

A-826

Total Pages : 3

Roll No. -----

DIT-05

Database Management System

(DIT)

2nd Semester, Examination 2024 (June)

Time: 2:00 hrs

Max. Marks: 100

Note : This paper is of Hundred (100) marks divided into Two (02) Section A and B. Attempt the questions contained in these sections according to the detailed given therein. 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)

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.

[2x26=52]

P.T.O.

- Q.1. Explain Primary File organization using example?
Write Goals of database security?
- Q.2. Explain types of DBMS? Write about the role of Database Administrator?
- Q.3. What is weak and strong entities? Convert any ER model into relational schema.
- Q.4. Write following SQL commands using Example:
- Select From Where Group by
Having Order by
 - Tables, Views and Indexes,
 - Insert, Update and Delete operations
- Q.5. Describe briefly:
- First Normal Form (1NF)
 - Second Normal Form (2NF)
 - Boyce Codd Normal Form (BCNF)
 - Fourth Normal Form (4NF)
 - Fifth Normal form (5NF)

Section-B (Short-Answer-Type Questions)

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.

[4x12=48]

- Q.1. Differentiate Specialization and generalization feature of ER diagram.
- Q.2. Differentiate between physical and logical data independence.
- Q.3. What is Database Management System (DBMS), merits and demerits of DBMS.
- Q.4. What is functional dependency? Explain its usage in database design.
- Q.5. Describe, Primary Key, Alternate Key, Foreign key?
- Q.6. What is Decomposition & Universal Relation in Relational Database Design?
- Q.7. Explain Entity integrity, Referential integrity, Domain Constraints.
- Q.8. What is Backup of database? Give types of database failure?
