

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

CLASS: BTECH
BRANCH: ALL

SEMESTER : Vth
SESSION : MO/2024

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.
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		CO	BL
Q.1(a)	What is a DBMS, and how does it differ from a file management system?	[5]	1 U
Q.1(b)	What are the different level of abstraction? Explain each of them?	[5]	1 U
Q.2(a)	Explain the fundamental operations of relational Algebra?	[5]	1 R
Q.2(b)	Differentiate between Cartesian product and join.	[5]	2 R
Q.3(a)	Explain E-R diagram with example.	[5]	2 U
Q.3(b)	What is normalization and Explain different types of Normal form.	[5]	2 U
Q.4(a)	What are the various states of a transaction? Explain with a state diagram?	[5]	2 U
Q.4(b)	What is schedule ? Explain the types of schedule?	[5]	3 U
Q.5(a)	What do you mean by concurrent execution? Discuss its advantages?	[5]	3 U
Q.5(b)	Explain locking. What are different modes of locking?	[5]	3 U

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