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(An Autonomous Institution)

Regulations: A20

Code No:8EC03 **Date: 12-August-2024 (FN)**

B.Tech II-Year II- Semester External Examination, August-2024 (Supplementary)

DATABASE MANAGEMENT SYSTEMS (CSE,IT,ECM,CS,AIML,DS,IOT)

Time: 3 Hours **Max.Marks:70**

Note: *a) No additional answer sheets will be provided.*
b) All sub-parts of a question must be answered at one place only, otherwise it will not be valued.
c) Missing data can be assumed suitably.

Bloom's Cognitive Levels of Learning (BCLL)

Remember	L1	Apply	L3	Evaluate	L5
Understand	L2	Analyze	L4	Create	L6

Part - A Max.Marks:20

ANSWER ALL QUESTIONS

		BCLL	CO(s)	Marks
1	What are the roles of database administrators?	L1	CO1	[2M]
2	What is the use of Foreign key?	L1	CO2	[2M]
3	Write about Comparison operators.	L1	CO3	[2M]
4	Why BCNF is required in normalization?	L1	CO4	[2M]
5	Define 2-phase locking protocol.	L2	CO5	[2M]
6	What is meant by cluster index?	L1	CO6	[2M]
7	Define Derived attribute and draw ER notation for derived attribute.	L3	CO1	[2M]
8	What is the use of Group-by clause?	L2	CO3	[2M]
9	Write the difference between partially committed and committed state.	L3	CO5	[2M]
10	List the various outer joins.	L1	CO6	[2M]

Part – B Max.Marks:50

ANSWER ANY FIVE QUESTIONS. EACH QUESTION CARRIES 10 MARKS.

			BCLL	CO(s)	Marks
11.	a)	Describe in detail about DDL and DML .Explain with suitable examples.	L2	CO1	[5M]
	b)	Explain different attributes used in ER model and draw ER diagram for a college scenario.	L4	CO1	[5M]
12.	a)	Discuss about Relational algebra operations.	L2	CO2	[5M]
	b)	Explain in detail about Creation ,altering and destroying views.	L2	CO2	[5M]
13.	a)	What are Aggregate operators? Explain with examples.	L2	CO3	[5M]
	b)	What are different types of Logical connectivity's used in SQL? Explain with examples	L2	CO3	[5M]
14.	a)	Define relational decomposition. Discuss types of decomposition with examples	L2	CO4	[5M]
	b)	Define 1NF and 2NF.Illustrate them with examples.	L4	CO4	[5M]
15.	a)	Define serializability and explain conflict serializability with example	L2	CO5	[5M]
	b)	Discuss how to implement recovery with concurrent transactions?	L3	CO5	[5M]
16.	a)	Explain about Indexed sequential access methods.	L2	CO6	[5M]
	b)	Describe about tree based indexing with an example.	L2	CO6	[5M]
17.	a)	Briefly write about transaction management.	L2	CO1	[4M]
	b)	Explain about Domain relational calculus.	L2	CO2	[3M]
	c)	Define trigger. Explain with an example.	L2	CO3	[3M]
18.	a)	Discuss about multi valued dependency with an example.	L3	CO4	[4M]
	b)	Explain in detail about multiple granularity.	L2	CO5	[3M]
	c)	Write about hash based indexing.	L2	CO6	[3M]

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