) What is normalization? Explain INF, 1NF and 3NF with example. (10)

(b) What is decomposition? What is the difference between lossy and lossless join. (5)

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**UNIT-IV**

- Q8 (a) Consider the following tables. **(10)**  
Emp(eid,ename, salary, designation, deptno)  
Dept(Deptno, dname, location)  
Write SQL for each of the following  
Create both tables  
(i) Find name of the employee having maximum salary of deptno 20.  
(ii) Find the eid, name of employee who are working in location Mumbai.  
(iii) Find the name and department of the employees whose salary is greater than 20000.
- (b) Explain various SQL DML commands with example. **(5)**
- Q9 (i) Write short notes on different data types used in MS-Access. **(5)**  
(ii) What are the different types of Aggregate Operators in SQL? Explain traditional and special operators with example. **(10)**

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