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

CLASS: BTECH   SEMESTER : V
BRANCH: CSE   SESSION : MO/2023

SUBJECT: CS265 DATABASE SYSTEM CONCEPTS

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
Q.1(a)	Create the database architecture diagram.	[5]	[CO1CO2][BL1][M1]
Q.1(b)	Describe different types of attributes.	[5]	{CO1CO2][BL5][M1]
Q.2(a)	Describe set operators and aggregate functions.	[5]	[CO3][BL5][M2]
Q.2(b)	Illustrate any 5 relational algebra operations with example.	[5]	[CO3][BL5][M2]
Q.3(a)	Support the theory of functional dependency with an example.	[5]	[CO4][BL2][M3]
Q.3(b)	Demonstrate second normal form with suitable example.	[5]	[CO4][BL4][M3]
Q.4(a)	Describe in short how a query is processed with a suitable block diagram	[5]	[CO4][BL5][M4]
Q.4(b)	Distinguish between B-tree and B+ tree index files.	[5]	[CO4][BL3][M4]
Q.5(a)	Describe ACID properties.	[5]	[CO5][BL5][M5]
Q.5(b)	Explain conflict serializability with example.	[5]	[CO5][BL5][M5]

:::::01/12/2023 M:::::