Roll No.										

Paper Code: MBA-IT-01

MBA
THIRD SEMESTER EXAMINATION 2016-17
DATABASE MANAGEMENT SYSTEM

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

Note: Attempt ***ALL*** questions. Assume suitable data, if required. All question carry equal marks.

1. Attempt any **four** of the following: - **(5x4=20)**

(a) Define **Database**, explain with examples.
(b) Illustrate with examples, the **Access Control/User Management** feature in Database.
(c) Define **Schema**, illustrate with example.
(d) What is a **Primary Key Attribute**, illustrate with examples.
(e) What is **Truncate** command, illustrate with appropriate SQL query example.
(f) Define **Attributes** and **Relations** with reference to Databases, with example.

2. Attempt any **four** of the following: - **(5x4=20)**

(a) What are **Triggers** and when are they used.
(b) Write an **Update 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) Differentiate between **Drop** and **Delete** functions in a DBMS, illustrate with examples.
(d) Illustrate with diagram **Components of Database Management Systems**.
(e) What is **Unique Attribute**; explain with examples.
(f) Define **Entity-Relationship Model**, illustrate with suitable diagrams and examples.

3. Attempt any **two** of the following: - **(10x2=20)**

(a) What is **BCNF**; what is the basic difference between 3NF and BCNF, explain with suitable example.
(b) Write ten benefits of **Normalization**.
(c) Write a short note on **Knowledge Extraction** through **Data Mining**.

4. Attempt any **two** of the following: - **(10x2=20)**

(a) Differentiate between **Network Data Model** and **Relational Data Model**.
(b) List ten features of **DBMS**.
(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**; explain using adequate examples.
(b) Write ten advantages of using **DBMS** over **Conventional File System**.
(c) Write a short note on **ACID** properties with reference to DBMS.