

16U425

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Name:

Reg. No.....

FOURTH SEMESTER B.C.A. DEGREE EXAMINATION, APRIL 2019

(CUCBCSS-UG)

CC17U BCA4 B05 - DATA BASE MANAGEMENT SYSTEM AND RDBMS

(Core Course)

(2017 Admission onwards)

Time: Three Hours

Maximum: 80 Marks

Section A

Answer all questions. Each question carries 1 mark.

1. Define entity and entity set.
2. What is a primary key?
3. Define deadlock.
4. What do you mean by data independence?
5. What do you mean by a trigger?
6. Which is the command used to sort the data in a table?
7. What do you mean a view?
8. List any two aggregate functions.
9. What is the function of IN operator?
10. What is DDL?

(10 x 1 = 10 Marks)

Section B

Answer *all* questions. Each question carries 2 marks.

11. What do you mean by relational model?
12. Briefly explain the working of a cursor.
13. Briefly explain stored procedures.
14. What do you mean by lost update problem?
15. What are the symbols used in an ER diagram?
16. What is the difference between DBMS and RDBMS?
17. List two anomalies in database design.
18. How is error handling done in SQL?

(8 x 2 = 16 Marks)

Section C

Answer any *six* questions. Each question carries 4 marks

19. Explain the different types of database users.
20. Explain the three schema architecture of a database.

21. Explain tuple relational calculus.
22. Define the following terms.
 - a) Strong entity set.
 - b) Foreign key.
 - c) Referential integrity.
 - d) Schema.
23. Write the SQL statements for the following
 - a) Create a table EMPLOYEE with details.
(Empid, empname, dept, designation, salary)
 - b) Display the details of all employees who have a salary greater than 10000.
 - c) Set Empid as the primary key.
 - d) Find the number of employees in IT department.
24. Explain Two phase locking protocol.
25. Explain the DML commands used in SQL.
26. Write the advantages of DBMS
27. What is the purpose of GRANT and REVOKE commands? Explain.

(6 x 4 = 24 Marks)

Section D

Answer any *three* questions. Each question carries 10 marks.

28. Compare file system and DBMS.
29. Explain in detail the relational algebra operations with examples.
30. Briefly explain the following.
 - a) ACID properties of a transaction.
 - b) States of a transaction.
31. What is Normalization? Explain the different types of normal forms.
32. Explain the control structures in PL/SQL.

(3 x 10 = 30 Marks)
