



22523/E 230

Reg. No.

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V Semester B.C.A.2 Degree Examination, October/November 2014
(RCU – Repeaters & Regular)
DATABASE MANAGEMENT SYSTEM

Time : 3 Hours]

[Max. Marks : 80

SECTION – A

Answer **any ten** of the following questions. Each question carries **2** marks :
(10 × 2 = 20)

1. Define DBMS.
2. What do you mean by Schema?
3. What is metadata?
4. Mention, when it is not suitable to use DBMS.
5. What are the basic task of DBMS?
6. What is the role played by DBA?
7. Define primary key. Give example.
8. What is relation and tuple? Give example.
9. What is meant by transaction (a) COMMIT (b) ROLLBACK?
10. What are the categories of end users?
11. Name the built-in functions of SQL.
12. What is weak entity?

SECTION – B

Answer **any six** of the following questions. Each question carries **5** marks.
Draw diagram wherever necessary : **(6 × 5 = 30)**

13. Explain the simplified database system environment, with diagram.
14. Enlist the characteristics of database, approach, and explain any two of them.



15. Define attribute and distinguish between
 - (a) Simple attribute V/s Composite attribute
 - (b) Stored attribute V/s Derived attribute.
16. State the various DBMS languages and discuss any two in detail.
17. Explain the desirable ACID properties of Transaction.
18. Discuss the characteristics of relation.
19. What is unary relational operator? Explain SELECT and PROJECT operation.
20. Explain in brief FIRST and SECOND normal form with an example.

SECTION – C

Answer **any three full** questions. Each question carries **10** marks :
(3 × 10 = 30)

21. (a) Discuss the actors on the scene.
(b) Enlist the various DBMS interfaces and explain any two.
22. (a) Draw and name the various symbols used for notations in E-R diagram.
(b) Define (i) Entity (ii) Attribute (iii) Composite attribute (iv) Multivalued attribute (v) Simple attribute.
23. (a) Explain three basic update operations on relation.
(b) Explain relational algebra operations : UNION, INTERSECTION AND MINUS with example.
24. (a) Discuss the informal design guidelines for relation schema.
(b) Explain in brief different data types in SQL.
25. (a) What do you mean by recovery in transaction processing? Discuss the various failures w.r.t. recovery.
(b) Explain the types of locks for concurrency control.