## K-1134

Total Page No. : 3]

[Roll No. ....

## **DIT-05**

# DIT IInd Semester Examination Dec., 2023

### DATABASE MANAGEMENT SYSTEM

Time : 2 Hours]

[Max. Marks : 100

Note :- This paper is of Hundred (100) marks divided into two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given there in. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

#### Section-A

#### **Long Answer Type Questions** 2×26=52

- *Note* :- Section 'A' contains Five (05) Long-answer type questions of Twenty Six (26) marks each. Learners are required to answer any *two* (02) questions only.
- **K–1134** (1) P.T.O.

- 1. Define Files and operation on files. Describe Records and its types.
- Explain Database architecture with suitable example.
  What is Data independence ?
- 3. Describe ER model as a tool for conceptual design : entities, attributes and relationships.
- Explain SQL data types, Types of SQL commands DDL, DML and Characteristics of SQL. Write Advantages of SQL.
- 5. What is normalization ? Describe 2NF, 3NF and BCNF with examples.

#### Section-B

### **Short Answer Type Questions** 4×12=48

- *Note* :- Section 'B' contains Eight (08) Short-answer type questions of Twelve (12) marks each. Learners are required to answer any *four* (04) questions only.
- Differentiate between fixed length records and variable length records.
- Differentiate between Traditional file approach Vs. Database approach.
- 3. What is Database Management System (DBMS) ? Write Insert, Update and Delete operations.



- 4. Differentiate between Prime attribute and Nor-Prime attribute with example.
- 5. Describe the concept of keys, composite key, candidate key.
- 6. Explain Database design using suitable example.
- 7. What is Relational data model and Integrity constraints ?
- 8. What is database recovery ? Write the types of database recovery.

\*\*\*\*\*\*