

# 42 Lecture - CS403

## Important Mcqs

1. **What does the concept of a transaction refer to in databases?**

- A) A single database operation
- B) A sequence of operations executed as a single unit of work
- C) A table modification
- D) A data query

**Answer: B**

**Why is the concept of a transaction important in databases?**

- A) It allows for faster data access
- B) It ensures data consistency and integrity
- C) It reduces database storage requirements
- D) It eliminates the need for data backups

**Answer: B**

**Which of the following is an ACID property that a transaction must follow?**

- A) Atomicity
- B) Security
- C) Availability
- D) Performance

**Answer: A**

**What does atomicity mean in the context of transactions?**

- A) The transaction must complete successfully or be rolled back completely
- B) The transaction must be isolated from other transactions
- C) The transaction must leave the database in a consistent state
- D) The transaction must be durable

**Answer: A**

**Which ACID property ensures that a transaction leaves the database in a consistent state?**

- A) Atomicity
- B) Consistency
- C) Isolation
- D) Durability

**Answer: B**

**What does isolation mean in the context of transactions?**

- A) The transaction must complete successfully or be rolled back completely
- B) The transaction must be isolated from other transactions
- C) The transaction must leave the database in a consistent state
- D) The transaction must be durable

**Answer: B**

**Which ACID property ensures that a transaction is isolated from other transactions?**

- A) Atomicity

- B) Consistency
- C) Isolation
- D) Durability

Answer: C

**What does durability mean in the context of transactions?**

- A) The transaction must complete successfully or be rolled back completely
- B) The transaction must be isolated from other transactions
- C) The transaction must leave the database in a consistent state
- D) The transaction must be durable

Answer: D

**Which ACID property ensures that a transaction is durable even in the event of system failures?**

- A) Atomicity
- B) Consistency
- C) Isolation
- D) Durability

Answer: D

**Which of the following is a benefit of using transactions in databases?**

- A) Faster data access
- B) Reduced storage requirements
- C) Improved data consistency and integrity
- D) Elimination of the need for data backups

Answer: C