QP CODE

H1034

Enrollment Number: ……

Name: ……

B.C.A DEGREE EXAMINATIONS, FEBRUARY 2026
Third Semester
B.C.A
B21CA05DC – Database Management Systems
(2024 July admissions)

Time: 3 Hours **Max Marks: 70**

Section A

Answer any ten of the following questions in a word or sentence each. Each question carries 1 mark.

1. Define the term DBMS.
2. Mention any one objective of a database system.
3. Define functional dependency.
4. State the condition of First Normal Form.
5. Identify the purpose of an attribute.
6. Define the term primary key.
7. State the meaning of a weak entity.
8. Discuss the role of a domain in SQL.
9. State the purpose of a view.
10. Define a cursor in PL/SQL.
11. State the meaning of a trigger.
12. Define a transaction.
13. Specify the meaning of a lock.
14. Define logical data independence.
15. Mention any one advantage of three-tier architecture.

(1X10=10)

Section B

Answer any five of the following questions in two or three sentences each. Each question carries 2 marks.

16. Describe levels of data abstraction.
17. Compare entity and relationship.
18. Discuss the types of keys with two examples.
19. Describe multivalued attribute with a short example.

20. List the different types of failures in a transaction.
21. Classify SQL data types with examples.
22. Describe aggregate functions.
23. Explain the use of an IN parameter in PL/SQL.
24. Illustrate the steps to create a stored procedure.
25. Describe the concept of serializability.

(2X5=10)

Section C

Answer any five of the following questions in one page each. Each question carries 4 marks.

26. Differentiate implicit cursor and explicit cursor.
27. Explain ER diagram symbols.
28. Briefly explain the conditions for deadlock.
29. List the different types of constraints and explain any two.
30. List and explain four commonly used SQL functions.
31. Describe DDL and DML operations with examples.
32. Explain explicit cursor working steps.
33. Illustrate creation and use of a stored function.
34. Describe deadlock detection and resolution techniques.
35. Explain locking types used in concurrency control.

(4X5=20)

Section D

Answer any two of the following questions in three pages each. Each question carries 15 marks.

36. Describe advantages of DBMS over file systems.
37. Explain the normalization process with example.
38. Describe PL/SQL trigger structure and uses.
39. Explain transaction states with examples.

(15X2=30)