# Oracle 1Z0-053 Exam Questions & Answers

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Oracle 1Z0-053 Exam Questions & Answers

Exam Name: Oracle Database 11g: Administration II

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# **Exactquestions**

# **QUESTION 1**

You have an external audit requirement that requires you to keep historical transaction data for the EMP\_SAL\_HISTORY table for two years. You create a flashback data archive with the desired retention period using the following statement:

CREATE FLASHBACK ARCHIVE fla3 TABLESPACE tbs4 RETENTION 2 YEAR; You then issue the following ALTER TABLE statement:

ALTER TABLE emp\_sal\_history FLASHBACK ARCHIVE fla3;

After a year, you are notified that you must keep the historical data for only one year. To save disk space, you want to reduce the retention period for the FLA3 flashback data archive.

Which statement is true?

- A. You should modify the retention period of FLA3 using the MODIFY RETENTION clause of the ALTER FLASHBACK ARCHIVE statement.
- B. You should create a new flashback data archive with the desired retention period and manually move the data from FLA3 to the new flashback data archive.
- C. You can only reduce the retention time for FLA3 if no data has been added or updated in the EMP\_SAL\_HISTORY table.
- D. You cannot reduce the retention time for an existing flashback data archive.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should modify the retention period of FLA3 using the MODIFY RETENTION clause of the ALTER FLASHBACK ARCHIVE statement. For example, in this scenario, you can use the following statement to modify the retention period of the existing FLA3 flashback data archive from two years to one year: ALTER FLASHBACK ARCHIVE fla3 MODIFY RETENTION 1 YEAR;

You should note that any historical data older than the specified retention period, which in this scenario is one year, would be purged from the flashback data archive.

You should not create a new flashback data archive with the desired retention period and manually move the data from FLA3 to the new flashback data archive. To reduce the retention period of a flashback data archive, you can use the MODIFY RETENTION clause of the ALTER FLASHBACK ARCHIVE statement.

The option that states you can only reduce the retention time for FLA3 if no data has been added or updated in the EMP\_SAL\_HISTORY table is incorrect. You can reduce the retention period for an existing flashback data archive that contains data, but any data older than the specified retention period is purged.

The option that states you cannot reduce the retention time for an existing flashback data archive is incorrect. You can reduce the retention time for an existing flashback data archive using the MODIFY RETENTION clause of the ALTER FLASHBACK ARCHIVE statement.

## **QUESTION 2**

You are maintaining a database that is in ARCHIVELOG mode. You have configured a flash recovery area in your database. The database is in MOUNT EXCLUSIVE mode, and you want to configure the Flashback Database feature.

Which two actions are NOT required to configure the Flashback Database feature? (Choose two.)

- A. opening the database in read-only mode
- B. setting the retention target with the DB\_FLASHBACK\_RETENTION\_TARGET initialization parameter
- C. enabling the block change tracking feature
- D. executing the ALTER DATABASE FLASHBACK ON; statement

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

To configure the Flashback Database feature in a database, you are not required to open the database in read-only mode. The database should be in MOUNT EXCLUSIVE mode. Also, you are not required to enable the block change tracking feature in your database to configure the Flashback Database feature. The block change tracking feature is used to increase the performance of the backup process during incremental backups.

The option stating that you are not required to set the retention target with the

DB\_FLASHBACK\_RETENTION\_TARGET initialization parameter to configure the Flashback Database feature in a database is incorrect. You should issue the following statement to set the value of the DB\_FLASHBACK\_RETENTION\_TARGETT parameter:

ALTER DB\_FLASHBACK\_RETENTION\_TARGET=<value>;;

The DB\_FLASHBACK\_RETENTION\_TARGETT parameter determines the point-in-time in the past to which you can flash back the database. The value of the DB\_FLASHBACK\_RETENTION\_TARGETT parameter is specified in minutes.

The option stating that you are not required to execute the ALTER DATABASE FLASHBACK ON; statement to configure the Flashback Database in a database is incorrect. After executing the ALTER DB\_FLASHBACK\_RETENTION\_TARGET=<value>;; statement, you must execute the ALTER DATABASE FLASHBACK ON; statement to enable the Flashback Database feature.

## **QUESTION 3**

Adam is the senior DBA at United Sales Corporation. The junior DBA in the organization dropped the user SCOTT at 10:00 A.M. At 10:15 A.M., the user SCOTT requests that Adam recover the schema and all the objects in the schema. Adam decides to flash back the database.

Which statements should Adam execute?

## A. SHUTDOWN IMMEDIATE;

STARTUP MOUNT:

FLASHBACK DATABASE TO TIMESTAMP (SYSDATE - (1/48)); ALTER DATABASE OPEN RESETLOGS;

## **B. SHUTDOWN IMMEDIATE:**

STARTUP MOUNT EXCLUSIVE:

FLASHBACK DATABASE TO TIMESTAMP (SYSDATE - (1/48)); ALTER DATABASE OPEN;

## C. SHUTDOWN IMMEDIATE;

STARTUP NOMOUNT;

FLASHBACK DATABASE TO TIMESTAMP (SYSDATE - (1/48)); ALTER DATABASE OPEN RESETLOGS;

# D. SHUTDOWN IMMEDIATE;

STARTUP MOUNT EXCLUSIVE:

FLASHBACK DATABASE TO TIMESTAMP (SYSDATE - 1 /48); ALTER DATABASE OPEN RESETLOGS;

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

Adam must execute the following statements to recover the SCOTT schema, and all the objects in the schema. To ensure recovery, the database should be in the MOUNT EXCLUSIVE mode. In addition, after the backup operation is performed, the database must be opened with the RESETLOGS option. SHUTDOWN IMMEDIATE:

STARTUP MOUNT EXCLUSIVE:

FLASHBACK DATABASE TO TIMESTAMP (SYSDATE - 1/48); ALTER DATABASE OPEN RESETLOGS; The SHUTDOWN IMMEDIATE; statement will shut down the database immediately. The STARTUP MOUNT EXCLUSIVE; statement will start the database in MOUNT EXCLUSIVE mode. The FLASHBACK DATABASE TO TIMESTAMP (SYSDATE - 1/48); statement will perform the flashback operation, and the ALTER DATABASE OPEN RESETLOGS; statement will open the database, reset the redo log groups, and create a

new incarnation of the database.

Adam should not execute the statements that open the database in MOUNT mode. The database should be in MOUNT EXCLUSIVE mode before a flashback operation is performed because you can only enable Flashback Database when the database is mounted in the exclusive mode.

Adam should not execute the statements that open the database without the RESETLOGS option after performing the flashback. These statements will recover the SCOTT schema and all the objects in the schema, but the database will not open because the log sequence number should be reset. To reset the log sequence number, you can use the ALTER DATABASE OPEN RESETLOGS; statement.

Adam should not use the statements that open the database in NOMOUNT mode. The database should be in MOUNT EXCLUSIVE mode before performing a flashback database operation. The NOMOUNT mode is used to perform incomplete recovery when all the control files are missing.

#### **QUESTION 4**

You are managing a data warehouse that uses an Oracle 11g database. You have automatic undo management enabled for the database. Your external audit requirements require you to track all long-term transactional changes to the AR\_HISTORY table for two years, which is past the current undo retention period.

Which tool or feature should you use?

- A. Flashback Version Query
- B. Flashback Transaction Query
- C. Flashback Data Archive
- D. The TRANSACTION\_BACKOUT procedure of the DBMS\_FLASHBACK package

Correct Answer: C Section: (none) Explanation

#### Explanation/Reference:

**Explanation:** 

You should use the Flashback Data Archive feature. This feature allows you to track all transactional changes for a table for a specified retention period, even past the undo retention period. You can create a flashback data archive using the CREATE FLASHBACK ARCHIVE statement. For example, the following statement creates a flashback data archive in the TBS5 tablespace that will be kept for two years:

CREATE FLASHBACK ARCHIVE fla1 TABLESPACE tbs5 RETENTION 2 YEAR;

Flashback archiving is disabled for all tables by default. However, users with the FLASHBACK ARCHIVE privilege for the flashback data archive can enable flashback archiving for a table by specifying the FLASHBACK ARCHIVE clause of either the CREATE TABLE or ALTER TABLE statement. For example, the following statement enables flashback data archiving for the AR\_HISTORY table and stores the historical transactional changes for the table in the FLA1 flashback data archive:

ALTER TABLE ar\_history FLASHBACK ARCHIVE fla1;

If you omit the name of the flashback data archive when specifying the FLASHBACK ARCHIVE clause, the default flashback data archive is used. You should note that you can only disable flashback archiving for a table if you are logged on as SYSDBA or if have been granted the FLASHBACK ARCHIVE ADMINISTER system privilege for the specified flashback data archive.

You can use the AS OF clause of Flashback Query to query historical data for a table that has flashback data archiving enabled. You can access the tables at any point in the past without modifying the current data. This operation can be performed an infinite number of times for each table and uses minimum resources. Historical data is kept for the specified retention period and then automatically purged. Even data that undergoes DDL changes is kept, unless the DDL change affects the table's structure. However, when a column is added to the table, the historical data is not kept.

You should not use Flashback Version Query. Flashback Version Query is used to retrieve different versions of rows in a table that existed during a given time interval as long as the data remains in the undo tablespace. When you are using Flashback Version Query, you can specify a time frame based on a start and end time or a start and end SCN.

You should not use Flashback Transaction Query. Flashback Transaction Query is used to view all changed rows within a particular set of transactions that occurred within a given time interval as long as the data is still in the undo tablespace. With Flashback Transaction Query, you can specify a time frame based on a start and

end time or a start and end SCN.

You should not use the TRANSACTION\_BACKOUT procedure of the DBMS\_FLASHBACK package. The TRANSACTION\_BACKOUT procedure of the DBMS\_FLASHBACK package allows you to back out specific transactions. You can specify the transaction names or the transaction identifiers, and the specified transactions are backed out.

## **QUESTION 5**

Which statements about using Flashback Data Archive are true? (Choose all that apply.)

- A. To use Flashback Data Archive, your database must use automatic undo management.
- B. Flashback Data Archive allows you to back out specific transactions.
- C. To enable flashback data archiving for a table, you must first define a default flashback data archive.
- D. You can only use Flashback Data Archive if your database is running in ARCHIVELOG mode.
- E. You can create multiple flashback data archives.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation: The following statements about Flashback Data Archive are true:

To use Flashback Data Archive, your database must use automatic undo management.

