

**TILAK MAHARASHTRA VIDYAPEETH, PUNE**  
**MASTER OF COMPUTER APPLICATIONS**  
**EXAMINATION :MAY- 2024**  
**SEMESTER - II**

**Sub:Advanced DBMS(MCA- 202-22)**

**Date :23/05/2024**

**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 2-3lines. (Any 5) (10)**

1. Write a note on SQL datatypes.
2. What is the use of HDFS?
3. What is purpose of group by clause in SQL.
4. What are stored procedures?
5. What is the difference between Delete and Drop command in SQL.
6. Define the term Big Data.
7. Define Inheritance in SQL.

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

1. Explain primary key and foreign key constraint with example.
2. What is Transaction? Explain different properties of Transactions.
3. Enlist the differences between Structured, Semi-structured and Unstructured data.
4. Explain any 5 CODD's rules in DBMS.
5. Explain types of SQL Join operations with suitable example.
6. Explain database Triggers with suitable example.

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

1. Define database view? Explain how to create, update and delete views along with example.
2. Write a PL/SQL block to calculate factorial of given number.
3. Define Distributed Database. Explain architecture of Distributed Databases in detail.
4. Explain normalization and its different forms with example.
5. Explain CREATE, INSERT, UPDATE and SELECT statements along with suitable example.

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