Started on	Wednesday, 6 August 2025, 4:03 PM
State	Finished
Completed on	Wednesday, 6 August 2025, 4:07 PM
Time taken	4 mins 16 secs
Marks	14.00/20.00
Grade	**70.00** out of 100.00

Question 1

Complete

Mark 0.00 out of 1.00

A table without a primary key can still have which of the following?

- ○ a. Candidate key
- ○ b. Referential integrity
- ◉ c. Clustered index
- ○ d. Composite key

Question 2

Complete

Mark 0.00 out of 1.00

In relational algebra, which operation is not considered a basic operation?

- ◉ a. Selection
- ○ b. Join
- ○ c. Difference
- ○ d. Union

Question 3

Complete

Mark 1.00 out of 1.00

What does the ACID property 'Consistency' ensure?

- ○ a. The data is normalized
- ◉ b. Database moves from one valid state to another
- ○ c. Transactions are executed in isolation
- ○ d. Only one user can access the data

Question 4

Complete

Mark 1.00 out of 1.00

What will be the result of a division operation in relational algebra?

○ a.   Join of attributes

◉ b.   Tuples in one relation matching all tuples in another

○ c.   Intersection of tuples

○ d.   Cartesian product

Question 5

Complete

Mark 1.00 out of 1.00

Which command is used to remove all rows from a table without logging individual row deletions?

◉ a.   TRUNCATE

○ b.   DROP

○ c.   DELETE

○ d.   REMOVE

Question 6

Complete

Mark 1.00 out of 1.00

Which constraint ensures that a column must have a value?

○ a.   FOREIGN KEY

○ b.   UNIQUE

○ c.   PRIMARY KEY

◉ d.   NOT NULL

Question 7

Complete

Mark 1.00 out of 1.00

Which file contains actual records in a heap-organized table?

◉ a.   Data file

○ b.   Index file

○ c.   Data dictionary

○ d.   Log file

Question 8

Complete

Mark 0.00 out of 1.00

Which index type stores a sorted list of values and pointers to rows?

- ○ a.   Full-text Index
- ◉ b.   Spatial Index
- ○ c.   Hash Index
- ○ d.   Clustered Index

Question 9

Complete

Mark 1.00 out of 1.00

Which isolation level allows non-repeatable reads but prevents dirty reads?

- ○ a.   Read Uncommitted
- ◉ b.   Read Committed
- ○ c.   Serializable
- ○ d.   Repeatable Read

Question 10

Complete

Mark 1.00 out of 1.00

Which JOIN returns all rows from the left table and matched rows from the right?

- ○ a.   INNER JOIN
- ◉ b.   LEFT JOIN
- ○ c.   RIGHT JOIN
- ○ d.   CROSS JOIN

Question 11

Complete

Mark 1.00 out of 1.00

Which keyword is used to prevent duplicate rows in SQL SELECT results?

- ◉ a.   DISTINCT
- ○ b.   FILTER
- ○ c.   UNIQUE
- ○ d.   ONLY

Question 12

Complete

Mark 0.00 out of 1.00

Which of the following can cause a phantom read?

- ○ a. Dirty read
- ◉ b. Non-repeatable read
- ○ c. Row-level locking
- ○ d. Insert by another transaction during a range scan

Question 13

Complete

Mark 1.00 out of 1.00

Which of the following ensures atomicity in a DBMS transaction?

- ○ a. Foreign Key
- ○ b. Primary Key
- ○ c. Check Constraint
- ◉ d. Commit and Rollback

Question 14

Complete

Mark 1.00 out of 1.00

Which of the following is not allowed in a view?

- ○ a. WHERE clause
- ○ b. SELECT from multiple tables
- ○ c. Aggregations
- ◉ d. INSERT with default values

Question 15

Complete

Mark 1.00 out of 1.00

Which of the following is true about a clustered index?

- ○ a. Does not define the physical order
- ○ b. Can be created only on primary keys
- ○ c. Can exist multiple times per table
- ◉ d. Defines the order in which data is physically stored

Question 16

Complete

Mark 1.00 out of 1.00

Which of the following normal forms eliminates transitive dependency?

○ a.   BCNF

○ b.   2NF

◉ c.   3NF

○ d.   1NF

Question 17

Complete

Mark 0.00 out of 1.00

Which of the following operations may violate referential integrity?

○ a.   UPDATE

◉ b.   INSERT

○ c.   SELECT

○ d.   RENAME

Question 18

Complete

Mark 0.00 out of 1.00

Which of the following schedules is always serializable?

○ a.   Conflict serializable

○ b.   Non-recoverable schedule

◉ c.   View serializable but not conflict serializable

○ d.   Cascading rollback schedule

Question 19

Complete

Mark 1.00 out of 1.00

Which SQL clause is evaluated first in a SELECT query?

◉ a.   FROM

○ b.   WHERE

○ c.   GROUP BY

○ d.   SELECT

Question 20

Complete

Mark 1.00 out of 1.00

Which SQL keyword is used to extract only those records that satisfy a specified condition?

○ a.   HAVING

○ b.   FROM

○ c.   SELECT

◉ d.   WHERE