

**C 3520**

**(Pages : 2)**

**Name.....**

**Reg. No.....**

**FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION, APRIL 2021**

**Computer Science**

**BCS 4B 05—DATABASE MANAGEMENT SYSTEM AND RDBMS**

**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 is the difference between database schema and database instance ?
2. What is meant by E-R models ?
3. What is meant by weak entity ?
4. What is the meaning of foreignkey ?
5. Define functional dependency.
6. What is the impact of primary key constraint ?
7. Describe DCL.
8. What is view ? How to create view ?
9. What is Alter command in SQL ?
10. What is BCNF ?
11. What is atomicity in DBMS ?
12. What do you mean by two-phase locking ?

**(8 × 3 = 24 marks)**

**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 is data independence ? Explain the difference between physical and logical data independence.
14. Explain the different types of attributes occurs in E-R model.

**Turn over**

15. Explain domain relational calculus with example.
16. Discuss the aggregate functions with examples.
17. Explain with example, the concept of nested queries.
18. Describe ACID properties of transaction.
19. Write SQL statements : (1) to create the table STUDENT(Name, Class, Mark, Rank), (2) to display the name and class of students with the descending of rank (3) List the details of students whose mark less than 60 and greater than 50.

(5 × 5 = 25 marks)

### Section C (Essay Type Questions)

*Answer any one question.*

*The question carries 11 marks.*

20. What is data base ? Describe the advantages and disadvantages of using DBMS.
21. What is normalization ? Explain 1NF, 2NF and 3NF with example.

(1 × 11 = 11 marks)