DCCA – 301

III Semester B.C.A. Degree Examination, December 2024/January 2025
(NEP Scheme) (Freshers and Repeaters)
COMPUTER APPLICATIONS
CAC07 : Database Management Systems

Time : 2½ Hours

Max. Marks : 60

Instruction : Answer **all** the Sections.

SECTION – A

I. Answer **any 6** questions. **Each** question carries **2** marks.   (6×2=12)

1) Define data model.

2) Mention any two users associated with database systems.

3) What is meant by Entity set ?

4) Define constraint.

5) Define referential integrity.

6) Differentiate between commit and rollback statement.

7) Define normalization.

8) Define deadlock.

9) Differentiate between single user and multi user systems.

SECTION – B

II. Answer **any 4** questions. **Each** question carries **6** marks.   (4×6=24)

10) Explain the classification of DBMS.

11) Mention the characteristics of database approach.

12) Explain the different types of relationships with example.

13) Explain Cartesian product operation with example.

14) Explain the different types of decomposition.

15) Write a note on ACID properties.

P.T.O.

SECTION – C

III. Answer **any 3** questions. **Each** question carries **8** marks.   (3×8=24)

16) a) Explain the different types of database languages.   4

    b) Mention the advantages and disadvantages of DBMS.   4

17) a) Construct an ER diagram of Bank database.   5

    b) Explain the different types of attributes with example.   3

18) a) Explain any 2 JOINs with example.   4

    b) Explain any two DML statements with example.   4

19) a) Explain 2NF with an example.   4

    b) Explain any two types of anomalies with example.   4

20) a) Explain 2 Phase locking.   4

    b) Explain any two types of failures in DBMS.   4

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