Question Paper Code: R18A22CS05

R18

ANURAG Engineering College

(An Autonomous Institution)

II B.Tech II Semester Supplementary Examinations, Jan/Feb-2024

DATABASE MANAGEMENT SYSTEMS

(COMPUTER SCIENCE AND ENGINEERING)

Time: 3 Hours **Max. Marks: 75**

Section – A (Short Answer type questions) (25 Marks)

Answer All Questions	Course Outcome	B.T Level	Marks
1. What is DDL?	CO1	L1	2M
2. Compare Strong entity Vs Weak entity	CO1	L2	3M
3. Construct SQL query to retrieve details of employees joined in year 1996.	CO2	L2	2M
4. Write SQL syntax to create table along with constraints.	CO2	L2	3M
5. What is FIRST Normal Form?	CO3	L1	2M
6. List basic operations of Relational algebra.	CO3	L1	3M
7. What are desirable properties of transaction?	CO4	L1	2M
8. Define serial schedule.	CO4	L1	3M
9. Why is concurrency control needed?	CO5	L2	2M
10. List types of failures.	CO5	L1	3M

Section B (Essay Questions)

Answer all questions, each question carries equal marks. (5 X 10M = 50M)

11. A)	Explain the characteristics of DBMS.	CO1	L2	10M
	OR			
B)	Design an ER model for simple library management system.	CO1	L3	10M
12. A)	Construct the SQL quires for the following. i) Retrieve the details employees whose name starts with 'A'. ii) Retrieve the name of employee who is earning highest salary. iii) Display the details employees in ascending order of their salaries department wise.	CO2	L3	10M
	OR			
B)	What are integrity constraints? How they are specified using SQL explain with examples.	CO2	L3	10M
13. A)	Explain basic relational algebra operations with suitable examples.	CO3	L3	10M
	OR			
B)	What are the guidelines for good design of relational database? Discuss.	CO3	L3	10M
14. A)	How indexing is useful in DBMS? Explain B+ Tree index in details.	CO4	L2	10M
	OR			
B)	What are serial schedules? Explain procedure to test conflict serilazability of schedule.	CO4	L3	10M
15. A)	Explain techniques for concurrency control in DBMS.	CO5	L2	10M
	OR			
B)	Explain ARIES algorithm.	CO5	L2	10M