

QP CODE: D4BCA2403	(Pages: 2)	Reg. No :
		Name :
FOURTH SEMESTER FYUGP EXAMINATION, APRIL 2026 Discipline Specific Core (DSC) Courses - Major BCA4CJ205 : DATABASE MANAGEMENT SYSTEM (Credits: 4)		
Time: 2 Hours	Maximum Marks: 70	
Section A		
Answer the following questions. Each carries 3 marks (Ceiling: 24 marks)		
1. Define a database.	BL1	CO1
2. What is a superkey? Give an example.	BL2	CO2
3. What is the purpose of the INSERT command in SQL?	BL1	CO6
4. Explain the purpose of access modes in SQL transactions.	BL2	CO1, CO5
5. Define SQL. What is its primary purpose in database management systems?	BL1	CO4
6. Who are the main actors on the scene in a database system? Name any two.	BL2	CO1
7. Differentiate between binary and ternary relationships with examples.	BL2	CO3
8. What is a NoSQL database?	BL1	CO6
9. Explain the isolation property of a transaction.	BL2	CO1, CO5
10. Describe temporary update problem.	BL2	CO1, CO5
Section B		
Answer the following questions. Each carries 6 marks (Ceiling: 36 Marks)		
11. Explain Unstructured Databases with examples and applications.	BL2	CO1
12. Explain NULL values in the relational model and discuss the different situations where NULL values are used.	BL2	CO2
13. Explain aggregation and grouping in SQL using suitable examples.	BL2	CO4
(PTO)		

14.	What is binary lock? Explain the locking and unlocking operations for binary lock.	BL2	CO1, CO5
15.	Define recoverable, cascadeless, and strict schedules. Explain their differences with suitable examples.	BL2	CO1, CO5
16.	What is a Database Interface? List different types of database interfaces.	BL1	CO1
17.	Describe strong entity set and weak entity set in the ER model with suitable examples.	BL2	CO3
18.	Explain how data is stored and retrieved in Redis. Give a simple example of key-value storage.	BL3	CO6
Section C			
Answer any one question. Each carries 10 marks (1 x 10 = 10 Marks)			
19.	Explain the concept of data models. Describe at least three types of data models commonly used in database systems with examples.	BL2	CO1
20.	Describe first, second, and third normal forms. Give suitable examples.	BL2	CO2
CO : Course Outcome			
BL : Bloom's Taxonomy Levels (1 – Remember, 2 – Understand, 3 – Apply, 4 – Analyse, 5 – Evaluate, 6 – Create)			