SR 22

SET – 1

St. Peter's Engineering College (Autonomous) Dullapally (P), Medchal, Hyderabad – 500100. II– Mid Term Examination – APR 2025						Dept.	:	AIML
						Academic Year 2024-25		
Subject Code	:	AS22-05PC07	Subject	:	DATABASE MANAGEMENT SYSTEMS (DBMS)			
Class/Section	:	B. Tech. (A)	Year	:	II	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

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

PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
1	a) What is Schedule?	1M	L1	C224.4
	b) What is dirty read?	1M	L1	C224.4
	c) What is granularity?	1M	L1	C224.4
	d) Define Atomicity.	1M	L1	C224.4
	UNIT – V			
	e) What is an Index?	1M	L1	C224.5
	f) Define serializability.	1M	L1	C224.5
	g) How many types of Indexes?	1M	L2	C224.5
	h) What is ISAM?	1M	L2	C224.6
	UNIT – III			
	i) What is Redundancy?	1M	L2	C224.3
	j) What is the full form of BCNF?	1M	L1	C224.3

PART – B (20M)

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
2	a) Explain about Time stamp based protocol.	4M	L2	C224.4
	b) Write about Transaction Properties.	4M	L2	C224.4
	OR			
3	a) Explain one of the lock based protocol.	4M	L2	C224.4
	b) Explain about recoverability.	4M	L2	C224.4
	UNIT – V			
4	a) Explain in detail Tree Based Indexing.	4M	L2	C224.5
	b) Write about Primary and Secondary Indexes.	4M	L2	C224.5
	OR			
5	a) Write about ISAM.	4M	L2	C224.6
	b) Compare any two File Organizations.	4M	L2	C224.5
	UNIT – III			
6	Write the problems related to Decomposition.	4M	L2	C224.3
	OR			
7	Write about 3rd Normal Form.	4M	L2	C224.3

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SET-2

St. Peter's Engineering College (Autonomous) Dullapally (P), Medchal, Hyderabad – 500100. I I- Mid Term Examination – APR 2025						Dept.	:	AIML
						Academic Year 2024-25		
Subject Code	:	AS22-05PC07	Subject	:	DATABASE MANAGEMENT SYSTEMS (DBMS)			
Class/Section	:	B. Tech. (A)	Year	:	II	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

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

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PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT - IV			
1	a) What is a Transaction give an example?	1M	L2	C224.4
	b) Discuss about blind writes?	1M	L2	C224.4
	c) How many types of schedules are there give real world examples?	1M	L2	C224.4
	d)What is granularity?	1M	L1	C224.4
	UNIT – V			
	e) What is File	1M	L1	C224.5
	f) Write any three types of File organizations?	1M	L2	C224.5
	g) Define Primary index?	1M	L1	C224.5
	h) Write any 2 Disadvantages of clustered index?	1M	L2	C224.5
	UNIT – III			
	I) What is Schema refinement?	1M	L2	C224.3
	j) What is Redundancy?	1M	L2	C224.3

PART – B (20M)

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Q. No	Question (s)	Marks	BL	CO
	UNIT - IV			
2	a) Explain ACID properties	**4M**	L2	C224.4
	b) Explain conflict serializability with an example?	**4M**	L2	C224.4
	OR			
3	**a) Explain about 2 PL?(-Any one protocol in 2PL)**	**4M**	L2	C224.4
	b) Write about validation based protocol?	**4M**	L2	C224.4
	UNIT – V			
4	**a) Explain in detail about Hash based Indexing?**	**8M**	L2	C224.5
	OR			
5	**a) Explain about inserting node in B+trees**	**4M**	L2	C224.5
	b)Write about ISAM	**4M**	L2	C224.5
	UNIT – III			
6	Define aggregate functions and their uses with the help of example queries.	**4M**	L2	C224.3
	OR			
7	Describe about 1st Normal form?	**4M**	L2	C224.3

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SET – 3

St. Peter's Engineering College (Autonomous) Dullapally (P), Medchal, Hyderabad – 500100. II – Mid Term Examination – APR 2025						Dept.	:	AIML
						Academic Year 2024-25		
Subject Code	:	AS22-05PC07	Subject	:	DATABASE MANAGEMENT SYSTEMS (DBMS)			
Class/Section	:	B. Tech. (A)	Year	:	II	Semester	:	II
Duration	:	120 Min	Max. Marks	:	30	Date:	:	

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

PART – A (10x1M = 10M)

Note: Answer all Questions. Each Question carries equal marks.

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
1	a) What are the Techniques to implement Durability?	1M	L2	C224.4
	b) Write the Advantages of Concurrent Executions in DBMS.	1M	L2	C224.4
	c) What is Serializability?	1M	L1	C224.4
	d) What are the Several levels of Recoverability that can be supported by a Database System?	1M	L2	C224.4
	UNIT – V			
	e) What are the types of Storage?	1M	L1	C224.5
	f) What is File Organization?	1M	L1	C224.5
	g) What are the types of Indexes?	1M	L2	C224.5
	h) What is Granularity?	1M	L1	C224.5
	UNIT – III			
	i) What is Active Databases?	1M	L1	C224.3
	j) What are the types of Decomposition?	1M	L2	C224.3

PART – B (20M)

Q. No	Question (s)	Marks	BL	CO
	UNIT – IV			
2	a) Draw transaction state diagram and describe each state that a transaction goes through during its execution.	4M	L2	C224.4
	b) Discuss in detail about ACID properties of a transaction.	4M	L2	C224.4
	OR			
3	a) What is need of lock in DBMS? Explain 2-phase locking and strict two-phase locking in detail.	4M	L2	C224.4
	b) Write short note on Multiple Granularity.	4M	L2	C224.4
	UNIT – V			
4	a) Explain in detail about Data on External Storage in DBMS.	4M	L2	C224.5
	b) Write in detail about ISAM.	4M	L2	C224.5
	OR			
5	a) What is Dynamic Index Structure? Explain in detail about the B+ Tree?	4M	L2	C224.5
	b) State and explain various file organization methods.	4M	L2	C224.5
	UNIT – III			
6	Explain in detail about the Aggregation Function in DBMS.	4M	L2	C224.3
	OR			
7	Write about Decomposition & its problems in DBMS.	4M	L2	C224.3

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