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ND—29—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (CS) (Third Year) (Sixth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

(CBCS/Revised Pattern)

COMPUTER SCIENCE

Paper BCS–403

(Relational Database Management System)

(Thursday, 7-12-2023)   **Time : 2.00 p.m. to 5.00 p.m.**

Time—3 Hours   *Maximum Marks—75*

N.B. :—   (*i*)   *All* questions are compulsory.

       (*ii*)   *All* questions carry equal marks.

       (*iii*)   Assume suitable data, if necessary.

1.   Attempt any *five* of the following :   15

     (*a*)   Explain advantages and disadvantages of RDBMS.

     (*b*)   What is SQL ?

     (*c*)   Explain various arithmetic operators used in SQL.

                                         P.T.O.

(d) What is Join ?

(e) Explain Declaration section of PL/SQL.

(f) Explain concept of trigger in detail.

(g) Explain concept of attributes in detail.

2. Attempt any *three* of the following : 15

(a) Explain various users of DBMS.

(b) What is RDBMS ?

(c) Explain concepts of tuples in detail.

(d) Explain WHERE clause with suitable example.

(e) Explain concept of primary key in detail.

3. Attempt any *three* of the following : 15

(a) Explain AVG() and FIRST() functions in detail.

(b) Explain concept of views in detail.

(c) Explain logical operators with an example.

(d) Explain with example how table is altered in SQL.

(e) Explain GROUP BY HAVING clause in detail with example.

4. Attempt any *three* of the following : 15

   (*a*) What is trigger ? Explain types of triggers in detail.

   (*b*) Explain executable command section of PL/SQL in detail with example.

   (*c*) Explain the procedure to enable and disable trigger with example.

   (*d*) Explain concept of exception handling in PL/SQL.

   (*e*) Explain subqueries and its types.

5. Write short notes on any *three* of the following : 15

   (*a*) ORDER BY Clause

   (*b*) Multiple row functions

   (*c*) Types of SQL commands

   (*d*) Outer join

   (*e*) Entities.