B.Tech II-Year II- Semester External Examination, July/August - 2022 (Supplementary)
DATA BASE MANAGEMENT SYSTEMS (CSE, IT and ECM)

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

> ***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.*

ANSWER ANY 5 OUT OF 8 QUESTIONS. EACH QUESTION CARRIES 15 MARKS.
Bloom's Cognitive Levels of Learning (BCLL)

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

			BCLL	CO(s)	Marks
1.	a)	Draw and explain the architecture of Database Management System with neat diagram.	L2	CO1	[8M]
	b)	Summarize the additional features of ER Model.	L2	CO1	[7M]
2.	a)	What is view in SQL? Differentiate different types Views and also explain all operations of Views with example.	L4	CO2	[8M]
	b)	Illustrate the different operations in Relational Algebra with the help of an example.	L4	CO2	[7M]
3.	a)	Explain the operators in SQL with examples. i) ANY ii) IN iii) ALL iv) MINUS	L2	CO3	[8M]
	b)	Write the importance of Joins in Databases and also list its types with examples.	L1	CO3	[7M]
4.	a)	Define normalization. Demonstrate the difference between 3NF and BCNF with suitable example.	L3	CO4	[8M]
	b)	Define a Functional Dependency. Explain the types of Functional Dependency.	L2	CO4	[7M]
5.	a)	Interpret the ACID properties of a Data Base Transaction.	L5	CO5	[8M]
	b)	Differentiate between Lock based Protocols and Time stamp Based Protocols.	L4	CO5	[7M]
6.	a)	Elaborate different types of operations in ISAM structure by taking a sample example.	L2	CO6	[8M]
	b)	Describe the various types of File Organization techniques.	L1	CO6	[7M]
7.	a)	Analyze the responsibilities of DBA.	L4	CO1	[5M]
	b)	Identify any three differences between primary key and foreign key.	L1	CO2	[5M]
	c)	Summarize any four SQL Aggregate operators with an example.	L6	CO3	[5M]
8.	a)	What is decomposition? What are the problems that can be caused by using decomposition?	L1	CO4	[5M]
	b)	Discuss about cascade and cascade-less schedules.	L2	CO5	[5M]
	c)	Categorize the types of storage devices.	L6	CO6	[5M]

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