

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: MBA
BRANCH: MANAGEMENT**

**SEMESTER : III
SESSION : MO/2025**

SUBJECT: MT538R1 RELATIONAL DATABASE MANAGEMENT SYSTEM

TIME: 3 Hours

FULL MARKS: 50

INSTRUCTIONS:

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
-

		CO	BL
Q.1(a)	Discuss main categories of data model. What is difference between a database schema and data base state?	[5] 1	2
Q.1(b)	Describe three -schema architecture. Why do we need mapping between schema level?	[5] 1	3
Q.2(a)	What is difference between primary storage and secondary storage? What is difference between static file and dynamic file?	[5] 1	2
Q.2(b)	Explain B+ tree data structure for storing index.	[5] 1	3
Q.3(a)	Explain transaction rollback and fuzzy checkpoint.	[5] 5	3
Q.3(b)	Explain fundamentals of RDBMS and list examples of DML and DDL commands.	[5] 2	3
Q.4(a)	Write a SQL query to fetch "FIRST_NAME" from the Student table in upper case and use ALIAS name as STUDENT_NAME.	[5] 3	3
Q.4(b)	Explain normalization. Discuss difference between 3NF and BCNF.	[5] 4	3
Q.5(a)	Explain client server architecture in distributed database.	[5] 3	3
Q.5(b)	Discuss data warehouse and data mart.	[5] 2	2

:20/11/2025:::E