You can create multiple flashback data archives.

Oracle 11g introduces the new Flashback Data Archive feature, also known as Oracle Total Recall, which allows you to track all transactional changes for a table for a specified retention period, even past the undo retention period. Your database must use automatic undo management to use Flashback Data Archive. You can create a flashback data archive using the CREATE FLASHBACK ARCHIVE statement. For example, the following statement creates a flashback data archive in the TBS5 tablespace that will be kept for two years: CREATE FLASHBACK ARCHIVE fla1 TABLESPACE tbs5 RETENTION 2 YEAR;

You should also note that tablespaces used for flashback data archives must use automatic segment space management (ASSM). You can create multiple flashback data archives if you want to retain historical information for different retention periods. Flashback data archiving is disabled for all tables by default. However, after creating one or more flashback data archives, you can enable flashback data archiving for a table using the FLASHBACK ARCHIVE clause of the CREATE TABLE or ALTER TABLE statement. The option that states Flashback Data Archive allows you to back out specific transactions is incorrect. Flashback Transaction allows you to back out transactions.

The option that states to enable flashback data archiving for a table, you must first define a default flashback data archive is incorrect. You can enable flashback data archiving for a table even if you do not have a default flashback data archive defined. However, to do so you must explicitly specify the name of the flashback data archive in your ALTER TABLE...FLASHBACK ARCHIVE statement.

The option that states you can only use Flashback Data Archive if your database is running in ARCHIVELOG mode is incorrect. You can use Flashback Data Archive even if your database is running in NOARCHIVELOG mode.

You are performing flashback of the EMPLOYEE table in SCOTT's schema because some incorrect data was inserted in the table and committed by mistake.

### **QUESTION 6**

Which two clauses could you use in the FLASHBACK TABLE statement when using the Flashback Table feature? (Choose two.)

- A. TO TIMESTAMP
- B. TO BEFORE DROP
- C. RENAME TO
- D. TO SCN

Correct Answer: AD Section: (none)

# **Explanation**

## **Explanation/Reference:**

Explanation:

You could use the TO SCN and the TO TIMESTAMP clauses in the FLASHBACK TABLE statement when using the Flashback Table feature. The TO SCN clause is used to flash back a table to a certain system change number. The TO TIMESTAMP clause is used to flash back a table to a certain point in time. For example, the following statement is used to flash back the EMPLOYEE table to a certain point in time: FLASHBACK TABLE employee

TO TIMESTAMP (SYSTIMESTAMP - INTERVAL '1' minute);

And, the following statement is used to flash back the EMPLOYEE table to a certain system change number: FLASHBACK TABLE employee TO SCN 567540;

The option stating that the RESETLOGS clause can be used in the FLASHBACK TABLE statement is incorrect. The RESETLOGS clause is used with ALTER DATABASE OPEN statement to create a new incarnation of online redo log files. If you open a database using the RESETLOGS clause, the online redo log files will be reset.

The option stating that the TO BEFORE DROP clause can be used in the FLASHBACK TABLE statement is incorrect. The TO BEFORE DROP clause is used with the FLASHBACK TABLE statement to restore a dropped table from the Recycle Bin. The FLASHBACK TABLE <table\_name> TO BEFORE DROP; statement uses the Flashback Drop feature, not the Flashback Table feature.

The option stating that the RENAME TO clause can be used in the FLASHBACK TABLE statement is incorrect. The RENAME TO clause is used to change the name of the table when the table is restored from the Recycle Bin. The syntax of the RENAME TO clause is as follows:

FLASHBACK TABLE <old\_name> TO BEFORE DROP RENAME TO <new\_name>;

## **QUESTION 7**

You want to issue the ALTER DATABASE FLASHBACK ON; statement to enable Flashback Database. Your database is running in ARCHIVELOG mode.

In which of the following modes should your database be before you issue this statement?

- A. OPEN
- **B. NOMOUNT**
- C. MOUNT SHARED
- D. MOUNT EXCLUSIVE

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

To enable Flashback Database, you need to issue the ALTER DATABASE FLASHBACK ON; statement when the database is in the MOUNT EXCLUSIVE mode.

All of the other options are incorrect because your database cannot be in the OPEN, NOMOUNT, or MOUNT SHARED mode when you issue the ALTER DATABASE FLASHBACK ON; statement. Instead, your database should be in MOUNT EXCLUSIVE mode.

Flashback Database is enabled in your database. One of your database users erroneously purged an important table residing in his schema. The table was purged sometime between 10:00 P.M. and 10:30 P.M. The next day, you decide to flash back the database. Before you flash back the database, you want to ensure that you have all the necessary flashback data.

## **QUESTION 8**

Which dynamic performance view must you use to determine whether you have the required flashback data to recover the purged table?

- A. V\$DATABASE
- B. V\$UNDOSTAT

C. V\$FLASHBACK DATABASE LOG

D. V\$FLASHBACK\_DATABASE\_STAT

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You must use the V\$FLASHBACK\_DATABASE\_LOG dynamic performance view to determine whether you have the required flashback data to recover the purged table. You can execute the following query to determine whether you can flash back the database to its state before the table was dropped: SELECT oldest\_flashback\_time FROM v\$flashback\_database\_log;

The OLDEST FLASHBACK TIME column from the V\$ FLASHBACK\_DATABASELOG view returns the time of the lowest System Change \_Number (SCN) from the flashback data. If the time in the OLDEST\_FLASHBACK\_TIME column is less than the time at which the table was dropped, you can flash

back the database to the time before the DROP TABLE statement was issued.

You cannot use the V\$DATABASE dynamic performance view to determine the availability of the necessary flashback data. You can use the V\$DATABASE dynamic performance view to verify whether Flashback Database is enabled in the database.

You cannot use the V\$UNDOSTAT dynamic performance view to determine the availability of the necessary flashback data. This view is used to display the statistics about the undo data, such as undo space consumption, transaction concurrency, and length of queries executed in the instance. You can use this view to help tune the undo usage in your database.

You cannot use the V\$FLASHBACK\_DATABASE\_STAT dynamic performance view to determine the availability of the necessary flashback data. The V\$FLASHBACK\_DATABASE\_STAT is used to show the bytes of flashback data logged by the database and also displays an estimate of flashback space required based on previous workload.

## **QUESTION 9**

You execute the following statement to create a default flashback data archive:

CREATE FLASHBACK ARCHIVE DEFAULT fla1 TABLESPACE tbs2 QUOTA 5G RETENTION 1 YEAR; You want to enable flashback data archiving for the TRX\_HISTORY table and use the default flashback data archive FLA1.

You issue the following statement:

ALTER TABLE trx\_history FLASHBACK ARCHIVE;

Which statement is true?

- A. Transactions for the TRX HISTORY table will be tracked in the USERS tablespace.
- B. Transactions for the TRX\_HISTORY table will be tracked indefinitely until you disable flashback data archiving.
- C. Transactions for the TRX\_HISTORY table will be tracked for one year.
- D. The command fails because it contains invalid syntax.

Correct Answer: C Section: (none) Explanation

#### Explanation/Reference:

**Explanation:** 

Transactions for the TRX\_HISTORY table will be tracked for one year. In this scenario, you created a default flashback data archive by including the DEFAULT clause in your CREATE FLASHBACK ARCHIVE statement. You created this default flashback data archive with a retention period of one year. The default flashback archive is used if you do not specify a specific flashback data archive when enabling flashback data archiving for a table. In this scenario, you issued the ALTER TABLE statement to enable flashback data archiving for the TRX\_HISTORY table, but did not specify a flashback data archive name. Therefore, the transactions will be tracked in the default flashback data archive that you created. You can guery the STATUS column of

DBA\_FLASHBACK\_ARCHIVE to determine if a flashback data archive is currently the default. A STATUS value of DEFAULT indicates it is the default flashback data archive, and a STATUS value of NULL indicates it is not.

The option that states transactions for the TRX\_HISTORY table will be tracked in the USERS tablespace is incorrect because they will be tracked in the TBS2 tablespace. In this scenario, you created a default flashback data archive and specified a tablespace of TBS2. Then, you enabled flashback data archiving for the table and used the default flashback data archive. Therefore, the transactions for the table will be tracked using the default flashback data archive.

The option that states transactions for the TRX\_HISTORY table will be tracked indefinitely until you disable flashback data archiving is incorrect because, in this scenario, you specified a retention period of one year in your CREATE FLASHBACK ARCHIVE statement.

The option that states the command fails because it contains invalid syntax is incorrect. When enabling flashback data archiving for a table, you can omit the flashback data archive name in your ALTER TABLE statement. If you do so, the defined default flashback data archive is used. If no default exists, you must include the name of the flashback data archive or an error occurs.

#### **QUESTION 10**

You are required to perform the following tasks to configure Flashback Database:

- 1. Open the database in MOUNT EXCLUSIVE mode.
- 2. Ensure that the database is in ARCHIVELOG mode.
- 3. Configure the flash recovery area.
- 4.Issue the ALTER DATABASE FLASHBACK ON; statement.
- 5.Set the DB\_FLASHBACK\_RETENTION\_TARGET parameter.

Which option identifies the correct sequence in which these steps should be performed to enable Flashback Database?

A. 2, 3, 5, 1, and 4

B. 2, 4, 1, 3, and 5

C. 5, 2, 3, 4, and 1

D. 2, 5, 3, 4, and 1

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

**Explanation:** 

The correct sequence in which the steps should be performed is 2, 3, 5, 1, and 4. For enabling Flashback Database, you must perform the following steps in the specified order:

Ensure that the database is in ARCHIVELOG mode.

Configure the flash recovery area.

Set the DB FLASHBACK RETENTION TARGET parameter.

Open the database in MOUNT EXCLUSIVE mode.

Issue the ALTER DATABASE FLASHBACK ON; statement.

To enable Flashback Database, the database must be in ARCHIVELOG mode. Therefore, you must first ensure that the database is in ARCHIVELOG mode. Then, you can configure the flash recovery area that stores all backup- and recovery-related files. After configuring the flash recovery area, you should set the DB\_FLASHBACK\_RETENTION\_TARGET parameter to the retention target. The retention target is the upper limit, in minutes, which indicates how far back Flashback Database can go. For example, if you specify the value 1440 for the DB\_FLASHBACK\_RETENTION\_TARGET parameter, you will be able to flash back the database by one day, which is equal to 1440 minutes. You should open the database in MOUNT EXCLUSIVE mode to issue the ALTER DATABASE FLASHBACK ON; statement. The ALTER DATABASE FLASHBACK ON: statement enables Flashback Database.

