SRM Institute of Science and Technology
College of Engineering and Technology

DEPARTMENT OF ECE

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

OFFLINE
SET B

Academic Year: 2022-23 (ODD)

Test: CLAT-1 **Date: 2/8/2022**
Course Code & Title: 18CSC303J/ Database Management Systems **Duration:** 60 Min
Year & Sem: IV & VII, Sec N **Max. Marks:** 25

Q. No	Questions	Marks	BL	CO	PO
1	Which of the following is not a type of database? a) Hierarchical b) Network c) Distributed d) Decentralized	1	1	1	1
2	Which of the following is a feature of the database? a) No-backup for the data stored b)User interface provided c)Lack of Authentication d) Store data in multiple locations	1	1	1	1
3	What does an RDBMS consist of? a) Collection of Records b) Collection of Keys c) Collection of Tables d) Collection of Fields	1	1	1	2
4	The DBMS acts as an interface between _____ and _____ of an enterprise-class system. a) Data and the DBMS b) Application and SQL c) Database application and the database d) The user and the software	1	2	1	1
5	The ability to query data, as well as insert, delete, and alter tuples, is offered by _____ a)TCL(Transaction Control Language) b)DCL(Data Control Language) c)DDL(Data Definition Language) d) DML (Data Manipulation Language)	1	1	1	2
6	Illustrate about Data abstraction. Also explain about various types. .	(4+6=10)	3	1	1
7	What is Data independence? Explain three level of data independence.	(4+6=10)	3	1	2
8	Illustrate about the SQL Command types. Explain each type with suitable example.	(4+6=10)	2	1	1

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Academic Year: 2022-23 (ODD)

Test: CLAT- 2 **Date: 14/9/2022**
Course Code & Title: 18CSC303J/ Database Management Systems **Duration:** 100 Min
Year & Sem: IV & VII, Sec N **Max. Marks:** 50

	PART A 10 X 1 = 10 Marks				
Q. No	**Questions**	**Marks**	**BL**	**CO**	**PO**
1	An entity or relationship set may be represented in a database as a ___. A. Table B. Field C. Database D. Entity	**1**	**1**	**2**	**1**
2	A separate table represents the ___ attribute. A. Single-valued B. Double-valued C. Multivalued D. None of the above	**1**	**1**	**2**	**1**
3	The generalization process is similar to the bottom-up approach. A. Top-Bottom B. Top-Up C. Bottom-Up D. Up-Bottom	**1**	**1**	**2**	**2**
4	As a general rule, entities at higher levels can combine with entities at lower levels to form a ___ level entity. A. Lower B. Higher C. Middle D. Central	**1**	**1**	**2**	**1**
5	How many types of keys are there? A. 1 B. 2 C. 3	**1**	**1**	**2**	**2**

	D. 4				
6	PL/SQL Procedure consists of – A. Header and Footer B. Body and Footer C. Header and Body D. None of the above	**1**	**1**	**3**	**2**
7	How much number of ways is there to pass the parameters in procedure? A. 1 B. 2 C. 3 D. 4	**1**	**1**	**3**	**2**
8	Which of the following pass parameters can be referenced by procedure? A. IN, OUT B. OUT, INOUT C. IN, INOUT D. None of the above	**1**	**1**	**3**	**2**
9	What is the difference between PL/SQL Function and PL/SQL Procedure? A. PL/SQL function may or may not return the value whereas PL/SQL Procedure must have to return the value. B. PL/SQL Procedure may or may not return the value whereas PL/SQL Function must have to return the value. C. PL/SQL Function may or may not return the function whereas PL/SQL Procedure must have to return the function. D. None of the above	**1**	**1**	**3**	**2**
10	Oracle creates ____ when SQL statements are processed. A. Content Areas B. Context Areas C. Context Ids D. Content Ids	**1**	**1**	**3**	**2**
	PART B (4 X 10 = 40 Marks)				
	Answer any Two Questions from CO2				
11	a)What is the need for ER Model? b) Discuss about the Concept Design with the ER Model?	**(4+6=10)**	**3**	**2**	**1**
12	a) Distinguish strong entity set with weak entity set?	**(5+5=10)**	**3**	**2**	**2**

