University of Mumbai
Examination 2020 under cluster 5 (APSIT)

Program: BE Computer Engineering

Curriculum Scheme: Revised 2016

Examination: Third Year Semester V

Course Code: CSC502 and Course Name: Database Management System

Time: 1 hour
Max. Marks: 50

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NOTE to the Question Bank Generator:

1. The question bank consists of 25 MCQ questions with each question carrying a maximum of 2 marks. It should cover all the modules with appropriate weightages.

2. You need to check the questions and their answers for their correctness. There should not be any ambiguity in the questions and the options. Only one option should be the Correct Answer.

3. You must ensure that the same question is not repeated again in this question paper.

4. Among 25-questions, 13 questions can be under the 'Simple' category, 7-questions can be under the 'Moderate' category, and the remaining 5-questions can be under the 'Difficult' category.

5. Please do not reveal answer on this Question Paper.

6. Use another template provided to enter the correct answers.

7. Please save this file with file name as per the sample format given below:

File Name: "Date of Examination_Scheme_Program_Semester_Subject Code_QP Set Number"

For example:

QP set number 1 of first core course of Mechanical Engineering Semester V for Rev2016 scheme and scheduled on 25/09/2020 has to have the file name as

2509_R16_Mech_V_MEC501_QP1

QP set number 1 of Department Level Optional Course of Computer Engineering Semester VI for Rev2012 scheme and scheduled on 28/09/2020 has to have the file name as

2809_R12_Comp_VI_CSDLO6021_QP3

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Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	A relation is in 2NF
Option A:	If all the non-key attribute should be fully functionally depend on the candidate key.
Option B:	If transitive dependency is present
Option C:	If multivalued functional dependency is present
Option D:	If join dependency is present
Q2.	For the relation R(ABCD) , functional dependency is B → C, D → A. find the candidate key for given relation.
Option A:	AD
Option B:	BD
Option C:	AC
Option D:	A
Q3.	4NF is designed to cope with :
Option A:	Transitive dependency
Option B:	Join dependency
Option C:	Multi valued dependency
Option D:	Partial Dependency
Q4.	Which one of the following is not true for BCNF.
Option A:	A relation in BCNF has two or more candidate keys.
Option B:	A relation in BCNF has composite candidate keys
Option C:	A relation in BCNF has overlapping candidate keys
Option D:	A relation in BCNF has based on join dependencies.
Q5.	An application where only one user accesses the database at a given time is an example of the following
Option A:	single-user database application
Option B:	multiuser database application
Option C:	e-commerce database application
Option D:	data mining database application
Q6.	A relational database consists of a collection of
Option A:	Tables
Option B:	Fields
Option C:	Classes
Option D:	Functions

Q7.	For each attribute of a relation, there is a set of permitted values which is called as
Option A:	Domain of attribute
Option B:	Relation of attribute
Option C:	Set of attributes
Option D:	Schema of attributes
Q8.	Which of the following attributes is suitable to be a Unique Identifier?
Option A:	Last name
Option B:	Address
Option C:	First Name
Option D:	Social Security Number
Q9.	Which of the following is composite attribute
Option A:	Name
Option B:	Phone no
Option C:	Roll No
Option D:	Age
Q10.	Which of the following WHERE clauses would not select the number 10?
Option A:	Where hours <> 10
Option B:	Where hours IN(8,9,10)
Option C:	Where hours <=10
Option D:	Where hours between 10 and 20
Q11.	When using the LIKE condition, which symbol represents any sequence of characters of any length--zero, one, or more characters?
Option A:	$
Option B:	&
Option C:	%
Option D:	#
Q12.	You need to display employees whose salary is in the range of 30000 and 50000. Which comparison operator should you use?
Option A:	IS NULL
Option B:	IN
Option C:	LIKE
Option D:	BETWEEN….AND

Q13.	You need to change the default sort order of the ORDER BY clause so that the data is displayed in reverse alphabetical order. Which keyword should you include in the ORDER BY clause?
Option A:	CHANGE
Option B:	DESC
Option C:	ASC
Option D:	SORT
Q14.	Evaluate this SQL statement: SELECT e.employee_id, e.last_name, e.first_name, m.manager_id FROM employees e, employees m ORDER BY e.last_name, e.first_name WHERE e.employee_id = m.manager_id;
Option A:	Remove the table aliases in the order by clause
Option B:	Remove the table aliases in the where clause
Option C:	Include sort clause
Option D:	Reorder the clauses in the query
Q15.	Which operator is used to combine columns of character strings to other columns?
Option A:	+
Option B:	/
Option C:	*
Option D:	||
Q16.	Collections of operations that form a single logical unit of work are called as
Option A:	Views
Option B:	Networks
Option C:	Units
Option D:	Transactions
Q17.	Which of the following command is used in transaction control language of SQL
Option A:	Commit
Option B:	Select
Option C:	Done
Option D:	Confirmed
Q18.	The situation where no transaction can proceed with normal execution is known as

Option A:	Road block
Option B:	Deadlock
Option C:	Execution halt
Option D:	Abortion
Q19.	If a transaction Ti may never make progress, then the transaction is said to be as
Option A:	Deadlocked
Option B:	Starved
Option C:	Committed
Option D:	Rolled back
Q20.	What are the ACID properties of transactions?
Option A:	Atomicity, Consistency, Isolation, Durability
Option B:	Automatically, Consistency, Isolation, Durability
Option C:	Atomicity, Consistency, Inconsistency, Durability
Option D:	Atomicity, Concurrency, Isolation, Durability
Q21.	A DBMS uses a transaction _____to keep track of all transactions that update the database
Option A:	Log
Option B:	Table
Option C:	Block
Option D:	Statement
Q22.	EXCEPT in SQL is analogous to
Option A:	Join operator of relational algebra
Option B:	Intersection operator of relational algebra
Option C:	Difference operator of relational algebra
Option D:	Cartesian product of relational algebra
Q23.	How is the left outer join symbol represented in relational algebra?
Option A:	⟕
Option B:	⟖
Option C:	⟗
Option D:	⋈
Q24.	Which of the operation allows us to find tuples that are in one relation but are not in another relation?
Option A:	Union
Option B:	Set-difference

Option C:	Intersection
Option D:	Cartesian Product
Q25.	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)