

(Please write your Exam Roll No.)

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## END TERM EXAMINATION

SECOND SEMESTER [BCA] MAY-JUNE, 2025

Paper Code: BCA-102T

Subject: Database Management System

Time: 3 Hours

Maximum Marks: 60

Note: Attempt all questions as directed. Internal choice is indicated.

Q1 Attempt any Four of the following questions: (4×5=20)

- (a) What are the main functions of a DBA?
- (b) Explain data independence.
- (c) List some popular data models.
- (d) What is ER Model? Why it is important?
- (e) Write disadvantages of direct file organization.
- (f) What is the syntax for creating an explicit cursor?
- (g) Define denormalization.
- (h) What do you mean by view serializability?

Q2 Compare and contrast between external, logical and physical view. (10)

OR

Q3 Explain the features of Network model. (10)

Q4 Construct an ER diagram for the registrar's office. Document all assumptions you make about the mapping constraints. (10)

OR

Q5 Explain the different hash function with example. (10)

Q6 What is relational integrity? How it is implemented? (10)

OR

Q7 What predefined exception is used to identify the situation where no data is returned by a select statement. (10)

Q8 State the ACID properties of a Transaction. (10)

OR

Q9 What is Integrity threat? How it can be avoided. (10)

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