SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN (AUTONOMOUS) (Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC) Chromepet, Chennai - 600 044. B.Sc. CS with AI - END SEMESTER EXAMINATIONS APRIL - 2024 SEMESTER -22UAICT4004 - Relational Database Management System

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30 \text{ Marks})$

- 1. Summarize the functionality of the database management system with an example.
- 2. Write the 12 rules (codd's law) for fully functional RDBMS.
- 3. Relate first and second normal form with an example.
- 4. Write SQL commands to insert, delete, update and select data from Student table with fields sid, sname, department, mark1, mark2, mark3.
- 5. Summarize the data types and control structure of PL/SQL.
- 6. Explain cursors with suitable examples.
- 7. Write queries to find maximum, minimum, average salary of employees from Employee table and Display name of the employees in Uppercase.
- 8. Explain the degree of relationship and its types.

Section C

Answer any **THREE** questions $(3 \times 10 = 30 \text{ Marks})$

- 9. Discuss briefly about the components of E-R diagram with example.
- 10. Interpret relational calculus with an example.
- 11. Illustrate the Normalization process with an example.
- 12. Create a table Employee with necessary fields, like Empno (primary key), name, designation, etc., and write SQL queries to perform the following operations on the table. Add a column 'department' to the Employee table. Rename the column Empno as Empnum. Display the table Structure. Delete the records whose department in Accounts.
- 13. Explain Exception handling features in PL/SQL with an example.
