

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2019

(CUCBCSS—UG)

B.Sc. 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 schema ?
2. ER model uses _____ symbol to represent weak entity set.
3. Key to represent relationship between two tables is called _____.
4. What is a candidate key ?
5. DDL stands for _____.
6. What is tuple ?
7. What is physical level ?
8. What is the purpose of commit ?
9. Which operator perform pattern matching ?
10. What is the use of GRANT ?

(10 × 1 = 10 marks)

Part B

*Answer all questions.
Each question carries 3 marks.*

11. Compare strong and weak entities.
12. Explain outer join operation.
13. Explain ER Model.
14. Define multivalued dependency.
15. Explain ACID properties.

(5 × 3 = 15 marks)

Turn over

Part C

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

16. Explain RDBMS.
17. Write a short note on database languages.
18. What is trigger ? Explain how to create trigger.
19. Explain different loops in SQL.
20. Write the difference between table level lock and row level lock.
21. Explain different datatypes in SQL.
22. How to create, rename and destroy views ?
23. What are the string functions ?

(5 × 5 = 25 marks)

Part D

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

24. Explain the advantages of DBMS over file system.
25. What is Normalization ? Explain different normal forms.
26. Explain various operations in relational algebra.
27. Explain how to create, modify, delete, rename and drop tables in SQL with example.
28. Write a comparison on relational calculus and domain calculus.

(3 × 10 = 30 marks)