| | |
|---:|:---|
| **Started on** | Wednesday, 6 August 2025, 3:46 PM |
| **State** | Finished |
| **Completed on** | Wednesday, 6 August 2025, 3:54 PM |
| **Time taken** | 7 mins 57 secs |
| **Marks** | 13.00/20.00 |
| **Grade** | **65.00** 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.   Clustered index

○ c.   Composite key

○ d.   Referential integrity

**Question 2**

Complete

Mark 0.00 out of 1.00

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

○ a.   Union

○ b.   Join

◉ c.   Selection

○ d.   Difference

**Question 3**

Complete

Mark 1.00 out of 1.00

What does the ACID property 'Consistency' ensure?

○ a.   Transactions are executed in isolation

○ b.   Only one user can access the data

○ c.   The data is normalized

◉ d.   Database moves from one valid state to another

**Question 4**

Complete

Mark 0.00 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.  Cartesian product
- ◉ d.  Intersection of tuples

**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.  DELETE
- ○ c.  REMOVE
- ○ d.  DROP

**Question 6**

Complete

Mark 1.00 out of 1.00

Which constraint ensures that a column must have a value?

- ◉ a.  NOT NULL
- ○ b.  UNIQUE
- ○ c.  PRIMARY KEY
- ○ d.  FOREIGN KEY

**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.  Log file
- ○ d.  Data dictionary

**Question 8**

Complete

Mark 0.00 out of 1.00

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

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

**Question 9**

Complete

Mark 1.00 out of 1.00

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

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

**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.  LEFT JOIN
- ○ b.  CROSS JOIN
- ○ c.  RIGHT JOIN
- ○ d.  INNER JOIN

**Question 11**

Complete

Mark 1.00 out of 1.00

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

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

**Question 12**

Complete

Mark 1.00 out of 1.00

Which of the following can cause a phantom read?

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

**Question 13**

Complete

Mark 1.00 out of 1.00

Which of the following ensures atomicity in a DBMS transaction?

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

**Question 14**

Complete

Mark 1.00 out of 1.00

Which of the following is not allowed in a view?

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

**Question 15**

Complete

Mark 0.00 out of 1.00

Which of the following is true about a clustered index?

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

**Question 16**

Complete

Mark 1.00 out of 1.00

Which of the following normal forms eliminates transitive dependency?

- ⦿ a.   3NF
- ○ b.   2NF
- ○ c.   1NF
- ○ d.   BCNF

**Question 17**

Complete

Mark 1.00 out of 1.00

Which of the following operations may violate referential integrity?

- ○ a.   INSERT
- ⦿ b.   UPDATE
- ○ c.   RENAME
- ○ d.   SELECT

**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.   Cascading rollback schedule
- ⦿ d.   View serializable but not conflict serializable

**Question 19**

Complete

Mark 0.00 out of 1.00

Which SQL clause is evaluated first in a SELECT query?

- ⦿ a.   WHERE
- ○ b.   SELECT
- ○ c.   FROM
- ○ d.   GROUP BY

**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.   FROM

○ b.   HAVING

◉ c.   WHERE

○ d.   SELECT