TILAK MAHARASHTRA VIDYAPEETH, PUNE
MASTER OF SCIENCE (M.SC) IN COMPUTER APPLICATIONS
EXAMINATION : JANUARY - 2023
SEMESTER - I
Sub.: Advanced Database Management System (MSC-101-22)

Date : 04/01/2023   **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.*

Q. 1. **Answer the following in 2 - 3 lines. (Any 5)**   **(10)**

1. What is XQuery ?
2. Define the terms i) DDL and ii) DML.
3. Define Deadlock.
4. What is meant by Data warehouse ?
5. What is concurrency Control
6. What is Data Mining ?
7. Define Commit and Rollback.

Q. 2. **Answer the following in short. (Any 4)**   **(20)**

1. Explain how pattern matching is done in SQL.
2. Explain difference between NOSQL and Relational database
3. What are different types of SQL statements ?
4. What is Structured, Unstructured and semi structured data ?
5. Write a note on JOINS in SQL.
6. Explain Aggregate functions.

Q. 3. **Answer the following in detail. (Any 3)**   **(30)**

1. Write a note on Concurrency contol mechanism.
2. What is a CURSOR? Explain with example.
3. Explain Stored procedure and Function.
4. Write a note on VIEWS in SQL? Explain how to create, modify or delete a VIEW.
5. What is Constraint? Explain in detail about all the Constraints available with example.