Course Code: SEITC303   **Course Name: Database Management System**

Time: 2 hours   Max. Marks: 80

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Q1.	Which SQL function is used to calculate the number of rows in a SQL query?
Option A:	COUNT ()
Option B:	NUMBER ()
Option C:	SUM ()
Option D:	AVG ()
Q2.	Which of the following is not a DDL command?
Option A:	UPDATE
Option B:	TRUNCATE
Option C:	ALTER
Option D:	None of the Mentioned
Q3.	_____ is not a category of SQL command.
Option A:	TCL
Option B:	SCL
Option C:	DCL
Option D:	DDL
Q4.	In existing table, ALTER TABLE statement is used to
Option A:	Add columns
Option B:	Add constraints
Option C:	Delete columns
Option D:	All of the above
Q5.	Which clause is used to combine rows from two or more tables based on a related column between them
Option A:	SQL MATCH
Option B:	SQL JOIN
Option C:	SQL PATTERN
Option D:	NONE

Q6.	To combine the result-set of two or more SELECT statements, SQL clause used is
Option A:	SQL UNION
Option B:	SQL JOIN
Option C:	SQL GROUP BY
Option D:	NONE
Q7.	Which is called as a virtual table in SQL?
Option A:	INNER JOIN
Option B:	JOIN
Option C:	VIEW
Option D:	NONE
Q8.	Which of the following is used to denote the selection operation in relational algebra?
Option A:	Pi (Greek)
Option B:	Sigma (Greek)
Option C:	Lambda (Greek)
Option D:	Omega (Greek)
Q9.	For select operation the _____ appear in the subscript and the_____ argument appears in the parenthesis after the sigma.
Option A:	Predicates, relation
Option B:	Relation, Predicates
Option C:	Operation, Predicates
Option D:	Relation, Operation
Q10.	If E1 and E2 are relational algebra expressions, then which of the following is NOT a relational algebra expression ?
Option A:	E1 ∪ E2
Option B:	E1 / E2
Option C:	E1 - E2
Option D:	E1 x E2
Q11.	If the common attributes of two relations are classified as join attributes then the OUTER UNION must be equal to
Option A:	LEFT OUTER JOIN
Option B:	FULL OUTER JOIN
Option C:	HALF OUTER JOIN
Option D:	HALF OUTER JOIN

Q12.	E-R Model uses which symbol to represent a weak entity
Option A:	Dotted rectangle
Option B:	Diamond
Option C:	Double outline rectangle
Option D:	None of these
Q13.	The no of entities to which another entity can be associated via a relationship set is expressed as
Option A:	Entity
Option B:	Cardinality
Option C:	Schema
Option D:	Attributes
Q14.	Which of the following is uniquely identify the entity set(Most suitable)
Option A:	Primary key
Option B:	Super key
Option C:	Candidate key
Option D:	None of these
Q15.	Which of the following is a single value attribute
Option A:	Register number
Option B:	Address
Option C:	Subjects taken
Option D:	Reference
Q16.	In an E-R diagram a ellipse represents_____?
Option A:	Weak entity
Option B:	Relationship
Option C:	Attribute
Option D:	Entity class
Q17.	A functional dependency is a relationship between or among
Option A:	Entities
Option B:	Rows
Option C:	Attributes
Option D:	Tables
Q18.	The database design prevents some data from being stored due to _____.
Option A:	Deletion anomalies

Option B:	Insertion anomalies
Option C:	Update anomalies
Option D:	Selection anomalies
Q19.	If one attribute is determinant of second, which in turn is determinant of third, then the relation cannot be:
Option A:	Well-structured
Option B:	1NF
Option C:	2NF
Option D:	3NF
Q20.	DBMS is
Option A:	Collection of data
Option B:	Collection of interrelated data
Option C:	A set of prewritten program
Option D:	All of the above

Q2	Solve any 2 out of 3 (10 marks each)
A	Draw an ER diagram of University Database Management
B	What is Normalization? Explain 1NF,2NF,3NF,BCNF
C	Explain relational algebra operation

Q3	Solve any 2 out of 3 (10 marks each)
A	What is ACID Properties? Explain Transaction concept.
B	Explain Database Architecture with Diagram
C	Explain DDL and DML commands