



# PRESIDENCY UNIVERSITY

BENGALURU

Roll No.														
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## Mid - Term Examinations – October 2025

Date: 09-10-2025

Time: 11.45am to 01.15pm

<b>School:</b> SOIS	<b>Program:</b> BCA	
<b>Course Code:</b> CSA2503	<b>Course Name:</b> Relational Database Management System	
<b>Semester:</b> III	<b>Max Marks:</b> 50	<b>Weightage:</b> 25%

CO - Levels	C01	C02	C03	C04	C05
<b>Marks</b>	<b>10</b>	<b>20</b>	<b>20</b>		

### Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

### Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

1	Defne a database.	2 Marks	L	C01
2	Enumerate the Six basic operators of Relational Algebra.	2 Marks	L	C01
3	What is data abstraction in SQL, and how is it achieved?	2 Marks	L	C01
4	Identify and explain the statement used to modify an existing database object.	2 Marks	L	C01
5	Recognize the constraint that ensures all values in a column satisfies a specific condition with an example.	2 Marks	L	C01

### Part B

Answer the Questions.

Total Marks 40M

6.	a.	What is <b>the</b> purpose of a Data Model. Explain any 3 Data Models.	10 Marks	L	C02
Or					
7.	a.	Differentiate Schemas versus Instances.	10 Marks	L	C02

<b>8.</b>	<b>a.</b>	Identify the steps to be followed to create an ER model for the Banking database application, illustrating the same with a neat ER diagram.	<b>10 Marks</b>	<b>L</b>	<b>CO2</b>
<b>Or</b>					
<b>9.</b>	<b>a.</b>	Identify the three basic Components of ER Diagram explaining the same with clear examples.	<b>10 Marks</b>	<b>L</b>	<b>CO2</b>

<b>10.</b>	<b>a.</b>	Illustrate DML commands illustrating the same by creating a student table with attributes srno, name and course with suitable datatypes and length having a cardinality of 3.	<b>10 Marks</b>	<b>L</b>	<b>CO3</b>
<b>Or</b>					
<b>11.</b>	<b>a.</b>	Illustrate DDL commands illustrating the same by creating a student table with attributes srno, name and course with suitable datatypes and length. Alter this table to add a new attribute phone having integer as data type.	<b>10 Marks</b>	<b>L</b>	<b>CO3</b>

<b>12.</b>	<b>a.</b>	Demonstrate how SQL Logical Operators are used, clearly showcasing it by applying at least 3 Logical operators for demonstration.	<b>10 Marks</b>	<b>L</b>	<b>CO3</b>
<b>Or</b>					
<b>13.</b>	<b>a.</b>	Demonstrate how SQL Comparison Operators are used, clearly showcasing it by applying at least 3 comparison operators for demonstration.	<b>10 Marks</b>	<b>L</b>	<b>CO3</b>