	b) Draw an ER diagram to Illustrate weak entity set?				
13	a) Define a nested query? b) Write a nested query to find the names of sailors who have reserved both red and green boat? c). Write a nested query to find the names of sailors who have reserved all boats?	**(4+3 +3=10)**	**2**	**2**	**1**
	Answer any TWO Questions from CO3				
14	a) Define trigger and explain its three parts? b) Differentiate row level and statement level triggers?	**(5+5=10)**	**2**	**3**	**1**
15	a) Illustrate outer joins with example?	**10**	**2**	**3**	**1**
16	a) What are different database schema languages and interfaces? Explain in detail of each	**(6+4=10)**	**2**	**3**	**1**

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Academic Year: 2022-23 (ODD)

Test: CLAT- 3 **Date: 02/11/2022**
Course Code & Title: 18CSC303J/ Database Management Systems **Duration:** 100 Min
Year & Sem: IV & VII, Sec N **Max. Marks**

	PART A 10 X 1 = 10 Marks				
Q. No	**Questions**	**Marks**	**BL**	**CO**	**PO**
1	Relational Algebra is a _____ query language that takes two relations as input and produces another relation as an output of the query. a) Relational b) Structural c) Procedural d) Fundamental	**1**	**1**	**4**	**1**
2	Which of the following is used to denote the selection operation in relational algebra? a) Pi (Greek) b) Sigma (Greek) c) Lambda (Greek) d) Omega (Greek)	**1**	**1**	**4**	**1**
3	Which is a join condition contains an equality operator: a) Equijoins b) Cartesian c) Natural d) Left	**1**	**1**	4	**2**
4	The assignment operator is denoted by a) ->	**1**	**1**	**4**	**1**

	b) <- c) = d) ==				
5	A query in the tuple relational calculus is expressed as: a) {t | P() | t} b) {P(t) | t } c) {t | P(t)} d) All of the mentioned	**1**	**1**	**4**	**2**
6	Collections of operations that form a single logical unit of work are called _____ a) Views b) Networks c) Units d) Transactions	**1**	**1**	**5**	**2**
7	Which of the following is a property of transactions? a) Atomicity b) Durability c) Isolation d) All of the mentioned	**1**	**1**	**5**	**2**
8	If a schedule S can be transformed into a schedule S' by a series of swaps of non-conflicting instructions, then S and S' are a) Non conflict equivalent b) Equal c) Conflict equivalent d) Isolation equivalent	**1**	**1**	**5**	**2**
9	A _____of the transactions can be obtained by finding a linear order consistent with the partial order of the precedence graph. a) Serializability order b) Direction graph c) Precedence graph d) Scheduling scheme	**1**	**1**	**5**	**2**
10	Which of the following is the most expensive method? a) Timestamping b) Plain locking c) Predicate locking d) Snapshot isolation	**1**	**1**	**5**	**2**
	PART B (4 X 10 = 40 Marks)				
	Answer any Two Questions from CO4				
11	a) What are the different relational operators that can be applied to a database? b) Describe in detail about Relational algebra queries and Tuple relational calculus	**(4+6=10)**	**3**	**4**	**1**
12	Illustrate with suitable examples about Pitfalls in Relational database	**10**	**3**	**4**	**2**
13	a)Define: Normalization and list out it types b) Describe about Functional Dependency with suitable example	**(4+6=10)**	**2**	**4**	**1**
	Answer any TWO Questions from CO5				
14	a)Describe in detail about the concurrency Control With Locking	**10**	**2**	**5**	**1**

	Methods				
15	a) List out different types of locks . b)Explain about Deadlocks.	**(4+6=10)**	**2**	**5**	**1**
16	**a)** What is Serializability in DBMS? **b)** View Equivalent Schedule	**(2+8=10)**	**2**	**5**	**1**