

43 Lecture - CS403

Important Mcqs

1. **What is the primary goal of Incremental Log with Deferred Updates in a database management system?**

- a) To improve data consistency
- b) To improve data security
- c) To improve efficiency and performance
- d) To improve user experience

Answer: c) To improve efficiency and performance

What is the purpose of a log file in Incremental Log with Deferred Updates?

- a) To store all database records
- b) To record changes to the database as they occur
- c) To store metadata about the database
- d) To store backup copies of the database

Answer: b) To record changes to the database as they occur

In Incremental Log with Deferred Updates, when are changes applied to the database?

- a) As soon as they are made
- b) At the end of each transaction
- c) At a later time, after being recorded in the log file
- d) None of the above

Answer: c) At a later time, after being recorded in the log file

Which of the following benefits does Incremental Log with Deferred Updates offer?

- a) Improved data security
- b) Improved data consistency
- c) Improved efficiency and performance
- d) Improved ease of use

Answer: c) Improved efficiency and performance

Which of the following statements is true about Incremental Log with Deferred Updates?

- a) It is a technique used only in small databases
- b) It is a technique that must be used with all databases
- c) It is a technique that can improve the performance of large databases
- d) It is a technique that can only be used with certain types of databases

Answer: c) It is a technique that can improve the performance of large databases

What is the primary disadvantage of Incremental Log with Deferred Updates?

- a) It can lead to inconsistencies in the database
- b) It can increase the risk of data loss
- c) It can make it more difficult to manage the database
- d) It can be slower than other techniques

Answer: a) It can lead to inconsistencies in the database

Which of the following is an example of a situation where Incremental Log with Deferred

Updates may not be appropriate?

- a) A financial institution that processes thousands of transactions per second
- b) A small business that processes a few transactions per day
- c) A healthcare organization that stores patient records
- d) None of the above

Answer: b) A small business that processes a few transactions per day

Which of the following is a benefit of using a log file in Incremental Log with Deferred Updates?

- a) It allows for faster data entry
- b) It provides a backup of the database
- c) It can help to recover from system failures
- d) It reduces the need for database indexing

Answer: c) It can help to recover from system failures

What is the role of the transaction manager in Incremental Log with Deferred Updates?

- a) To manage the log file
- b) To ensure data consistency
- c) To apply changes to the database
- d) To ensure data security

Answer: b) To ensure data consistency

Which of the following best describes how Incremental Log with Deferred Updates improves performance?

- a) By reducing the amount of data that needs to be stored in memory
- b) By reducing the time it takes to apply changes to the database
- c) By reducing the amount of data that needs to be indexed
- d) By reducing the number of transactions that can be processed simultaneously

Answer: b) By reducing the time it takes to apply changes to the database