

**Microsoft 70-442**

**Microsoft 70-442 PRO: Designing and Optimizing Data  
Access by Using Microsoft SQL Server 2005  
Practice Test  
Version 2.2**

**QUESTION NO: 1**

You are troubleshooting concurrency problems with the code that was originally developed on the SQL Server 2000 database. You discover that there are excessive read locks on important tables. You need to resolve the problem. What should you do?

- A. Set the transaction isolation level to REPEATABLE READ.
- B. Set the transaction isolation level to SERIALIZABLE.
- C. Set the ALLOW\_SNAPSHOT\_ISOLATION database option to ON.
- D. Set the READ\_COMMITTED\_SNAPSHOT database option to ON.

**Answer: D**

**QUESTION NO: 2**

You design the following stored procedure that will be used by sales managers.  
CREATE PROCEDURE StoreSales (@StartDate datetime, @EndDate datetime)

```
AS
SET TRANSACTION ISOLATION LEVEL SERIALIZABLE
SELECT StoreID, TotalSales
FROM Sales
WHERE SaleDate BETWEEN @StartDate AND @EndDate
```

While tuning the query, you notice that table locks are occurring. You need to resolve the problem. What should you do?

- A. Change the isolation level to READ COMMITTED.
- B. Add a HOLDLOCK table hint to the query.
- C. Add a NOWAIT table hint to the query.
- D. Add a READPAST table hint to the query.

**Answer: A**

**QUESTION NO: 3**

You are designing a stored procedure that records a sale and decreases the inventory for the items that are being purchased. The stored procedure contains the following code.

```
CREATE PROCEDURE UpdateSalesAndInventory (@ProductID int, @quantity int)
AS
SET IMPLICIT_TRANSACTION ON
INSERT INTO Sales.SalesOrder Values(@ProductID, @quantity)
UPDATE Inventory.ProductInventory
SET Quantity = Quantity - @quantity
```

WHERE ProductID = @ProductID

You run this stored procedure and discover that no updates are applied. You need to resolve the problem. What should you do?

- A. Change SET IMPLICIT\_TRANSACTION to OFF.
- B. Use multiple active result sets (MARS) to execute the stored procedure.
- C. Add logic to commit or roll back the transaction based on the successful updates of the data.
- D. Add a BEGIN TRANSACTION statement to the stored procedure.

**Answer: C**

#### QUESTION NO: 4

You need to design the user interface that will display availability to pick up items at a retail store for items that are ordered online. You also must minimize the number of connections to the database. Which data access strategy should you use?

- A. ActiveX data objects (ADO)
- B. multiple active result sets (MARS)
- C. System.Data.DataReader
- D. System.Data.DataSet

**Answer: B**

#### QUESTION NO: 5

You are designing the stored procedure that updates inventory quantities. The stored procedure contains the following code.

```
CREATE PROCEDURE UpdateInventory (@ProductID int, @Amount int)
AS
BEGIN TRANSACTION
DECLARE @CurrentQuantity int
SELECT @CurrentQuantity = Quantity
FROM Inventory.ProductInventory
WHERE ProductID = @ProductID
UPDATE Inventory.ProductInventory
SET Product.Quantity = @CurrentQuantity + @Amount
WHERE ProductID = @ProductID
IF @@ERROR <> 0
ROLLBACK TRAN
ELSE
COMMIT TRAN
```

You discover that the ProductInventory column is occasionally updated incorrectly. You need to resolve the problem. What should you do?

- A. Add a SET TRANSACTION ISOLATION LEVEL SERIALIZABLE statement to the stored procedure.
- B. Remove the SELECT statement from the stored procedure. Perform the update using theProduct.Quantity column instead of the @CurrentQuantity variable.
- C. Add a NOLOCK hint to the SELECT statement.
- D. Move the BEGIN TRANSACTION statement so that it immediately precedes the UPDATE statement.

**Answer: B**

#### **QUESTION NO: 6**

You need to design the data access strategy for the Tailspin Toys online store search requirement. Which strategy should you use?

