

FD-472

M.Sc. 2nd Semester Examination, May-June 2022

COMPUTER SCIENCE

Paper - I

RDBMS (SQL Programming with Oracle)

Time: Three Hours] [Maximum Marks: 100

Note: Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

- 1. (a) What is data, information and knowledge? How to Data Processing is differ from Data Management? Explain.
 - (b) Explain the object oriented database and object relational database.
 - (c) What is ODBC? Explain the concept of ODBC in details.

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(Turn Over)

Unit-II

- **2.** (*a*) What is Generalization, Specialization and Aggregation in E-R Model? Explain with example.
 - (b) Describe the various types of Joins used in Relational Algebra.
 - (c) What is Key? Explain the different types of key used in E-R Model.

Unit-III

- **3.** (a) What is View? How to create and delete view? Explain with example.
 - (b) What is data type? Explain the various data types used in PL/SQL with example.
 - (c) Write a PL/SQL to calculate factorial of any given number.

Unit-IV

- **4.** (a) How to inserting and fetching row using PL/SQL? Explain with example.
 - (b) Create a procedure to display record in PL/SQL using suitable data.
 - (c) What is Package? How to create and use a package in PL/SQL? Explain with example.

Unit-V

- **5.** (a) What is 3NF and Boyce Codd Normal Form? Explain with example.
 - (b) How do functional dependencies differ from join dependencies? Explain with example.
 - (c) What is Indexing? Explain the B+ Tree and Hashing Techniques.