All the other options are incorrect because they do not represent the correct sequence of steps to enable

#### **QUESTION 11**

You are required to configure the Flashback Database feature.

Which condition should be fulfilled to configure the Flashback Database feature?

- A. The database must be in ARCHIVELOG mode.
- B. The database must be in NOARCHIVELOG mode.
- C. The database must be open in MOUNT mode.
- D. The undo tablespace should be large enough to support Flashback operations.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

To configure the Flashback Database feature, the database must be in ARCHIVELOG mode. If the database is in NOARCHIVELOG mode, you cannot configure the Flashback Database feature on the database. Therefore, the first step should be to ensure that the database is in ARCHIVELOG mode. If your database is in NOARCHIVELOG mode, you should alter the database to operate in ARCHIVELOG mode.

The option stating that the database must be in NOARCHIVELOG mode is incorrect because you cannot configure the Flashback Database feature for a database that is operating in NOARCHIVELOG mode. You must first alter the database to operate in ARCHIVELOG mode.

The option stating that the database must be open in MOUNT mode is incorrect. To configure the Flashback Database feature, the database must be open in MOUNT EXCLUSIVE mode. After the database is opened in MOUNT EXCLUSIVE mode, you can enable the Flashback Database feature using the following statement: ALTER DATABASE FLASHBACK ON;

The option stating that the undo tablespace should be large enough to support Flashback operations is incorrect. The Flashback Database feature uses flashback logs, not undo data.

## **QUESTION 12**

You have enabled flashback data archiving for a table.

Which statements can you NOT use on the table without generating an error? (Choose all that apply.)

- A. ALTER TABLE
- B. DROP TABLE
- C. RENAME TABLE
- D. TRUNCATE TABLE

Correct Answer: BCD Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You cannot use the TRUNCATE TABLE, DROP TABLE, or RENAME TABLE

statements on the table. Any operations that might invalidate data in the flashback data archive are not allowed.

You can use the ALTER TABLE statement in some situations. However, you cannot use an ALTER TABLE statement that performs any of the following operations:

Drops, renames, or modifies a column Includes an UPGRADE TABLE clause Partitions or subpartitions the table Converts a LONG to a LOB

## **QUESTION 13**

You are working as a DBA at NetFx Corporation. You discover that the SCOTT schema was deleted by mistake. You decide to flash the database back to the time when the schema existed.

Which view should you query to determine the estimated size of the flashback data that you require for your current target retention?

- A. V\$FLASHBACK DATABASE LOG
- B. V\$FLASHBACK\_DATABASE\_STAT
- C. V\$DATABASE
- D. V\$RECOVERY\_FILE\_DEST

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should query the V\$FLASHBACK\_DATABASE\_LOG view. The V\$FLASHBACK\_DATABASE\_LOG view is used to determine the estimated size of the flashback data that you require for your current target retention. The V\$FLASHBACK\_DATABASE\_LOG view allows you to determine the space required in the recovery area to support the flashback activity generated by the changes in the database. The

ESTIMATED\_FLASHBACK\_SIZE column is used to estimate the required size of the flashback data for your current target retention.

You should not query the V\$FLASHBACK\_DATABASE\_STAT view. The V\$FLASHBACK\_DATABASE\_STAT view is used to monitor the overhead of maintaining the data in the Flashback Database logs.

You should not query the V\$DATABASE view. The V\$DATABASE view displays whether Flashback Database is on or off, which indicates whether the Flashback Database feature is enabled or disabled.

You should not query the V\$RECOVERY\_FILE\_DEST view. The V\$RECOVERY\_FILE\_DEST view provides information about the disk quota and current disk usage in the flash recovery area.

#### **QUESTION 14**

You are required to flash back your database. You want to determine the amount of flashback data generated since the database was opened.

Which task should you perform to obtain the required information?

- A. Query the V\$FLASHBACK\_DATABASE\_LOG view.
- B. Query the V\$FLASHBACK\_DATABASE\_STAT view.
- C. Check the value of the DB FLASHBACK RETENTION TARGET initialization parameter.
- D. Query the V\$RECOVERY\_FILE\_DEST view.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should query the V\$FLASHBACK\_DATABASE\_STAT view. The V\$FLASHBACK\_DATABASE\_STAT view is used to estimate the amount of flashback data generated since the database was opened. The V\$FLASHBACK\_DATABASE\_STAT view is used to monitor the overhead of maintaining data in the Flashback Database logs. This view allows you to estimate the space required for future Flashback Database operations. The V\$FLASHBACK\_DATABASE\_STAT view consists of the following columns:

BEGIN\_TIME: displays the start of the time interval

END\_TIME: displays the end of the time interval

FLASHBACK\_DATA: displays the number of bytes of flashback data written during the interval DB\_DATA: displays the number of bytes of database data read and written during the interval

REDO\_DATA\_TIME: displays the number of bytes of redo data written during the interval

ESTIMATED\_FLASHBACK\_SIZE: displays the value of the ESTIMATED\_FLASHBACK\_SIZE column in the V\$FLASHBACK\_DATABASE\_LOG view at the end of the time interval identified by the BEGIN\_TIME and END\_TIME

You should not query the V\$FLASHBACK\_DATABASE\_LOG view. The V\$FLASHBACK\_DATABASE\_LOG

view is used to determine the estimated size of the flashback data that you require for your current target retention. This view allows you to determine the space required in the recovery area to support the flashback activities generated by the changes in the database.

You should not check the value of the DB\_FLASHBACK\_RETENTION\_TARGET initialization parameter in the initialization parameter file. The value of the DB\_FLASHBACK\_RETENTION\_TARGET initialization parameter specifies the retention period of the data that will be retained in the flash recovery area.

You should not query the V\$RECOVERY\_FILE\_DEST view. The V\$RECOVERY\_FILE\_DEST view provides information regarding the disk quota and the current disk usage in the flash recovery area. This view consists of the following columns:

NAME: displays the name of the flash recovery area

SPACE\_LIMIT: displays the maximum amount of disk space that the database can use for the flash recovery area

SPACE\_USED: displays the space used by the flash recovery area

SPACE\_RECLAIMABLE: displays the space which consists of obsolete and redundant data that can be deleted and the space reclaimed for reuse

NUMBER\_OF\_FILES: displays the number of files in the flash recovery area

#### **QUESTION 15**

At the end of the financial year, an accounts accumulation batch update job is run to update the company's accounting records. During the batch run process, some incorrect entries were inserted into the ACCOUNT table. You identified the bug and immediately stopped the batch run process, but 3,000 incorrect records were inserted into the ACCOUNT table before the batch process was stopped. You want to recover the table to the state it was in at 11:50 P.M.

Which flashback feature should you use?

- A. Flashback Table
- B. Flashback Version Query
- C. Flashback Drop
- D. Flashback Database
- E. Flashback Version Query

Correct Answer: A Section: (none) Explanation

## Explanation/Reference:

Explanation:

You should use the Flashback Table feature to recover the table to the state it was at 11:50 P.M. The Flashback Table feature allows you to recover a table to a specific point-in-time without performing an incomplete recovery. The table's dependent objects are also recovered using the Flashback Table feature. Flashback Table has the following benefits over incomplete recovery:

It is much faster and easier to use than incomplete recovery.

Flashback Table does not impact the availability of the database.

A database user can flash back a table to quickly recover from logical corruptions.

To perform recovery using Flashback Table, a user must be granted either the FLASHBACK ANY TABLE or the FLASHBACK TABLE system privilege as well as the SELECT, INSERT, DELETE, and ALTER object privileges on the table being flashed back.

You should not use the Flashback Drop feature because this feature is used to restore dropped objects. Flashback Drop involves the process of saving a copy of the dropped database object and the dependent objects in the Recycle Bin to recover the objects if necessary. The dropped database objects are not removed from the database until the Recycle Bin is emptied or space is reclaimed in the Recycle Bin. In this scenario, the ACCOUNT table was not dropped.

You should not use the Flashback Database feature because this feature allows you to flash the entire database back to a specific point-in-time, not a single table.

You should not use the Flashback Version Query feature because this feature is used to retrieve all the versions of the rows that exist or existed between the time the query is executed and a determined point-in-time in the past. The Flashback Version Query feature returns all the committed occurrences of the rows for an object without displaying the uncommitted row versions.

## **QUESTION 16**

You issue the following statement:

FLASHBACK TABLE scott.emp TO TIMESTAMP SYSTIMESTAMP - INTERVAL '15' MINUTE; In which two scenarios would you issue this statement? (Choose two.)

- A. when the schema of the user SCOTT was deleted by mistake 15 minutes ago
- B. when the EMP table of the user SCOTT's schema was dropped by mistake 15 minutes ago
- C. when some rows of the EMP table in the SCOTT schema were deleted by mistake 15 minutes ago
- D. when some incorrect values were inserted in the EMP table in the user SCOTT's schema during the last 15 minutes
- E. never, because FLASHBACK TABLE is not a valid statement

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The option stating that you would issue the FLASHBACK TABLE scott.emp TO TIMESTAMP SYSTIMESTAMP - INTERVAL '15' MINUTE; statement because some rows of the EMP table in the SCOTT schema were deleted by mistake 15 minutes ago and the option stating you would issue the statement because some incorrect values were inserted in the table during the last 15 minutes are both correct. The Flashback Table feature allows you to recover one or more tables to a specific point in time without performing time-consuming recovery operations, such as point-in-time recovery, which affect the availability of the rest of the database. The Flashback Table feature is different from the Flashback Drop feature because the FLASHBACK TABLE statement performs an undo operation as a single transaction to undo the changes made by the DML statements on the table. In addition, any existing indexes are maintained during this undo operation. If this undo operation causes a constraint to be violated, the flashback operation is not performed. The option stating that you would issue the FLASHBACK TABLE scott.emp TO TIMESTAMP SYSTIMESTAMP - INTERVAL '15' MINUTE; statement when the schema of the user SCOTT was deleted by mistake 15 minutes ago is incorrect. If SCOTT's schema is deleted, then the FLASHBACK DATABASE statement should be used to recover SCOTT's schema, and all the objects in the schema. The option stating that you would issue the FLASHBACK TABLE scott.emp TO TIMESTAMP SYSTIMESTAMP - INTERVAL '15' MINUTE; statement when the EMP table was deleted from SCOTT's schema by mistake 15 minutes ago is incorrect. If a table is deleted from SCOTT's schema, the FLASHBACK TABLE scott.emp TO BEFORE DROP; statement is used to restore the table to SCOTT's schema. The option stating that you will never issue the FLASHBACK TABLE scott.emp TO TIMESTAMP SYSTIMESTAMP - INTERVAL '15' MINUTE; statement because FLASHBACK TABLE is not a valid statement is incorrect. The FLASHBACK TABLE statement is used to recover one or more tables to a specific point in time.