- A. System.Xml.XmlReader
- B. System.Data.SqlClient.SqlDataReader
- C. System.Data.DataSet
- D. CLR user-defined type

**Answer: C**

#### **QUESTION NO: 7**

You need to design the data access method for accessing the SQL Server 2005 computer. You must ensure that your solution supports the Web site and the smart client application. Which data access technology should you use?

- A. SqlXmlCommand
- B. updategrams
- C. XML template queries
- D. HTTP endpoints

**Answer: D**

#### **QUESTION NO: 8**

You need to design the transfer of sales data to the Accounting database. You are designing the stored procedure that will be used to transfer the data. You must ensure that all requirements are

fulfilled. Which Transact-SQL statement should you use first?

- A. BEGIN TRANSACTION Acct WITH MARK 'Accounting'
- B. BEGIN DISTRIBUTED TRANSACTION Acct
- C. SET IMPLICIT\_TRANSACTIONS ON
- D. SAVE TRANSACTION Acct

**Answer: A**

#### QUESTION NO: 9

You need to improve the performance and reduce the database resource usage of the stored procedure that will be used to generate the monthly agent-commission report. What should you do?

- A. Remove the INSENSITIVE argument from the cursor declaration.
- B. Add the OPTIMISTIC argument to the cursor declaration.
- C. Rewrite the stored procedure using set operations.
- D. Rewrite the stored procedure as a user-defined type.

**Answer: C**

#### QUESTION NO: 10

You are attempting to correct the FlightsBooked report. The report contains the following code segment.

```
CREATE PROCEDURE FlightBookings (@AsOfTime datetime)
AS
SET TRANSACTION ISOLATION LEVEL READ UNCOMMITTED
SELECT BookingID, AgentFullName, FlightID, FlightDate
FROM FlightBookings JOIN Agent
ON FlightBookings.AgentID = Agent.AgentID
WHERE BookingTime <= @AsOfTime
```

You need to correct the problem. What should you do?

- A. Set the transaction isolation level to READ COMMITTED.
- B. Set the transaction isolation level to REPEATABLE READ.
- C. Set the READ\_COMMITTED\_SNAPSHOT database option to ON.
- D. Set the READ\_COMMITTED\_SNAPSHOT database option to OFF.

**Answer: B**

**QUESTION NO: 11**

You need to design the data access model for available flight information. What should you use?

- A. XML template queries
- B. ActiveX data objects (ADO)
- C. System.Data.DataSet
- D. System.Data.DataReader

**Answer: D**

**QUESTION NO: 12**

You need to design the data access object model to be used for the infrequently changing data about trading partners. What should you use?

- A. ActiveX data objects (ADO)
- B. System.Data.DataReader
- C. System.Data.DataSet
- D. System.Xml.XmlReader

**Answer: C**

**QUESTION NO: 13**

You need to design the solution for logging and reviewing the performance metrics of the production database. The solution must fulfill the requirements. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Use SQL Server Profiler at the specified intervals for finding the problematic queries.
- B. Schedule a SQL Trace to run at specified intervals. Create a job that searches this trace after the specified intervals for the problematic queries.
- C. Search for queries that have a low value for duration and a high value for reads and writes.
- D. Search for queries that have a high value for CPU and a low value for duration.
- E. Search for queries that have a high value for duration and a low value for reads and writes.

**Answer: B,E**

**QUESTION NO: 14**

You need to design the stored procedure that will retrieve the first five rows from any table in the database. Your design must fulfill the requirements. Which three actions should you perform?

(Each correct answer presents part of the solution. Choose three.)

- A. Create the stored procedure with the EXECUTE AS SELF option.
- B. Create the stored procedure with the EXECUTE AS OWNER option.
- C. Use dynamic SQL.
- D. Use a data type for the table name parameter that is not larger than 128 characters.
- E. Design the stored procedure to check that the table named in the parameter exists in the sys.tables catalog view before executing the SELECT statement against the table.

