

University of Mumbai

Examination June 2021

Examinations Commencing from 1st June 2021

Program: **Computer Engineering**

Curriculum Scheme: **Rev-2019 'C' Scheme**

Examination: **SE Semester IV**

Course Code: **CSC403** and Course Name: **DBMS**

Time: 2 hour

Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks
1.	What is entity.....?
Option A:	Object of relation
Option B:	Present working model
Option C:	Thing in real world
Option D:	Model of relation
2.	Consider attributes ID, CITY and NAME. Which one of this can be considered as a super key?
Option A:	NAME
Option B:	ID
Option C:	City
Option D:	City, ID
3.	The attribute AGE is calculated from DATE_OF_BIRTH. The attribute AGE is.....?
Option A:	Single valued
Option B:	Multi valued
Option C:	Composite
Option D:	Derived
4.	An _____ is a set of entities of the same type that share the same properties, or attributes.
Option A:	Entity set
Option B:	Attribute set
Option C:	Relation set
Option D:	Entity model
5.	which command(s) is(are) used to change a table's storage characteristics in my SQL
Option A:	ALTER TABLE
Option B:	MODIFY TABLE
Option C:	CHANGE TABLE
Option D:	All of the Mentioned

6.	In the _____ normal form, a composite attribute is converted to individual attributes.
Option A:	First
Option B:	Second
Option C:	Third
Option D:	Fourth
7.	Functional Dependencies are the types of constraints that are based on _____
Option A:	Key
Option B:	Key revisited
Option C:	Superset key
Option D:	None of the mentioned
8.	Which is a bottom-up approach to database design that design by examining the relationship between attributes:
Option A:	Functional dependency
Option B:	Database modeling
Option C:	Normalization
Option D:	Decomposition
9.	Tables in second normal form (2NF):
Option A:	Eliminate all hidden dependencies
Option B:	Eliminate the possibility of a insertion anomalies
Option C:	Have a composite key
Option D:	Have all non key fields depend on the whole primary key
10.	select from below which command is used for removing a table and all its data from the database
Option A:	Create command
Option B:	Drop table command
Option C:	Alter table command
Option D:	All of the Mentioned
11.	Which SQL commands is used to manipulate Database structures, including tables?
Option A:	Data Definition Language(DDL)
Option B:	Data Manipulation Language(DML)
Option C:	DML and DDL
Option D:	None of the Mentioned
12.	How many types of join condition DBMS
Option A:	2
Option B:	3
Option C:	4
Option D:	5
13.	Which conditions has to be satisfied for INNER JOIN to work from the following?
Option A:	Columns used for joining must have same name
Option B:	Columns used for joining can have same or different name

Option C:	Columns used for joining must have different names
Option D:	Columns used for joining must have different names
14.	Which forms are based on the concept of functional dependency:
Option A:	1NF
Option B:	2NF
Option C:	3NF
Option D:	4NF
15.	Q.6) For a table to be in the Second Normal form, it should be in the First Normal form and it should not have..... Dependency.
Option A:	Partial Dependency.
Option B:	Full Dependency.
Option C:	Have a composite key
Option D:	none of above
16.	Collections of operations that form a single logical unit of work are called
Option A:	Views
Option B:	Networks
Option C:	Units
Option D:	Transactions
17.	from the following which is the property of transactions?
Option A:	Atomicity
Option B:	Durability
Option C:	Isolation
Option D:	All of the mentioned
18.	In the _____ scheme, a transaction that wants to update the database first creates a complete copy of the database.
Option A:	Shadow copy
Option B:	Shadow Paging
Option C:	Update log records
Option D:	All of the mentioned
19.	If a transaction does not modify the database until it has committed, it is said to use the _____ technique.
Option A:	Deferred-modification
Option B:	Late-modification
Option C:	Immediate-modification
Option D:	Undo
20.	The _____ is the one in which the primary key of one relation is used as a normal attribute in another relation.
Option A:	Referential relation
Option B:	Referencing relation
Option C:	Referenced relation
Option D:	Referred relation

Q2	Solve any Four out of Six	5 marks each
A	Explain DBMS system architecture.	
B	Draw the ER diagram for library management system and explain it	
C	Explain DDL and DML command with syntax and suitable example	
D	What is Transaction and explain Properties of Transaction.	
E	What is normalization and explain different normal form.	
F	Explain ACID properties in detail.	

Q3.	Solve any Two Questions out of Three	10 marks each
A	Explain EER model with its all properties	
B	Explain different types of keys use in DBMS	
C	Explain Different types of joints with suitable examples.	