D 103015   (Pages : 2)   Name.................................

Reg. No..............................

FOURTH SEMESTER (CBCSS–UG) DEGREE EXAMINATION
APRIL 2024

B.C.A./B.Sc. Computer Science

BCA4B05/BCS4B05—DATABASE MANAGEMENT SYSTEM AND RDBMS

(2019 Admission onwards)

Time : Two Hours   Maximum : 60 Marks

Section A – Short Answer Type Questions

Answer all the questions.
Each question carries maximum of 2 marks.
Ceiling 20 marks.

1. List the advantages and applications of DBMS.

2. Define instances and schemas of database.

3. What are the different Relationship Sets ? Explain.

4. Define i) super key ; ii) candidate key.

5. What are domain constraints ?

6. Explain about multi-valued dependencies.

7. Define views.

8. Explain deadlock and advisory lock.

9. What is mean by revoke ? How it is applied ?

10. What is the need for triggers ?

11. How to lock Table-level ?

12. How to use IN operator in SQL ? Explain.

(Ceiling 20 marks)

Section B Short Essay Type Questions

Answer all the questions.
Each question carries 5 marks.
Ceiling 30 marks.

13. What do you mean by Database Independence ? Explain Three Schema Architecture.

14. List the different set operations ? Explain each with examples.

Turn over

15. Explain about different types of integrity constraints.

16. Define second and fifth normal Form.

17. What is Decomposition ? What is the purpose of Decomposition in database ?

18. Which are the modes of lock ? Explain. Explain two phase locking.

19. Write about triggers and its operations in detail.

Section C Essay Type Questions

(30 mark)

Answer any **one** *question.*
The question carries 10 marks.

20. a. Explain different relational database anomalies in a database.

    b. List different data models and explain each.

(5 mar)

21. a. What Does Database Concurrency Mean ? When a lost update problem occurs how the proble can be avoided, explain ?

(5 mar)

    b. What are the disadvantages of file-processing system ?

(6 ma)

(4 ma)

$(1 \times 10 = 10$ ma)