

# **Lamrin Tech Skills University Punjab**

University School of Engineering & Technology

## **Course Title: RDBMS (UGCS-201)**

Program: B.Tech

MST-I Sept. 2024

Semester: 3rd

Time: 1.5 hrs.

Max. Marks: 25

### **INSTRUCTIONS TO CANDIDATES**

1. SECTION-A is Compulsory carrying one marks each.
2. SECTION-B you have to attempt 3 questions carrying 5 marks each.
3. SECTION-C you have to attempt 1 question carrying 8 marks each.

### **Section-A (5x1=5)**

- Q1. Attempt all question.
- (i) What is an Entity in RDBMS?
  - (ii) What is database administrator?
  - (iii) What do you mean by schema and instances?
  - (iv) Write a query from table in which amount > 1000.
  - (v) Write a query to remove the duplicate rows from a table.

### **Section-B (3x4=12)**

- Q2. Write the characteristics of DBMS?
- Q3. Explain data languages DDL, DCL, DML with the statements?
- Q4. Make a table 'EMPLOYEE', and Identify all keys.
- Q5. Explain about Integrity Constraints over relations in detail?
- Q6. Make a table 'DEPARTMENT FACULTY' and do such operation:
- a) Select all employees who work in the IT department.
  - b) Retrieve the name and department of employees who have a salary greater than 60000.
  - c) Delete employees who joined before the year 2018.

### **Section-C (1x8=8)**

- Q7. Draw the ER diagram for University Management system with the describe of weak entity, derived attribute, weak Relation.
- Q8. What do you mean by Relational Algebra? Describe Fundamental Operation in Relational Algebra?