#### **QUESTION 17**

You query DBA\_FLASHBACK\_ARCHIVE using the following statement:

SELECT flashback\_archive\_name, status FROM DBA\_FLASHBACK\_ARCHIVE;

The output indicates that you have created two flashback data archives, FLA1 and FLA2. FLA1 has a STATUS value of DEFAULT, and FLA2 has a null STATUS.

You want to drop the FLA1 flashback data archive.

Which statement is true?

- A. If you drop FLA1, historical data will remain in the tablespace until you manually purge it.
- B. If you drop FLA1, any historical data archived will be lost.
- C. You cannot drop FLA1 if data has been archived to it.
- D. You cannot drop FLA1 because it is the default flashback data archive.

Correct Answer: B Section: (none)

## **Explanation**

## **Explanation/Reference:**

**Explanation:** 

If you drop FLA1, any historical data archived will be lost. When you drop a flashback data archive using the DROP FLASHBACK ARCHIVE statement, historical data is lost, but the tablespace for the flashback data archive is retained.

The option that states if you drop FLA1, historical data will remain in the tablespace until you manually purge it is incorrect. Dropping a flashback data archive removes any archived historical data.

The option that states you cannot drop FLA1 if data has been archived to it is incorrect. You can drop a flashback data archive that contains archived data, but the previously archived data is lost.

The option that states you cannot drop FLA1 because it is the default flashback data archive is incorrect. You can drop a flashback data archive regardless if it is the default flashback data archive or not.

#### **QUESTION 18**

You use the FLASHBACK TABLE statement to flash back the EMP table in your database. Which task is performed as a result of issuing the FLASHBACK TABLE statement?

- A. A shared DML lock is acquired on the EMP table.
- B. The statistics of the EMP table are flashed back.
- C. The flashback operation will be written to the trace file.
- D. The existing indexes on the EMP table will be maintained.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

As a result of issuing the FLASHBACK TABLE statement, the existing indexes on the EMP table will be maintained. When you issue the FLASHBACK TABLE statement to flash back a table in the database, the following tasks will be performed:

Current indexes and dependent objects, such as views, will be maintained.

The Flashback Table operation will be written to the alert log file of the database.

An exclusive DML lock will be held on the table on which you have issued the FLASHBACK TABLE statement. This lock will be held for the duration of the transaction.

The constraints of the table will be checked. If the FLASHBACK TABLE statement violates any constraints, the flashback operation will be aborted.

The option stating that a shared DML lock is acquired on the EMP table is incorrect because the FLASHBACK TABLE statement acquires an exclusive DML lock, not a shared DML lock.

The option stating that the statistics of the EMP table are flashed back is incorrect. The FLASHBACK TABLE statement does not cause the statistics of a table to be flashed back.

The option stating that the flashback operation will be written to the trace file is incorrect because the flashback operation will be written to the alert log file, not the trace file.

### **QUESTION 19**

You issued the following statement:

FLASHBACK TABLE employee TO SCN 567547 ENABLE TRIGGERS; The current SCN number of the database is 567987.

Which statement is NOT an impact of issuing this statement?

- A. The EMPLOYEE table is flashed back to SCN number 567547.
- B. The statement acquires DML locks on all the tables during the flashback operation.
- C. A record of issuing the statement is written in the alert log file.
- D. The triggers on the EMPLOYEE table are disabled during the operation and changed back to the enabled state after completion of the flashback operation.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The triggers on the EMPLOYEE table are not disabled during the operation and changed back to the enabled state after completion of the flashback operation. The FLASHBACK TABLE <table\_name> TO SCN <scn\_value> ENABLE TRIGGERS; statement is used to flash back a table to the specified SCN number. The ENABLE TRIGGERS clause is used to specify that the triggers on a table will not be disabled during the time that the flashback operation is in progress. If the ENABLE TRIGGERS clause is not specified in the FLASHBACK TABLE statement, then the triggers on the table are disabled during the time that the flashback operation is in progress. The triggers are re-enabled after the completion of the flashback operation. All of the other options are incorrect because they are true about the impact of issuing this statement. The EMPLOYEE table is flashed back to SCN number 567547, the statement acquires DML locks on all the tables in the statement during the operation, and a record of issuing the FLASHBACK TABLE statement is written in the alert log file.

## **QUESTION 20**

Which two statements are true about a Flashback Table operation? (Choose two.)

- A. A Flashback Table operation cannot be performed on fixed tables.
- B. The Flashback Table operation shrinks segments that correspond to the table that is being flashed back.
- C. Flashback Table uses LogMiner to determine the earlier state of the table.
- D. Row movement should be disabled before performing a Flashback Table operation.
- E. If a constraint is violated during a Flashback Table operation, the table will be flashed back, but a message will be written to the alert log file.

Correct Answer: AC Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The following two statements are true about a Flashback Table operation:

A Flashback Table operation cannot be performed on fixed tables.

Flashback Table uses LogMiner to determine the earlier state of the table.

There is a restriction on the types of tables that can be flashed back using the FLASHBACK TABLE statement. Fixed tables, system tables, remote tables, tables that are a part of a cluster, nested tables, object tables, and Advanced Queuing (AQ) tables cannot be flashed back using the FLASHBACK TABLE statement. When a Flashback Table operation is performed, the information regarding the earlier state of the table is determined by using the information stored in LogMiner. Flashback Table cannot itself determine the state of the table that existed at a particular point in time.

The option stating that the Flashback Table operation shrinks segments that correspond to the table that is being flashed back is incorrect. The Flashback Table operation does not shrink segments that correspond to the table that is being flashed back.

The option stating that row movement should be disabled before performing a Flashback Table operation is incorrect. To perform a Flashback Table operation, you must enable row movement for the table you are flashing back because row ids might change during the flashback operation. A Flashback Table operation does not preserve row IDs. You can enable row movement for a table named EMP using the following statement:

ALTER TABLE emp ENABLE ROW MOVEMENT;

The option stating that the table will be flashed back, but a message will be written to the alert file if a constraint is violated during a Flashback Table operation is incorrect. If any constraint is violated during a Flashback Table operation, the operation will be aborted.

### **QUESTION 21**

Observe the following sequence of events:

A user in your database performs an erroneous update of data in the EMP table at 7:10 P.M.

You find out about this at 8:00 P.M.

You flash back the EMP table to its state at 7:05 P.M.

At 8:30 P.M., you find out that the EMP table must be recovered to its state at 7:30 P.M.

What should you do to recover the table using minimum administrative effort?

- A. Roll back the earlier flashback operation, and perform another flashback operation on the table.
- B. Flash back the database to its state at 7:30 P.M.
- C. Flash back the EMP table to its state at 7:30 P.M.
- D. Perform an incomplete recovery to recover the database to its state at 7:30 P.M.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

In this scenario, you should flash back the EMP table to its state at 7:30 P.M. The Flashback Table feature enables you to perform a flashback operation even if you already flashed back the table to a previous time. You can reverse the changes done by a FLASHBACK TABLE statement using another FLASHBACK TABLE statement that uses the SCN that corresponds to the SCN before the first Flashback Table operation. In this scenario, you can reverse the changes made by the first FLASHBACK TABLE statement using another FLASHBACK TABLE statement.

The option stating that you should roll back the earlier flashback operation and perform another flashback on the table is incorrect. The ROLLBACK statement is not supported for the Flashback Table feature. A Flashback Table operation is executed as a single transaction and cannot be rolled back.

The option stating that you should flash back the database to its state at 7:30 P.M. is incorrect. If you flashed back the database to its state at 7:30 P.M., the entire database would be flashed back. In this scenario, you only need to flash back the table to its state at 7:30 P.M. Flashing back the entire database would flash back all database objects and might lead to loss of data.

The option stating that you should perform an incomplete recovery to recover the database to its state at 7:30 P.M. is incorrect. By performing an incomplete recovery, you could recover the EMP table to its state at 7:30 P.M. In this scenario, you are required to meet the objective using minimum administrative effort. An incomplete recovery requires more administrative effort compared to the Flashback Table feature. Therefore, you should not perform an incomplete recovery on the database.

#### **QUESTION 22**

You are performing a flashback of the ORDERS table in SCOTT's schema because some important data was deleted in the table by mistake. The SCN number was 771513 at the time of deletion. You issued the following statement to perform the flashback operation:

FLASHBACK TABLE orders TO SCN 771513;

What is the prerequisite to successfully issue this statement?

- A. You must enable the block change tracking feature in your database.
- B. You must enable row movement for the ORDERS table.
- C. You must use the Flashback Version Query before using the Flashback Table feature.
- D. You must configure OMF in your database.

Correct Answer: Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

To use the Flashback Table feature, you must enable row movement for the ORDERS table because row ids might change during the flashback operation. A Flashback Table operation does not preserve row IDs. You can enable row movement for the ORDERS table using the following statement:

#### ALTER TABLE orders ENABLE ROW MOVEMENT:

The option stating that you must configure OMF in your database is incorrect. Configuring Oracle Managed Files (OMF) in the database is not a prerequisite for using the Flashback Table feature. OMF is used to specify the default locations of the datafiles, control files, and the online redo log files. If OMF is configured in your database and you do not specify the names and sizes of the datafiles during tablespace creation, then Oracle automatically assigns names and sizes to the datafiles associated with that tablespace and stores them in the location specified by the DB\_CREATE\_FILE\_DEST parameter. The

DB\_CREATE\_ONLINE\_LOG\_DEST\_n parameter is used to specify the default locations of online redo log files and control files.

