09-06-2026 SE IT SEM-III C SCHEME DMS QP CODE: 20014987

Duration: 3hours **[Max Marks:80]**

N.B. : (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Assume suitable data, if required and state it clearly.

1			
	a.	Explain DML SQL commands with suitable Examples	**[5]**
	b.	Differentiate between Strong and Weak Entity.	**[5]**
	c.	Explain Log based recovery	**[5]**
	d.	Discuss the Database Administrator role in Database Development.	**[5]**
2	a.	Explain Conflict and View Serializability in detail	**[10]**
	b.	Design an ER diagram for a Hotel Management System and convert it into a relational schema.	**[10]**
3	a.	Explain DBMS Overall Architecture in detail.	**[10]**
	b.	Explain any 5 relational algebra operators with examples.	**[10]**
4	a.	Explain Database Programming with JDBC.	**[10]**
	b.	What is Normalization? Explain 1NF, 2NF, and 3NF with an example.	**[10]**
5	a.	Explain the concept of Transactions and ACID Properties.	**[10]**
	b.	Explain EER notations with examples	**[10]**
6		Write short note on:	
	a.	Keys in database management.	**[5]**
	b.	Aggregate Functions in SQL	**[5]**
	c.	Discuss Triggers with examples	**[5]**
	d.	Joins in SQL	**[5]**

****

X525Y5534C2X525Y5534C2X525Y5534C2X525Y5534C2