

Roll No.

Exam Code : D-18

Subject Code—0260

M.B.A. EXAMINATION

(Batch 2018 Onwards)

(Third Semester)

DATABASE MANAGEMENT SYSTEMS

ITM-321

Time : 3 Hours

Maximum Marks : 70

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit in addition to compulsory Q. No. 1. All questions carry equal marks.

1. Explain the following with suitable example :
 - (a) Database
 - (b) Domain
 - (c) Weak entity type
 - (d) Null values

- (e) Data Allocation
- (f) Authorization
- (g) Functional Dependency. **7×2=14**

Unit I

- 2. Discuss the importance of file organization in database. Discuss in brief various types of file organizations available. **14**
- 3. Explain the architecture of DBMS with the help of an example. **14**

Unit II

- 4. Discuss the advantages of a database system. Explain various cost and risk factors involved in implementation a database system. **14**
- 5. Define Transaction. Why is it desirable to have concurrent execution of multiple transactions ? What are various anomalies that can occur due to undesirable interleaving of transactions ? **14**

Unit III

- 6. What is Normalization ? How is it useful ? Explain the normal form based on the concept of transitive dependency. **14**
- 7. What is the use of constraints ? What are different types of constraints that can be specified in SQL ? Explain with suitable examples. **14**

Unit IV

- 8. What are the security policies that should be established by an organization to prevent unauthorized access of its database ? **14**
- 9. What are log based recovery techniques ? Explain the deferred and immediate modification versions of the log based recovery technique with the help of an example. **14**