The option stating that you must enable the block change tracking feature in your database is incorrect. The block change tracking feature is enabled to improve the performance of the backup process during incremental backups. If block change tracking is enabled, a change tracking file keeps track of the blocks that are changed since the last backup. During an incremental backup, only the changed blocks, instead the entire datafile, are read.

The option stating that you must use the Flashback Version Query feature before using the Flashback Table feature is incorrect. Using the Flashback Version Query feature is a prerequisite for using the Flashback Transaction Query feature. Both the Flashback Version Query and the Flashback Transaction Query are used to identify the user who deleted the record, the transaction ID of the transaction that deleted the record, and the undo SQL statements that will undo the deletion of the record. Oracle Flashback Version Query and Oracle Flashback Transaction Query are referred to as complementary features. The Oracle Flashback Version Query feature provides a history of the changes made to a row along with the corresponding identifiers of the transactions that made the changes. You should use the transaction identifier provided by the Flashback Version Query feature in the Flashback Transaction Query to identify the user who made the changes in the database by running the specific transaction. The Flashback Transaction Query feature provides the Undo SQL statements to undo the changes made by a specific transaction.

#### **QUESTION 23**

You have created two jobs, JOBA and JOBB, which are both assigned to the same job class and are scheduled with the same start time. You need to prioritize these jobs so that JOBB begins first.

Which action should you take?

- A. Modify the jobs to be assigned to different job classes.
- B. Associate each job with a different resource consumer group and allocate more resources to the resource consumer group associated with JOBB.
- C. Set the job\_priority attribute of JOBA to a value lower than the job\_priority attribute of JOBB.
- D. Set the job priority attribute of JOBB to a value lower than the job priority attribute of JOBA.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should set the job\_priority attribute of JOBB to a value lower than the job\_priority attribute of JOBA. You can prioritize jobs within a job class by setting each job's job\_priority attribute using the SET\_ATTRIBUTE procedure of the DBMS\_SCHEDULER package. The job\_priority attribute can be set to an integer value between 1 and 5. A value of 1 indicates the highest priority, and a value of 5 indicates the lowest priority. For example, in this scenario, you could use the following code block to set the priorities of JOBA and JOBB: BEGIN

DBMS\_SCHEDULER.SET\_ATTRIBUTE ( name => 'JOBB', attribute => 'iob priority', value => 1);

DBMS SCHEDULER.SET ATTRIBUTE ( name => 'JOBA',

attribute => 'job\_priority', value => 2);

END:

With these settings, even though the jobs are scheduled to start at the same time, JOBB will start before JOBA because it has the highest priority.

You should not modify the jobs to be assigned to different job classes. You can prioritize jobs at the class

level, but when you do so, the prioritization is based on the resource plans being used. You should also note that when you use class-level prioritization, the priorities given to jobs is not guaranteed. This means that a job with a lower priority in one job class may start before a higher priority job in another job class.

You should not associate each job with a different resource consumer group and allocate more resources to the resource consumer group associated with JOBB. Jobs are not associated with resource consumer groups. Job classes are associated with resource consumer groups.

You should not set the job priority attribute of JOBA to a value lower than the job priority attribute of JOBB. This would cause JOBA to have a higher priority than JOBB because a lower value represents a higher priority.

## **QUESTION 24**

Which statements about job classes are true? (Choose all that apply.)

- A. Job classes can be used to assign the same job attributes to multiple jobs.
- B. To create job classes, no special privilege is required.
- C. All job classes belong to the SYS schema.
- D. All jobs that are not explicitly associated with a job class are associated with the default job class.

Correct Answer: ACD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The following statements about job classes are true:

Job classes can be used to assign the same job attributes to multiple jobs.

All job classes belong to the SYS schema.

All jobs that are not explicitly associated with a job class are associated with the default job class.

The option that states to create job classes, no special privilege is required is incorrect. You must have been granted the MANAGE SCHEDULER privilege to be able to create job classes.

Your system performs heavy transaction processing between 8:00 A.M. and 5:00 P.M. but runs batch processing and reports after that. You decide to create a separate resource plan to govern resource allocation for each time period.

### **QUESTION 25**

Which Scheduler object should you use to automatically switch between the two resource plans?

- A. a window
- B. a program
- C. a job class
- D. a window group

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should use a window to automatically switch between the two resource plans. When creating a window, the RESOURCE\_PLAN parameter specifies the name of the resource plan that will govern the defined timeframe for the window. When the window opens, the system switches to the specified resource plan. When the window closes, the system switches back to the previous resource plan or to the resource plan of the new window if another window is opening.

You should not use a program. A program defines the action that will occur when a job runs. It can be a PL/SQL block, a stored procedure, or an operating system executable.

You should not use a job class. A job class is a container object for the logical grouping of jobs into a larger

unit. From an administrative perspective, it is easier to manage a small number of job classes than a large number of individual jobs. Certain job characteristics that can be assigned at the group level will be inherited by all the jobs within the group. Job classes can be assigned to a resource consumer group. This allows you to control resource allocation for all the jobs within the group.

You should not use a window group. A window group is a named collection of windows owned by SYS. A window group simplifies the management of windows by allowing the members of the group to be manipulated as a single object. For example, you might have two windows, NIGHTS and WEEKENDS, and add them to a window group called NONWORK. Then, you could create jobs that would run during the nonworking time identified by the NONWORK window group.

#### **QUESTION 26**

Which component is NOT used by the Scheduler for prioritizing jobs?

- A. a window
- B. a job class
- C. a resource plan
- D. a window group
- E. a PL/SQL procedure
- F. a resource consumer group

Correct Answer: E Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

A PL/SQL procedure is not a valid component of the Oracle Scheduler. A PL/SQL procedure is an executable component which is contained within the job component of the Scheduler and is not used as a component for prioritizing jobs.

All of the other options are incorrect because the following components are used by the Scheduler for prioritizing jobs:

window - Is used to activate different resource plans at different times. A window is represented by an interval of time.

job class - Defines a category of jobs that share common resource usage requirements.

resource plan - Enables users to prioritize jobs by implementing resource management.

window group - Represents a list of windows and ensures that a job runs only when the windows and its associated resource plan are active.

resource consumer group - Is associated with the job class and determines the resources being allocated to the jobs in the job class.

# **QUESTION 27**

Which statements about windows are NOT true? (Choose all that apply.)

- A. A job running within a window is allocated resources based solely on the resource plan associated with the window.
- B. When you create a window, you must specify the job to which it should be associated.
- C. At any given time, a maximum of three windows can be open at a given time.
- D. A window can be used to specify that a job should start, but not to change the resources allocated.
- E. When you create a window, you must specify a unique window name.

Correct Answer: ABCD Section: (none)

Explanation

## **Explanation/Reference:**

Explanation:

The following statements are not true about windows:

A job running within a window is allocated resources based solely on the resource plan associated with the window.

When you create a window, you must specify the job to which it should be associated.

At any given time, a maximum of three windows can be open at a given time.

A window can be used to specify that a job should start, but not to change the resources allocated.

A job running within a window is not allocated resources based solely on the resource plan associated with the window. Instead, it is allocated resources based on the resource plan associated with the window and the consumer group of its job class. When you create a window, you do not specify the job to which the window should be associated. Windows are not associated with jobs. Instead, they are associated with a specified resource plan. At any given time, only one window can be open. A window can specify when a job should start using the start\_date parameter, and it can also change the resources allocated to the job with the resource plan parameter.

The option stating when you create a window you must specify a unique name is incorrect because this statement is true. When creating a window with the CREATE\_WINDOW procedure, you must specify a unique window name using the window name parameter.

#### **QUESTION 28**

You want to create a lightweight job. You execute the code shown in the exhibit. (Click the Exhibit(s) button.) What is the result?

- A. A single lightweight job is created from the PROG1 template that will run at regular intervals.
- B. An array of lightweight jobs is created from the PROG1 template.
- C. An error occurs because you specified an invalid value for the JOB\_STYLE argument.
- D. An error occurs because you must specify a value for the REPEAT\_INTERVAL argument.

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

**Explanation:** 

With the given code, a single lightweight job is created from the PROG1 template that will run at regular intervals. To create a lightweight job, you use the CREATE\_JOB procedure of the DBMS\_SCHEDULER package and specify the JOB\_STYLE argument value of 'LIGHTWEIGHT'. When creating a lightweight job, you can specify the time and frequency using the REPEAT\_INTERVAL and END\_TIME arguments, or you can specify a schedule using the SCHEDULE\_NAME argument.

The option that states an array of lightweight jobs is created from the PROG1 template is incorrect. To create an array of lightweight jobs, you would declare variables for the job and job array, use the SYS.JOB\_ARRAY constructor to initialize the job array, extend the array to the desired size, place jobs in the job array, and then create the job array using the CREATE\_JOBS procedure of the DBMS\_SCHEDULER package.

The option that states an error occurs because you specified an invalid value for the JOB\_STYLE argument is incorrect. Valid values for the JOB\_STYLE argument are 'REGULAR' and 'LIGHTWEIGHT', which create a regular and lightweight job, respectively. If you do not specify a value for the JOB\_STYLE argument, a regular job is created by default.

The option that states an error occurs because you must specify a value for the REPEAT\_INTERVAL argument is incorrect. You can omit the REPEAT\_INTERVAL and END\_TIME arguments and use the SCHEDULE\_NAME argument to specify the job's schedule.

### **QUESTION 29**

You create a job chain object using the CREATE\_CHAIN procedure. You want to define chain steps to run three programs. If the third program executes successfully, you want to run a fourth program. Which statement is true in this scenario?

- A. You can accomplish this, but only if all jobs in the chain are time-based.
- B. You can accomplish this by defining a chain rule.
- C. You cannot accomplish this because a job chain cannot contain steps that include nested jobs.

D. You cannot accomplish this because a job chain can have only one dependency.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You can accomplish this by defining a chain rule. Each chain rule defined with the DEFINE\_CHAIN\_RULE procedure includes a condition and an action. If the condition evaluates to a TRUE value, then the specified action is performed. In this scenario, you could add a rule that checks to verify whether the third program executed successfully, and if it did, will execute the fourth program.

The option that states you can accomplish this, but only if all jobs in the chain are time-based, is incorrect. Time-based and event-based jobs can have rules defined.

The option that states you cannot accomplish this because a job chain cannot contain steps that include nested jobs is incorrect. A step in a job chain can be another chain.

