MARRI LAXMAN REDDY
INSTITUTE OF TECHNOLOGY AND MANAGEMENT
(AN AUTONOMOUS INSTITUTION)
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad)
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MLRS

II B.Tech II Sem Supply End Examination, July 2022
Database Management Systems
(CSE & IT)

Time: 3 Hours.   Max. Marks: 70

Note: 1. Question paper consists: Part-A and Part-B.
2. In Part – A, answer all questions which carries 20 marks.
3. In Part – B, answer any one question from each unit.
    Each question carries 10 marks and may have a, b as sub questions.

PART- A
(10*2 Marks = 20 Marks)

1.	a)	Define (i) Database (ii) DBMS	2M	CO1	BL1
	b)	List the database Applications?	2M	CO1	BL1
	c)	Define primary key	2M	CO2	BL1
	d)	Write example of candidate key	2M	CO2	BL1
	e)	Write a syntax for View	2M	CO3	BL1
	f)	Define trigger and list it three parts	2M	CO3	BL1
	g)	List the properties of Transaction	2M	CO4	BL1
	h)	Define Compatibility Function	2M	CO4	BL1
	i)	Define Secondary indexes	2M	CO5	BL1
	j)	List various types of Failures.	2M	CO5	BL1

PART- B
(10*5 Marks = 50 Marks)

2	a)	Explain about Disadvantages of file system.	5M	CO1	BL4
	b)	Define Data Model. Explain various types of Data Models in DB systems.	5M	CO1	BL4

OR

3		Construct an E-R diagram for a hospital with a set of patients and a set of medical doctors. Associate with each patient a log of the various tests and examinations conducted.	10M	CO1	BL6

4	a)	Write about views and updates on views?	5M	CO2	BL1
	b)	Differentiate Nested Queries and Correlated Queries with suitable examples	5M	CO2	BL2

OR

5		Define a nested query?
		 Consider the following schema
		   Sailors (sid: integer, sname: string, rating: integer, age: integer)
		   Reserves (sid: integer, bid: integer, day: date)
		   Boats (bid: integer, bname: string, color: string)
		  b. Write a nested query to find the names of sailors who have reserved both a red and green boat?
		 c. Write a nested query to find the names of sailors who have reserved all boats?
			10M	CO2	BL1

6	a)	Differentiate row level and statement level triggers?	5M	CO3	BL2
	b)	List the aggregate functions with suitable examples	5M	CO3	BL1

<div align="center">OR</div>

7		Define normalization? Explain 1NF, 2NF, 3NF Normal forms?	10M	CO3	BL4
8	a)	Discuss about non recoverable and recoverable schedules	5M	CO4	BL2
	b)	Illustrate Concurrent execution of transaction with examples?	5M	CO4	BL3

<div align="center">OR</div>

9		Explain ACID properties and Illustrate them through examples?	10M	CO4	BL4
10	a)	Discuss about different categories of storage?	5M	CO5	BL2
	b)	Explain B+ trees? Discuss about this Dynamic Index Structure?	5M	CO5	BL4

<div align="center">OR</div>

11		Classify different types of failures in DBMS. Explain.	10M	CO5	BL2

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