Total Pages : 3

Roll No.

MIT(CS)-402

Introduction to DBMS

M.Sc. Cyber Security (MSCCS-18/21)

4th Semester Examination, 2021 (Winter)

Time : 2 Hours]

Max. Marks : 80

Note : This paper is of Eighty (80) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION-A

(Long Answer Type Questions)

- Note : Section 'A' contains Five (05) long answer type questions of Twenty (20) marks each. Learners are required to answer any Two (02) questions only. (2×20=40)
- 1. What is data Model? Explain the types of Data Model.

829 / MIT(CS)-402

[P.T.O.

- 2. What do you mean Database Language? What are the different types of data base language? Explain with an example.
- **3.** What is Normalization? Explain 1NF, 2NF and 3NF with an example.
- 4. What is a Distributed database system? Discuss the advantages and disadvantages of distributed database systems.
- **5.** Explain the three-level architecture of database system. What are its objectives?

SECTION-B

(Short Answer Type Questions)

- **Note :** Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only. (4×10=40)
- 1. Differentiate between database system and file system.
- 2. What is Functional Dependency? Explain with an example.
- **3.** Explain the role of a Database Administrator.
- 4. Explain the different types of keys with an example.

829 / MIT(CS)-402 [2]

- 5. Explain the following terms with the help of an example.
 - (a) Tuple.
 - (b) Attribute.
 - (c) Cardinality.
 - (d) Degree.
 - (e) Domain.
- 6. What is SQL? What are the Characteristics of SQL?
- 7. What are the SQL logical operators? Explain with an example.
- **8.** What is database security? Describe the various type of database recovery process.