The option that states you cannot accomplish this because a job chain can have only one dependency is incorrect. A job chain can have many dependencies. You can define rules to define these dependencies.

#### **QUESTION 30**

Which statements about persistent lightweight jobs are true? (Choose all that apply.)

- A. A persistent lightweight job generates minimum redo when the job starts.
- B. Persistent lightweight jobs can be created directly through EM without using a template.
- C. Persistent lightweight jobs must be created using a template created with the CREATE\_PROGRAM procedure.
- D. A persistent lightweight job generates excessive redo when the job starts.

Correct Answer: AC Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

It is true that a persistent lightweight job generates minimum redo when the job starts. It is also true that persistent lightweight jobs must be created using a template created with the CREATE\_PROGRAM procedure.

Oracle 11g provides a type of job referred to as a persistent lightweight job. Each regular job creates a database object, modifying tables, and generating redo, when it starts. This requires a significant amount of time and redo if users create many jobs in a short period of time. The persistent lightweight job improves this by creating only a minimum amount of metadata and reducing the amount of time needed to create the job. Lightweight jobs must be created from a template and cannot be created as easily as a regular job. Also, you cannot set privileges for lightweight jobs as you do for regular jobs. Lightweight jobs inherit their privileges from their parent job template.

The option that states a persistent lightweight job generates excessive redo when the job starts is incorrect. A lightweight job generates minimum redo.

The option that states persistent lightweight jobs can be created directly through EM without using a template is incorrect. You must use a template to create a persistent lightweight job, and you must use PL/SQL to do so because EM does not allow you to specify the JOB\_STYLE argument required to create a lightweight job.

#### **QUESTION 31**

In which situation would you use a Scheduler-generated event?

- A. when you want to execute a stored procedure when a new user is added to the database
- B. when you want to execute a job when the inventory quantity on hand drops below a defined reorder point
- C. when you want to run a script when a file is received in the file system
- D. when you want to execute another job immediately after another job completes

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You would use a Scheduler-generated event when you want to execute another job immediately after another job completes. Scheduler-generated events are events that the Scheduler raises when job states change within the Scheduler, such as when a job starts, fails, completes, or is disabled.

All of the other options are incorrect because, for these situations, the events would be generated by the application, not by state changes within the Scheduler. You can create an event-based job that is based on some event raised within the application by specifying the queue\_spec and event\_condition parameters for the job. The application writes information about the event to an event queue, and the Scheduler can use the queued information to execute the job.

# **QUESTION 32**

You are receiving data files from customers. As each file is received in the file system, you want to execute a shell script to preprocess the file to perform validation. After the validation has run, you want to load the data into your database.

You want to use event-based scheduling to accomplish this.

Which statement about event-based scheduling is true?

- A. You can only schedule jobs that execute in response to Scheduler-generated events.
- B. You can only schedule jobs that execute in response to application-generated events.
- C. An application can generate an event to instruct the Scheduler to start a job.
- D. The Scheduler can only raise events that you explicitly define within the job.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

An application can generate an event to instruct the Scheduler to start a job. To do so, you must specify the queue\_spec and event\_condition parameters when you are creating the job. The application queues information about the event in an event queue. The Scheduler can then run the job when the event occurs and the specified condition is met.

The option that states you can only schedule jobs that execute in response to Scheduler-generated events is incorrect. You can also schedule jobs that execute in response to user-defined or application-generated events.

The option that states you can only schedule jobs that execute in response to application-generated events is incorrect. You can also schedule jobs that execute in response to Scheduler-generated events. Scheduler-generated events are events that are raised within the Scheduler, such as when a job completes, fails, or is disabled.

The option that states the Scheduler can only raise events that you explicitly define within the job is incorrect. The Scheduler raises a series of predefined events based on the changes in a job's state within the Scheduler.

#### **QUESTION 33**

Which statement about regular jobs and persistent lightweight jobs is true?

- A. You should use a lightweight job if you want to set job privileges.
- B. You should use a regular job if you want to create less metadata when the job is created.
- C. You cannot create a lightweight job from a job template.
- D. You should use a regular job if users are creating a small number of jobs.

Correct Answer: D

Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should use a regular job if users are creating a small number of jobs. Oracle 11g provides a type of job referred to as a persistent lightweight job. Each regular job creates a database object, modifying tables, and generating redo, when it starts. This requires a significant amount of time and redo if users create many jobs in a short period of time. The persistent lightweight job improves this by creating only a minimum amount of metadata and reducing the amount of time to create the job. If users are creating a small number of jobs, then using a regular job is easier and provides more flexibility.

The option that states you should use a lightweight job if you want to set job privileges is incorrect. You cannot set privileges for lightweight jobs as you do for regular jobs. They inherit their privileges from their parent job template.

The option that states you should use a regular job if you want to create less metadata when the job is created is incorrect. Using a regular job creates more metadata.

The option that states you cannot create a lightweight job from a job template is incorrect. Lightweight jobs must be created from a job template.

#### **QUESTION 34**

You are running a job chain when it stalls. Which statement about a stalled job chain is true?

- A. When a job chain stalls, you must perform some manual action to correct the situation.
- B. When a job chain stalls, execution of the job chain ends.
- C. A job chain stalls if you have not set the evaluation interval for the defined chain.
- D. A job chain stalls if you have not specified a priority for all jobs in the job chain.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

When a job chain stalls, you must perform some manual action to correct the situation. A job chain stalls when it cannot proceed with execution. This can occur if none of the rules evaluate to a condition that allows another job step to begin or if a condition ends the chain and the evaluation interval for the chain is set to the default value. For a job chain that is stalled, no steps are running, scheduled to run, or waiting for an event to occur. To allow the job chain to continue, you must perform some manual action to correct the situation. You can do so by altering the running chain so that a step can proceed or by redefining the chain rules so that execution can continue. You should note that if you redefine chain rules, you should run the

EVALUATE RUNNING CHAIN procedure on the stalled chain job for rules to be reevaluated.

The option that states when a job chain stalls, execution of the job chain ends is incorrect. Instead, the chain's state is set to CHAIN STALLED, and you must manually correct the problem.

The option that states a job chain stalls if you have not set the evaluation interval for the defined chain is incorrect. The evaluation\_interval defaults to a NULL value. With this default setting, all rules are evaluated when the chain starts and at the end of each step in the chain.

The option that states a job chain stalls if you have not specified a priority for all jobs in the job chain is incorrect. Job chains do not stall based on the priority of the jobs.

You want to create a job chain that links several activities.

#### **QUESTION 35**

When defining the chain steps, which object CANNOT be included as a job step?

- A. another program
- B. a nested chain
- C. another job
- D. another event

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

When defining chain steps, you cannot include another job as a chain step. A job chain links several activities together as job chain steps. Each job chain step can specify a Scheduler program, another job chain, or an event. A job chain step that specifies another job chain is referred to as a nested chain. You create a job chain using the CREATE\_CHAIN procedure, and define chain steps using the DEFINE\_CHAIN\_STEP and DEFINE\_CHAIN\_EVENT\_STEP procedure defines a chain step that is a program or nested chain, and the DEFINE\_CHAIN\_EVENT\_STEP procedure defines a chain step that is an event schedule or an in-line event.

All of the other options are incorrect because they can be included as job steps when defining a job chain.

## **QUESTION 36**

The KITDEV1 user needs to create a regular job that will run at periodic intervals. Consider the following requirements:

The job must execute the UPD\_INV\_TRX stored procedure owned by the KIT2 user.

The job should be enabled immediately after it is created.

The job should run weekly until specified otherwise.

The job should not be dropped after it is run.

The job should execute with the privileges of the KIT2 user.

Which block of code should the KITDEV1 user run to create the job?

#### A. BEGIN

```
DBMS_SCHEDULER.CREATE_JOB ( job_name => 'upd_inventory', job_type => 'STORED_PROCEDURE', job_action => 'kit2.upd_inv_trx' start_date => SYSTIMESTAMP, repeat_interval => 'FREQ=WEEKLY;INTERVAL=1', enabled => TRUE, auto_drop => FALSE, comments => 'Weekly Inventory Update' ); END:
```

### B. BEGIN

DBMS\_SCHEDULER.CREATE\_JOB ( job\_name => 'kit2.upd\_inventory', job\_type => 'STORED\_PROCEDURE', job\_action => 'kit2.upd\_inv\_trx' start\_date => SYSTIMESTAMP, repeat\_interval => 'FREQ=WEEKLY;INTERVAL=1', enabled => TRUE, comments => 'Weekly Inventory Update' ); END;

# C. BEGIN

DBMS\_SCHEDULER.CREATE\_JOB ( job\_name => 'kit2.upd\_inventory', job\_type => 'STORED\_PROCEDURE', job\_action => 'upd\_inv\_trx' start\_date => SYSTIMESTAMP, repeat\_interval => 'FREQ=WEEKLY;INTERVAL=1', comments => 'Weekly Inventory Update' ); END:

## D. BEGIN

```
DBMS_SCHEDULER.CREATE_JOB ( job_name => 'kit2.upd_inventory', job_type => 'STORED_PROCEDURE', job_action => 'kit2.upd_inv_trx' start_date => SYSTIMESTAMP, end_date = SYSTIMESTAMP + INTERVAL '7' DAY, repeat_interval => 'FREQ=WEEKLY;INTERVAL=1', enabled => TRUE, comments => 'Weekly Inventory Update'); END:
```

Correct Answer: B Section: (none)

# **Explanation**

### Explanation/Reference:

```
Explanation:
```

The KITDEV1 user should run the following block of code to create the job: **BEGIN** 

DBMS SCHEDULER.CREATE JOB (job name => 'kit2.upd inventory', job type => 'STORED PROCEDURE', iob\_action => 'kit2.upd\_inv\_trx' start\_date => SYSTIMESTAMP. repeat interval => 'FREQ=WEEKLY;INTERVAL=1',

enabled => TRUE,

comments => 'Weekly Inventory Update'

END;

In this scenario, the code specifies a job name parameter of kit2.upd inventory, thereby giving the job a unique name. The job name parameter includes an optional schema name to create the job in the KIT2 schema. If you do not specify a schema name, the job is created in the schema of the user who created it. Specifying a schema name is required in this scenario because you want the job to execute using KIT2's privileges. Jobs execute with the privileges of the schema in which the job was created. If you do not include a job\_name parameter in the CREATE\_JOB procedure call, an error is produced, and the job will not be created. Next, the code specifies a job\_type parameter to indicate the type of job. Valid values for this parameter are 'PL/SQL\_BLOCK', 'STORED\_PROCEDURE', 'EXECUTABLE', and 'CHAIN'. In this scenario, the code specifies the value 'STORED\_PROCEDURE' to indicate that the defined job will execute a stored procedure. Like the job\_name parameter, the job\_type parameter is also required. If you omit this parameter, the job will not be created, and an error is returned. Next, the code specifies a job\_action parameter. For stored procedures, this is the name of the stored procedure to execute. Because KIT2 owns the stored procedure, you must prefix the stored procedure name with the schema. The code then specifies a start\_date parameter of SYSTIMESTAMP to indicate that the job should start on or after today's date. You do not specify an end date, so the job will continue to execute indefinitely based on the repeat interval value you specified. which was weekly. Finally, the code sets the enabled parameter to TRUE. This is required in this scenario because, by default, jobs are disabled when they are created. Setting the enabled parameter to TRUE allows the job to automatically run as soon as you create it. This code did not specify a value for the auto drop parameter, but has a repeating schedule that does not specify an ending date, so it will not be dropped after it is run.