**Answer: B,C,E**

#### QUESTION NO: 15

You need to minimize the memory usage of the Customers table as much as possible to fulfill the requirements. What should you do?

- A. Rebuild the clustered index with a fill factor of 10.
- B. Rebuild the clustered index with a fill factor of 100.
- C. Rebuild the index on the primary key column.
- D. Change the data type of the primary key column to a smaller data type.
- E. Use a different column with a smaller data type for the clustered index.

**Answer: E**

#### QUESTION NO: 16

You need to design the validation of the phone number format to fulfill the requirements. What should you do?

- A. Design all stored procedures that insert and update tables containing phone numbers to verify that the phone numbers have the correct format by using a user-defined function.
- B. Design CHECK constraints on the tables containing phone numbers to verify that the phone numbers have the correct format by using a user-defined function.
- C. Design AFTER triggers on the tables containing phone numbers to verify that the phone numbers have the correct format by using a user-defined function.
- D. Design INSTEAD OF triggers on the tables containing phone numbers to verify that the phone numbers have the correct format by using a user-defined function.

**Answer: B**

**QUESTION NO: 17**

You need to optimize the report for orders received per month. Which two actions should you perform? (Each correct answer presents part of the solution. Choose two.)

- A. Create a clustered index on the OrderDate column.
- B. Create a computed column over MONTH(OrderDate) and change the query to filter on this column.
- C. Create a nonclustered index on the computed column and include the columns OrderID, CustomerID, and OrderDate.
- D. Change the query to use the DATEPART function instead of the MONTH function.
- E. Change the query to use the BETWEEN operator on the OrderDate column instead of the = operator.

**Answer: B,C**

**QUESTION NO: 18**

You need to design a plan for finding out which configuration changes might have been made shortly before the system failure. Which plan should you recommend?

- A. Query the dynamic management views in the most recent database snapshot.
- B. Restore the most recent full backup of the database, using another database name. Query the dynamic management views in the restored database.
- C. Use SQL Server Profiler to start a trace.
- D. Query the default trace for what occurred before the failure.

**Answer: D**

**QUESTION NO: 19**

You are executing performance testing on the BAP application. You discover that the system is not performing according to requirements. In addition, you discover that there is excessive disk activity. You need to find out which stored procedures are causing the excessive disk activity. Which Transact-SQL statement should you run prior to executing each stored procedure that you suspect is performing poorly?

- A. SET STATISTICS IO ON
- B. SET SHOWPLAN\_TEXT ON
- C. SET SHOWPLAN\_ALL ON
- D. SET STATISTICS TIME ON



**Answer: A**

**QUESTION NO: 20**

You are testing the PlantGeneration stored procedure. When you query for the current months data, query performance is exceeding 30 seconds. You need to correct the performance problem. What should you do?

- A. Create a federation of database servers, and partition the data by date.
- B. Create a distributed partitioned view across multiple instances of SQL Server. Distribute the data by date.
- C. Create a view on the data, and order by date.
- D. Create a partitioned table for the data, and partition the data by date.

**Answer: D**

**QUESTION NO: 21**

You are designing a stored procedure that will be exposed to the company's energy trading partners. These partners are assigned minimal permissions in the BAP database. This procedure contains logic that constructs dynamic SQL that requires elevated permissions. You must provide the appropriate permissions. What should you do?

- A. Add WITH EXECUTE AS OWNER to the procedure definition.
- B. Add SETUSER before the dynamic SQL statement.
- C. Add EXECUTE AS CALLER before the dynamic SQL statement.
- D. Add REVERT after the dynamic SQL statement.

**Answer: A**

**QUESTION NO: 22**

You are attempting to identify the query performance problems that are being reported by the testers of the MRS application. You need to identify the problem queries. Which tool should you use?

- A. SQL Server Profiler
- B. Database Engine Tuning Advisor
- C. SQLDiag utility
- D. dta utility