Paper Code: MBA IT 01 **Roll No.** | | | | | | | | | | |

MBA

(SEM III) ODD SEMESTER EXAMINATION 2015-16
DATABASE MANAGEMENT SYSTEM

[TIME: 3 hrs] [Max. Marks: 100]

1. Attempt any **four** of the following. [5x4=20]
   a. Define **Database**, **Database Management System** with examples.
   b. Define **Attributes** and **Relations** with reference to Databases, with example.
   c. What is a **Foreign Key Attribute**, illustrate with examples.
   d. Define **Relational Data Model**, illustrate with diagram and examples.
   e. Differentiate between **Drop** and **Delete** functions in a DBMS, illustrate with examples.
   f. What are **Triggers** and when are they used.

2. Attempt any **four** of the following: [5 x4=20]
   a. Define **Primary Key**, illustrate with examples.
   b. Write an **Insert Query** for a table with table name 'Employee' with attributes `Emp. No.` (Primary Key Auto-Increment), `Name`, `Age`, `Designation`, `Contact No.` and `Salary`, use hypothetical but relevant data values.
   c. What is **Remote Data Access**?
   d. Illustrate with diagram **Components of Database Management Systems**.
   e. Define **Domain** and **Entity Integrity Constrains**, explain with suitable example.
   f. Define **Entity-Relationship Model**, illustrate with suitable diagrams and examples.

3. Attempt any **two** of the following: [10x2-20]
   a. List ten advantages of using DBMS.
   b. Write a brief on Normalization, explain with suitable e xample.
   c. Write a short note on Knowledge Extraction through Data Mining

4. Attempt any **two** of the following: [10x2=20]

   a. Describe 1NF, 2NF and 3NF, explain with suitable example.
   b. Differentiate between Network Data Model and Hierarchy Data Model.
   c. Write an SQL Query to create table with table name 'Student' under the database 'School' with attributes `Enroll No.`, `Name`, `Age`, `Address`, `Contact No.` and two other relevant attributes of your choice. The query must specify the Primary Key Attribute, Attribute's: data type, length or size, null value specification and unique value specification.

5. Attempt any **two** of the following: [10x2=20]

   a. Define Data Mining and Data Warehousing with examples.
   b. Write a short note on ACID properties with reference to DBMS.
   c. Differentiate between 3NF and BCNF, explain with suitable example.