A

(20322)   Roll No. ....

B.Sc.(Hons.) Com. Sci.-III Sem.

NS-3299(CV-III)

B. Sc. (Hons.) Examination, Dec. 2021

COMPUTER SCIENCE

DBMS and SQL/PLSQL

(BHCS-302)

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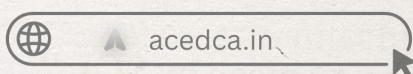
Time : 1½ Hours]   *[Maximum Marks : 75*

Note : Attempt questions from all Sections as per instructions.

Section-A

(Very Short Answer Type Questions)

Answer any *two* questions out of the following five questions. Each question carries 7½ marks.

7½×2=15

1.   What is DBMS ? Why do we need it ?

2.   What is an entity ? Also mention the types of entities.

3.   Define normalization.

4.   Define data independence and its types.

5.   What do you mean by SQL ?

Section-B

(Short Answer Type Questions)

Answer any *one* question out of the following three questions. Each question carries 15 marks.

$$15 \times 1 = 15$$

6.   Explain Architecture of DBMS.

7.   Explain the different types of relationships used in DBMS.

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8. Differentiate between :

   (a) Strong entity and Weak entity

   (b) Triggers and Cursors

   (c) Data manipulation language and Data control language.

Section-C

(Detailed Answer Type Questions)
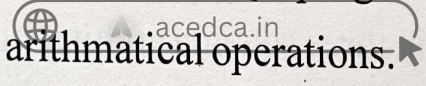
Answer any *two* questions out of the following five questions. Each question carries 22½ marks.

$$22½×2=45$$

9. (a) Explain three schema architecture.

   (b) Explain an E–R diagram for keeping track of information about company database, taking into account minimum five entities.

10. (a) Explain briefly, insertion, updation and deletion aromalies in the database.

    (b) Create EMP table using following fields

    EMP NO – Number

    EMP Name – Character

    DOB – Date

    DEPT – String

    SALARY – Rent

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    (i)   Create table and enter 5 records

    (ii)   Find total salary of all employees

    (iii) Find highest salary of employee

    (iv) Find longest salary of employee.

11.   (a)   Explain the different types of locks.

      (b)   Explain the different DDL (Data Definition Lang.) commands with syntax and examples.

12.   (a)   Write a PL/SQL program to perform basic arithmatical operations.

      (b)   Write a PL/SQL program to check wheather a given

           year is leap year or not.

13.   Explain the following :

    (a)   TRIGGERS

    (b)   CURSORS

    (c)   PROCEDURES.