The KITDEV1 user should not use the code block that does not include the schema name in the job name parameter but does includes the auto drop parameter. In this scenario, you wanted the job to execute using KIT2's privileges. Therefore, KITDEV1 must include the schema name in the job name when creating the job. Also, the auto drop parameter is not necessary in this scenario, because the job is a repeating job that has no ending date. The auto drop parameter specifies when a job should be automatically dropped, and it defaults to TRUE. Using this default, non-repeating jobs are run once and automatically dropped. Repeating jobs run until their end date has passed, and then they are dropped. The job in this scenario has no ending date, so the same results are accomplished regardless of whether the auto\_drop parameter value is specified. The KITDEV1 user should not use the code block that does not include the schema name in the job\_action parameter and omits the enabled parameter. In this scenario, you wanted the job to execute a procedure owned by KIT2. Therefore, the schema name must be included in the job action parameter. In addition, all jobs are disabled by default, so to enable the job immediately after it is created, the enabled parameter must be included and set to TRUE.

The KITDEV1 user should not use the code block that includes an end\_date parameter. In this scenario, you wanted the job to continue to run indefinitely, so you would not specify an ending date. The end\_date parameter is used to specify a date after which the job will no longer be run.

# **QUESTION 37**

Which three components does the Scheduler use for managing tasks within the Oracle environment? (Choose three.)

- A. a job
- B. a program
- C. a schedule
- D. PL/SQL procedure

Correct Answer: ABC Section: (none) Explanation

### **Explanation/Reference:**

Explanation:

The Scheduler uses the following three basic components for managing tasks within the Oracle environment: job - Identifies what to execute and when execution should occur

program - Specifies a collection of metadata information for an executable schedule - Specifies when a job is executed and the frequency of execution

A PL/SQL procedure is not a valid component of Oracle Scheduler. The job component and the program component of the Scheduler include information, such as the type of action that will be executed. A PL/SQL procedure is a type of action, which is represented by the job or the program component of the Scheduler.

#### **QUESTION 38**

You are planning to schedule your backup activity using the Scheduler. Which statement about job scheduling is NOT true?

- A. When a job is created, information about the job is stored in a job table in the data dictionary.
- B. The job coordinator goes to sleep automatically after a sustained period of Scheduler inactivity.
- C. The Scheduler uses one job table for each database and one job coordinator for each instance.
- D. When a job is created, information about the job is stored in a job table created in the USERS schema.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

When a job is created, information about the job is not stored in a job table created in the USERS schema. The Scheduler is primarily responsible for job execution. Information about the job is stored in a job table in the data dictionary.

All of the other options are incorrect because they are true about job scheduling. When a job is created, information about the job is stored in a job table created in the data dictionary. The job coordinator goes to sleep automatically after a sustained period of Scheduler inactivity. The job coordinator is a background process and is active when jobs are run. This process goes to sleep automatically after a sustained period of Scheduler inactivity. The Scheduler uses one job table for each database and one job coordinator for each instance. The Scheduler uses one job table to store information about the job and one job coordinator background process for one instance. The job coordinator process is started automatically when jobs are run.

## **QUESTION 39**

You want to use Scheduler components to schedule a job. Which statement regarding Scheduler components is true?

- A. A program can contain one or more jobs.
- B. A job can be scheduled to run at a specific time or in response to a specific event.
- C. A schedule can be defined for a job or a program.
- D. A program can be included in one and only one job.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

A job can be scheduled to run at a specific time or in response to a specific event. A job defines a PL/SQL

procedure, script or executable that needs to be run. A schedule defines when each job runs and the run frequency. A program further breaks down tasks within a job. When you create a job, you can specify the associated schedule and program.

The option that states a program can contain one or more jobs is incorrect. A program does not contain jobs. A job contains a program.

The option that states a schedule can be defined for a job or a program is incorrect. A schedule is created for a job.

The option that states a program can be included in one and only one job is incorrect. A program can be reused in different jobs.

You need to enable a Scheduler object, such as a program, job, window, or window group.

#### **QUESTION 40**

Which procedure should you use to accomplish this?

- A. DBMS\_SCHEDULER.ENABLE
- B. DBMS\_SCHEDULER.ENABLE\_JOB
- C. DBMS\_SCHEDULER.CREATE\_JOB
- D. DBMS\_SCHEDULER.GENERATE\_JOB\_NAME

Correct Answer: A Section: (none) Explanation

### **Explanation/Reference:**

Explanation:

You should use the DBMS\_SCHEDULER.ENABLE procedure. You can enable Scheduler objects, such as programs, jobs, windows, or window groups using the ENABLE procedure of the DBMS\_SCHEDULER package. The following syntax is used when calling the DBMS\_SCHEDULER.ENABLE procedure: DBMS\_SCHEDULER.ENABLE(name)

The name parameter signifies the Scheduler object to be enabled. The enabled flag for the object is set to TRUE when the object is enabled. When you create a job or program Scheduler object, it is disabled by default. When you create a window or window group Scheduler object, it is enabled by default. If a job class name is specified as a parameter to the ENABLE procedure, then all the corresponding jobs within the class are also enabled. However, if you specify a window group name, only the window group is enabled, but the windows that are members of the window group are not enabled. You must explicitly enable the windows. You should not use the DBMS\_SCHEDULER.ENABLE\_JOB procedure because this is an invalid procedure. You should not use the DBMS\_SCHEDULER.CREATE\_JOB procedure. You can create a new job using the CREATE\_JOB procedure of the DBMS\_SCHEDULER package.

You should not use the DBMS\_SCHEDULER.GENERATE\_JOB\_NAME procedure. GENERATE\_JOB\_NAME is a function that is used to generate a new name for a job. It helps to identify the jobs by assigning each job a unique job name. The function accepts a prefix parameter and uniquely names the job by appending a unique number to the specified prefix. If a NULL value is passed for the prefix parameter, the job name consists only of a unique number.

## **QUESTION 41**

You are configuring channel settings for RMAN.

Which statement about configuring RMAN channel settings is true?

- A. You can control the size of backup sets that RMAN creates.
- B. You can configure only one SBT channel, but multiple disk channels.
- C. You can modify the RATE parameter to control how much bandwidth RMAN uses.
- D. You can configure two channels that use different compression algorithms.

Correct Answer: C Section: (none) Explanation

# Explanation/Reference:

**Explanation:** 

You can modify the RATE parameter to control how much bandwidth RMAN uses. When you use either the CONFIGURE CHANNEL or ALLOCATE CHANNEL command to configure channels, you can specify several parameters for the channel settings. The RATE parameter specifies the maximum number of bytes RMAN reads on the channel each second. You can modify this value to control how much bandwidth RMAN uses. In addition, when you are configuring channels, you can specify the size of backup pieces for the channel, specify the number of channels that should be used in parallel for backups and restores, and specify information for a media manager.

The option that states you can control the size of backup sets that RMAN creates is incorrect. This can be specified, but not in the channel settings. However, you can include the MAXPIECESIZE parameter when you are configuring channel settings to control the size of backup pieces on a channel.

The option that states you can configure only one SBT channel, but multiple disk channels, is incorrect. You can configure multiple disk channels and multiple SBT channels.

The option that states you can configure two channels that use different compression algorithms is incorrect. The compression algorithm is not specified at the channel level. When using compression, the same compression algorithm is used for all channels. The two compression algorithms are ZLIB and BZIP2, and BZIP2 is used by default. It provides maximum compression, but uses more CPU resources.

## **QUESTION 42**

You have configured a flash recovery area for your database. You are modifying RMAN persistent configuration settings. You issue the following RMAN commands:

CONFIGURE RETENTION POLICY TO REDUNDANCY 3;

CONFIGURE BACKUP OPTIMIZATION ON;

CONFIGURE DEFAULT DEVICE TYPE TO DISK;

CONFIGURE DEVICE TYPE DISK PARALLELISM 2;

CONFIGURE CHANNEL c1 DEVICE TYPE DISK FORMAT '/rdsk1/orabk/%d %U.bkup'; CONFIGURE CHANNEL c2 DEVICE TYPE DISK FORMAT '/rdsk2/orabk/%d:%U.bkup'; CONFIGURE MAXSETSIZE TO 100MB:

You then execute an RMAN RUN block that contains the following two commands:

ALLOCATE CHANNEL c3 DEVICE TYPE disk; BACKUP DATABASE;

Which statement is true about executing this RUN block?

- A. RMAN allocates three channels and creates a backup on rdsk1, rdsk2, and in the flash recovery area.
- B. The backup is created in the flash recovery area, if it exists.
- C. Execution fails because you did not specify a FORMAT parameter in the ALLOCATE CHANNEL command
- D. Execution fails because you cannot manually allocate a channel within a RUN block.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The backup is created in the flash recovery area, if it exists. In this scenario, you configured two channels using CONFIGURE CHANNEL commands. You subsequently execute a RUN block that includes an ALLOCATE CHANNEL command. The ALLOCATE CHANNEL command will override any persistent channel settings, but only for the duration of the RUN block. In this scenario, you do not specify a FORMAT parameter to provide a specific destination to which backups should be written. Therefore, in this scenario, RMAN only allocates the single channel c3, and writes backups to the flash recovery area. If the flash recovery area does exist and you omit the FORMAT parameter, then backups are written to a default location depending on the operating system.

