BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/2024)

CLASS: B.TECH.   SEMESTER : V (O.E)
BRANCH: CIVIL,EEE,ECE,MECH.   SESSION : MO/2024

SUBJECT: CS361 DATABASE MANAGEMENT SYSTEM

TIME: 02 Hours   FULL MARKS: 25

INSTRUCTIONS:
1. The question paper contains 5 questions each of 5 marks and total 25 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. **Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates**

			CO	BL
Q.1(a)	What are the functions and responsibilities of DBA	[2]	1	I
Q.1(b)	Define Database Management system? Its advantages and disadvantages over file-oriented system.	[3]	2	II
Q.2(a)	What is Transaction? Explain different Transaction States with example.	[2]	2	III
Q.2(b)	With the help of diagram explain Database Architecture and its function.	[3]	2	VI
Q.3(a)	Describe Specialization, Generalization, Aggregation, and its difference with figure.	[2]	2	IV
Q.3(b)	Construct an E-R diagram for a Car Insurance company whose customers' own one or more cars each. Each car has associated with its zero to any number of record accidents. Car loan through Bank.	[3]	3	VI
Q.4(a)	How many types of relationships can be created in Base? Explain each of them.	[2]	2	II
Q.4(b)	What is the uses of Codd's Rule in DBMS? Explain.	[3]	2	II
Q.5(a)	Define Normalization, Functional Dependency with example.	[2]	2	III
Q.5(b)	Explain 1NF, 2NF and 3NF with example.	[3]	3	II

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