A (Printed Pages 4)

(21222) Roll No. 19.....

B.C.A.-V Sem.

18021

B.C.A. Examination, Dec.-2022

Introduction to DBMS

(BCA-501)

Time : Three Hours] *[Maximum Marks : 75*

Note : Attempt questions from **all** sections as per instructions.

Section - A

Note : Attempt **all** the questions. 3×5=15

1. What are the database system applications?
2. What is specialization and generalization?
3. What is entity set?
4. What are the mapping cordinalities?
5. Describe weak entity set in brief.

P.T.O.

Section-B

Note : Attempt any **two** questions.

7.5×2=15

6. What is Key? Explain different types of Keys.
7. Compare the BCNF and 3NF in brief.
8. What are the relational and structural constraints?

Section-C

Note : Attempt **any three** questions.

15×3=45

9. Consider the employee data base, where the primary keys are underlined. Give the expression in SQL for each of the following quaries:-

   employee (employee-name, street, city)

   works (employee-name, company-name, salary)

   company (employee-name, city)

   manages (employee-name, manager-name)

   (a) Find the name and cities of residence of all employees whose work for first Bank Corporation.

   (b) Find the names, street add and city of residence of all employees whose work for first Bank Corporation and earn more than ₹10,000/-.

   (c) Find all employees in data base who do not work for first Bank Corporation.

   (d) Find the company that has the most employees.

10. Explain data models in detail.
11. What is relational model? Explain collision in brief.

12. What is hashing? Describes hashing functions in detail.

13. Give the architecture of database and their characteristics.