S-759

Total Pages: 3 Roll No. -----

MIT(CS)-402

Introduction to DBMS

M.Sc. Cyber Security (MSCCS)

4th Semester, Examination 2022(Dec.)

Time: 2 Hours Max. Marks: 70

Note: This paper is of Seventy (70) 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 Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

 $[2 \times 19 = 38]$

P.T.O.

- Q.1. Define the term Database and explain the characteristics and benefits of a Database Management System.
- Q.2. Explain the level or layers of DBMS architecture in details.
- Q.3. What are the different types of Data Models? Why we need Data Models?
- Q.4. What is SQL? Discuss in details the basic structure of SQL queries with suitable examples.
- Q.5. Explain normalization. What are different types of normal form? Explain in brief.

Section - B

(Short-answer-type questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

$$[4 \times 8 = 32]$$

- Q.1. Discuss merits and demerits of DBMS.
- Q.2. Explain the role of Database Administrator.
- Q.3. Explain the term cardinality.
- Q.4. Explain any six Codd's rules for RDBMS.
- Q.5. Explain DDL, DML and DCL.
- Q.6. What is ORDER BY clause? Give example.
- Q.7. What are different types of database failure? Explain in brief why it occurs?
- Q.8. Write SQL for the following:
 - a. Create a table EMPLOYEE with EMP_ID,EMP NAME, DESIG, DEPT, SALARY.
 - b. Display EMP_ID, EMP_NAME and DEPT where SALARY is greater than 15000.
