

C 2174

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Name.....

Reg. No.....

**FOURTH SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION
APRIL 2021**

Computer Science

BCS 4B 05—DATABASE MANAGEMENT SYSTEM AND RDBMS

(2017 Admissions)

Time : Three Hours

Maximum : 80 Marks

Part A

Answer all questions.

Each question carries 1 mark.

1. What is a Database System ?
2. Define Schema in a Database.
3. What do you understand by Data Model ?
4. What is a Weak Entity ?
5. What is Relational Algebra ?
6. Which normal form is considered adequate for normal relational database design ?
7. DDL stands for _____.
8. _____ is a virtual table, through which a selective portion of the data from one or more tables can be seen.
9. What do you mean by durability in DBMS ?
10. What is RDBMS ?

(10 × 1 = 10 marks)

Part B

Answer all questions.

Each question carries 3 marks.

11. Define Normalization. Explain 2NF.
12. Define different DDL commands.

Turn over

13. What is E-R model ?
14. What is stored procedure ?
15. What is the function of Grant and Revoke commands ?

(3 × 5 = 15 marks)

Part C

*Answer any five questions.
Each question carries 5 marks.*

16. Discuss the differences between database systems and information retrieval systems.
17. Explain the concept of Primary Key and Foreign Key.
18. Write a comparison on tuple calculus and domain calculus ?
19. Explain different control structures in SQL.
20. What are the Relational database design Anomalies in a Database ?
21. What is view in SQL ? How to create a view from multiple tables ?
22. Write a short note on generalization and specialization ?
23. Explain ACID properties.

(5 × 5 = 25 marks)

Part D

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

24. Define DBMS. What are the advantages of DBMS over traditional file system ?
25. Explain Relational Algebra and its various operations.
26. Explain Boyce Codd Normal Form and Fourth Normal Form.
27. Write a short note on :
(A) Built in Function in SQL (B) Aggregate Functions in SQL.
28. Explain different Concurrency Control Protocols in DBMS.

(3 × 10 = 30 marks)