C 21505 (Pages : 2) Name...

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

FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION, APRIL 2022

B.C.A./Computer Science

BCA 4B 05/BCS 4B 04—DATABASE MANAGEMENT SYSTEM AND RDBMS

(2019 Admission onwards)

Time : Two Hours Maximum : 60 Marks

Section A (Short Answer Type Questions)

Answer at least **eight** *questions.*
Each question carries 3 *marks.*
All questions can be attended.
Overall Ceiling 24.

1. What are the responsibilities of DBA ?

2. What are the different Relationship Sets ? Explain.

3. Explain the use of foreign key constraint ?

4. Define Relationship and Relationship set ?

5. Write short notes on tuple relational calculus.

6. Discuss how can you change the data in the table ?

7. Define correlated nested queries.

8. Discuss about different operators used in algebra.

9. Define transaction management.

10. Advantages and Disadvantages of Stored Procedures.

11. Write a note on DDL, DML.

12. Discuss how can you change the data in the table ?

(8 × 3 = 24 marks)

Turn over

Section B (Short Essay Type Questions)

Answer at least **five** *questions.*
Each question carries 5 marks.
All questions can be attended.
Overall Ceiling 25.

13. What are the different types of data model ? Discuss about Database users.

14. Draw the ER diagram for a company needs to store information about employees (identified by CEN, with salary and phone as attributes), departments (identified by Dno, with Dname and budget as attributes), and children of employees (with Cname and Cage as attributes). Employees work in departments, each department is managed by an employee, a child must be identified uniquely by name when the parent (who is an employee ; assume that only one parent works for the company) is known. We are not interested in information about a child once the parent leaves the company

15. Write a short note on Relational model and Entity-Relationship model.

16. Define First Normal and fourth Form.

17. What is the use of group by clause ? And Discuss about the how to drop tables ?

18. How to use and working of the cursors - fetch, move, update, delete, close ?

19. Define decomposition and how does it address redundancy ? Discuss the problems that may be caused by the use of decompositions ?

(5 × 5 = 25 marks)

Section C (Essay Type Questions)

Answer any **one** *question.*
The question carries 11 *marks.*

20. (a) Compare and Contrast, file Systems with DBMS ?

    (b) What is the use of groupby and having clauses ? Explain with examples.

21. (a) How Passing and Returning data to and from Stored Procedures. Explain with example.

    (b) What is an Attribute ? Explain types of attributes used in ER how it represented in ER diagram ?

[1 × 11 = 11 marks]