

QP Code: D143673		Total Pages: 1	Name:
		Register No.	
FOURTH SEMESTER (CUFYUGP) DEGREE EXAMINATION, APRIL 2026			
COMPUTER APPLICATION			
BCA4CJ205 Database Management System			
2024 Admission onwards			
Maximum Time :2 Hours		Maximum Marks :70	
Section A			
All Questions can be answered. Each Question carries 3 marks (Ceiling: 24 Marks)			
1	Define a Database Management System (DBMS).		
2	Who are the main actors involved in a database system?		
3	What is meant by schema and instance in a database?		
4	Define an entity set and attribute in the ER model.		
5	What is meant by cardinality in a relationship?		
6	Define a relation, tuple, and attribute in the relational model.		
7	What is SQL?		
8	What is Data Definition Language (DDL)?		
9	What is a transaction in DBMS?		
10	What are the desirable properties of a transaction?		
Section B			
All Questions can be answered. Each Question carries 6 marks (Ceiling: 36 Marks)			
11	Explain the different database languages and interfaces.		
12	Describe structured, semi-structured, and unstructured databases with examples.		
13	Explain relational model constraints.		
14	Describe the different normal forms: 1NF, 2NF, and 3NF.		
15	Explain SQL Data Manipulation Language (DML) commands with examples.		
16	Explain nested queries in SQL.		
17	Explain recoverability of schedules in transaction processing.		
18	Describe transaction support in SQL.		
Section C			
Answer any ONE. Each Question carries 10 marks (1x10=10 Marks)			
19	Explain the Boyce–Codd Normal Form (BCNF) and its importance in database design.		
20	Explain the main characteristics of document databases with an example from MongoDB.		