# TILAK MAHARASHTRA VIDYAPEETH, PUNE MASTER OF COMPUTER APPLICATIONS

# EXAMINATION : DECEMBER - 2023 SEMESTER - II

Sub: Advanced DBMS (MCA- 202-22)

Date :20/12/2023 Total Marks : 60 Time: 10.00 am To 12. 30 pm

#### Instruction:

- 1. All questions are compulsory unless and otherwise stated.
- 2. Bold figures to the right of every question are the maximum marks for that question.
- 3. Candidates are advised to attempt questions in order.
- 4. Answers written illegibly are likely to be marked zero.
- 5. Use of scientific calculators, Log tables, Mollier Charts is allowed.
- 6. Draw neat and labelled diagram wherever necessary.

## O. 1. Answer the following in 2 - 3 lines. (Any 5)

(10)

- 1. List common data integrity constraints.
- 2. Define Index and View
- 3. What are Subqueries?
- 4. Write down difference between Primary Key and Foreign Key.
- 5. What is XML Document?
- 6. What is Big Data?
- 7. Compare SQL and NoSQL.

## Q. 2. Answer the following in short. (Any 4)

(20)

- 1. Describe the concept of a database transaction and its properties
- 2. What is NoSQL?Explain types of NoSQL
- 3. Explain the use of Index in relational database with syntax and example.
- 4. Define function in SQL? Write example to create a user-defined function
- 5. Write a note on deadlock detection and recovery.
- 6. Difference between Structured, Semi structured and unstructured database

#### Q. 3. Answer the following in detail. (Any 3)

(30)

- 1. Explain CURSOR in SQL? Write syntax to declare a cursor explain with example
- 2. What is an Object Oriented Database (OODB)? How does OODB differ from relational database?
- 3. Explain normalization and its different forms with example?
- 4. Explain CREATE, INSERT, UPDATE and DELETE statement with the help of example.
- 5. Explain Conditional statement / Branching in PL/SQL? Explain with example.

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