B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022

Fourth Semester

Computer Science and Business Systems

20CBPC401 - DATABASE MANAGEMENT SYSTEMS

(Regulations 2020)

Duration: 3 Hours   Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks, K-Level,CO
1.	State the difference between open source and commercial DBMS.	*2,K1,CO2*
2.	Why relational database is used?	*2,K1,CO2*
3.	How query processing and optimization done?	*2,K1,CO3*
4.	List the advantage of query equivalence technique.	*2,K1,CO3*
5.	What are the two basic kinds of indices?	*2,K1,CO4*
6.	List the different types of Storage strategies.	*2,K1,CO4*
7.	State difference between Multi-version and optimistic scheduling.	*2,K1,CO5*
8.	Why DBMS needs a concurrency control?	*2,K1,CO5*
9.	Define data mining.	*2,K1,CO6*
10.	List the advantage of Logical Database.	*2,K1,CO6*

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11.	a)	Discuss in detail about MYSQL, ORACLE, DB2, SQL.	*13,K2,CO2*
		OR	
	b)	Illustrate about relational query languages with example.	*13,K3,CO2*
12.	a)	Explain about query processing and optimization in detail.	*13,K2,CO3*
		OR	
	b)	Explain the evaluation of relational algebra expressions.	*13,K2,CO3*
13.	a)	Compare static hashing and dynamic hashing in detail.	*13,K2,CO4*
		OR	
	b)	Explain the different types of indexes and its properties.	*13,K2,CO4*

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create   **11675**

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14. a) Describe in detail about concurrency control schemes. *13,K1,CO5*

    OR

    b) Illustrate about locking and timestamp based scheduler. *13,K3,CO5*

15. a) Explain object oriented and object relational database with example. *13,K2,CO6*

    OR

    b) Discuss in detail about the deductive database and spatial database. *13,K2,CO6*

PART - C (1 × 15 = 15 Marks)

16. a) Construct an ER diagram for a student database system. Assume details and elaborate. *15,K3,CO*

    OR

    b) Construct an ER diagram for an employee database system. Assume details and elaborate. *15,K3,CO1*