18U417   (Pages: 2)   Name: ……………………

Reg. No…………………..

FOURTH SEMESTER B.C.A. DEGREE EXAMINATION, APRIL 2020
(CUCBCSS-UG)

(Regular/Supplementary/Improvement)

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. What is entity set?

2. What are the main differences between Primary key and Unique Key?

3. What is the difference between NULL value, Zero, and Blank space?

4. What is the difference between DBMS and RDBMS?

5. What is index?

6. Define trigger?

7. What is Referential Integrity Constraint?

8. What are the types of relationship exist in a database?

9. What is stored procedure?

10. What is cursor?

(10 x 1 = 10 Marks)

Section B
Answer all questions. Each question carries 2 marks.

11. Discuss the different types of data models.

12. Explain insert anomaly, delete anomaly and update anomaly with examples.

13. Explain the concepts of a Primary key, Foreign Key, Super Key.

14. Distinguish between GRANT and REVOKE commands.

15. What are the different levels of abstraction in the DBMS?

16. Distinguish between "Having" and "Where" clause in SQL with an example.

17. Distinguish between Relational Algebra and Relational calculus.

18. What is meant by Lost Update problem?

(8 x 2 = 16 Marks)

Section C

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

19. Explain mapping cardinalities with examples.

20. What are the different SQL commands to modify the database?

21. Find the candidate key.

    (a) Consider a relation R = ABCDEF, Functional dependency F = {A -> B, B -> D, C -> D, E -> F}.

    (b) Relation R = ABCD, Functional dependency F={A -> BCD, C -> A}.

22. What are the different types of joins in SQL?

23. What are the advantages and disadvantages of using DBMS approach?

24. Describe ACID properties of a transaction.

25. Explain Entity Relationship model with an example.

26. Explain about the levels of locks.

27. Mention and Explain different relational algebra operations.

(6 x 4 = 24 Marks)

Section D

Answer any three questions. Each question carries 10 marks.

28. (a) Explain the basic data types of SQL.

    (b) Describe about the Built-in functions in SQL.

29. Explain control structures and Loop in PL/SQL with suitable examples.

30. (a) Describe in detail about cursor and give an example.

    (b) Describe in detail about Transaction states.

31. What is Normalization and Explain BCNF,4NF,5NF with examples.

32. What is view? Explain how to create, rename a column and destroy a view?

(3 x 10 = 30 Marks)

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