The option that states RMAN allocates three channels and creates a backup on rdsk1, rdsk2, and in the flash recovery area is incorrect. The ALLOCATE CHANNEL command overrides the persistent channel settings. In this scenario, only channel c3 is allocated, and the backup is written the flash recovery area.

The option that states execution fails because you did not specify a FORMAT parameter in the ALLOCATE CHANNEL command is incorrect. If you omit the FORMAT parameter, then backups will be written to the flash

recovery area if it exists. Otherwise, they will be written to a default location depending on the operating system.

The option that states execution fails because you cannot manually allocate a channel within a RUN block is incorrect. You can manually allocate a channel within a RUN block, and RMAN will ignore the persistent channel settings and use the manually allocated channel for the duration of the RUN block.

You are modifying your RMAN persistent configuration settings. You issue the following RMAN commands:

CONFIGURE RETENTION POLICY TO REDUNDANCY 3;

CONFIGURE BACKUP OPTIMIZATION ON:

CONFIGURE DEFAULT DEVICE TYPE TO DISK:

CONFIGURE DEVICE TYPE DISK PARALLELISM 2;

CONFIGURE CHANNEL 1 DEVICE TYPE DISK FORMAT '/rdsk1/orabk/%d %U.bkup'; CONFIGURE CHANNEL 2 DEVICE TYPE DISK FORMAT '/rdsk2/orabk/%d:%U.bkup'; CONFIGURE MAXSETSIZE TO 100MB;

## **QUESTION 43**

You subsequently issue a BACKUP DATABASE; statement. In which location(s) will the backup be created?

- A. only in the flash recovery area
- B. only on rdsk1
- C. only on rdsk2
- D. on both rdsk1 and rdsk2

Correct Answer: D Section: (none) Explanation

#### Explanation/Reference:

**Explanation:** 

The backup will be created on both rdsk1 and rdsk2. In this scenario, you configure channel parallelism to 2 using the CONFIGURE DEVICE TYPE DISK PARALLELISM 2; command. This instructs RMAN to allocate and use two channels during backup and restore operations. Then, you configure two channels, and each contains a FORMAT parameter. The FORMAT parameter points to a specific location to which backups for the channel should be written. If you do not specify a location, then the flash recovery area, if it exists, is the destination. Otherwise, the destination is a specific platform-dependent location. In this scenario, you specify locations on rdsk1 and rdsk2. The %d variable represents the database name, and the %U variable represents a unique name. Therefore, backups will be written to rdsk1 and rdsk2.

All of the other options are incorrect because, with the given RMAN configuration settings, the backup will created on both rdsk1 and rdsk2.

# **QUESTION 44**

With backup optimization, which three factors does RMAN consider when it determines whether or not to back up a file? (Choose three.)

- A. whether the file is compressed
- B. whether the file has already been backed up
- C. whether the file is eligible for deletion per the retention policy
- D. whether the file is required for the configured backup duplexing
- E. whether the file is encrypted
- F. whether sbt and disk channels have been allocated

Correct Answer: BCD Section: (none) Explanation

# **Explanation/Reference:**

### Explanation:

With backup optimization, RMAN considers whether the file has already been backed up, whether the file is eligible for deletion per the retention policy, and whether the file is required for the configured backup duplexing. Backup optimization is an RMAN feature that is used to instruct the BACKUP command to skip the backup of datafiles that have not changed since the last backup. RMAN also considers the retention policy and backup duplexing configuration to determine if the required number of backups have been performed. Backup optimization can be used for backups taken to disk or tape.

All of the other options are incorrect because RMAN does not consider compression, encryption, and channel allocation when it determines whether to back up or skip a file. With backup optimization, backups are performed on only one type of channel, either disk or sbt.

#### **QUESTION 45**

You have enabled backup optimization in RMAN. You issue the following RMAN command to configure a redundancy-based retention policy:

CONFIGURE RETENTION POLICY TO REDUNDANCY 3; Which statement is true?

- A. The command fails because you cannot configure a redundancy-based retention policy when backup optimization is enabled.
- B. Backup optimization is performed, but RMAN considers the redundancy-based retention policy when it determines which datafiles should be backed up.
- C. Backup optimization is permanently disabled.
- D. Backup optimization is temporarily disabled because a redundancy-based retention policy is specified.

Correct Answer: B Section: (none) Explanation

### **Explanation/Reference:**

**Explanation:** 

Backup optimization is performed, but RMAN considers the redundancy-based retention policy when it determines which datafiles should be backed up. Backup optimization is an RMAN feature that is used to instruct the BACKUP command to skip the backup of datafiles that have not changed since the last backup. However, RMAN considers the retention policy and backup duplexing requirements when it determines whether datafiles should be backed up. If backup optimization is enabled and a redundancy-based retention policy is configured using the CONFIGURE RETENTION POLICY TO REDUNDANCY n; command, RMAN skips the backup of files that have not changed since the last backup. RMAN also skips offline or read-only datafiles if there are already n+1 backups of these offline or read-only datafiles. For example, if you have a KIT1 tablespace that is offline, the datafiles associated with the KIT1 tablespace have not changed since the last backup, and you configure a redundancy-based retention policy using the CONFIGURE RETENTION POLICY TO REDUNDANCY 3; command, The KIT1 tablespace will not be backed up if there are already four backups.

The option that states the command fails because you cannot configure a redundancy-based retention policy when backup optimization is enabled is incorrect. You can specify either a redundancy-based retention policy or a recovery window. RMAN will consider these when it performs backup optimization.

The option that states backup optimization is permanently disabled is incorrect. To disable backup optimization, you should issue the CONFIGURE BACKUP OPTIMIZATION OFF; command.

The option that states backup optimization is temporarily disabled because a redundancy-based retention policy is specified is incorrect. Specifying a retention policy does not disable backup optimization.

#### **QUESTION 46**

You have set the following RMAN backup configuration settings:

CONFIGURE DEFAULT DEVICE TYPE TO sbt; CONFIGURE BACKUP OPTIMIZATION ON;

You issue the following command:

BACKUP DEVICE TYPE sbt BACKUPSET ALL FORCE;

Which statement is true about the result?

- A. RMAN only backs up files that have changed since the last backup.
- B. RMAN backs up all files, even if they have not changed since the last backup.

- C. The backup fails because it is a tape backup.
- D. The backup fails because backup optimization is enabled.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

With the given configuration and command, RMAN backs up all files, even if they have not changed since the last backup. In this scenario, you have enabled backup optimization using the CONFIGURE BACKUP OPTIMIZATION ON; command. Then, you perform a backup and include the FORCE option in your BACKUP command. The FORCE option overrides the use of backup optimization, and RMAN will back up all files, even if they have not changed.

The option that states RMAN only backs up files that have changed since the last backup is incorrect because you included the FORCE option in your BACKUP command.

The options that state the backup fails are incorrect. The backup executes successfully, but backup optimization is not used. Backup optimization can be used with disk or tape backups, and the FORCE option overrides the use of backup optimization.

## **QUESTION 47**

You are maintaining your company's SALES database. You have never backed up the USERS tablespace that is currently offline.

On Sunday, you issued the following commands:

CONFIGURE DEFAULT DEVICE TYPE TO sbt; CONFIGURE BACKUP OPTIMIZATION ON:

CONFIGURE RETENTION POLICY TO REDUNDANCY 3:

From Monday to Saturday, you performed the following actions:

How many times will the backup of the USERS tablespace be performed?

- A. The backup will not be performed at all.
- B. three times
- C. four times
- D. six times

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The backup of the USERS tablespace will be performed four times. If backup optimization is enabled and a redundancy-based retention policy is configured using the CONFIGURE RETENTION POLICY TO REDUNDANCY n; command, RMAN skips the backup of the offline or read-only datafiles when n+1 backups of these offline or read-only datafiles already exist. Backup optimization is an RMAN feature that instructs the BACKUP command to skip the backup of the datafiles that have not changed since the last backup. In this scenario, the USERS tablespace is an offline tablespace, and the datafiles associated with the USERS tablespace have not changed since the last backup. The CONFIGURE RETENTION POLICY TO REDUNDANCY 3; command sets the redundancy to 3. Therefore, the backup of the offline tablespace USERS will be taken four times, that is, on Monday, Tuesday, Wednesday, and Thursday. The other options are incorrect because the offline USERS tablespace is backed up four times according to the backup optimization and redundancy-based retention policy settings.

# **QUESTION 48**

Which statement about RMAN persistent configuration settings is true?

- A. Persistent settings remain in effect until you close the RMAN session and start a new RMAN session.
- B. The only RMAN setting that can persist across RMAN sessions is the retention policy.

- C. A persistent channel setting can be overridden within a RUN block.
- D. You can reset all persistent RMAN settings to their default values by issuing a CONFIGURE ALL CLEAR; command.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

A persistent channel setting can be overridden within a RUN block. Persistent RMAN settings are set using the CONFIGURE command. These settings remain in effect across different RMAN sessions until they are cleared or reset to another value. However, you can override some persistent settings within a RUN block. For example, you can override channel allocation settings within a RUN block by including an ALLOCATE CHANNEL command within the RUN block.

The option that states persistent settings remain in effect until you close the RMAN session and start a new RMAN session is incorrect. Persistent RMAN settings remain in effect across different RMAN sessions until they are cleared or are reset to a different value using another CONFIGURE command.

The option that states the only RMAN setting that can persist across RMAN sessions is the retention policy is incorrect. You can also use the CONFIGURE command to allocate channels, set the default backup type and destination, define a retention policy or archivelog deletion policy, enable backup optimization, and set other RMAN configuration settings. Settings configured with the CONFIGURE command persist across all RMAN sessions.

The option that states you can reset all persistent RMAN settings to their default values by issuing a CONFIGURE ALL CLEAR; command is incorrect because this syntax is invalid. You can only clear a single persistent setting at a time. To do so, you issue a CONFIGURE command for the specific persistent setting and

include the CLEAR option. For example, the following statement sets the value of MAXSETSIZE back to its default value of UNLIMITED:

CONFIGURE MAXSETSIZE CLEAR;

#### **QUESTION 49**

Which statement about channel allocation is true?

- A. You must specify a FORMAT parameter with each CONFIGURE CHANNEL or ALLOCATE CHANNEL command or an error will occur.
- B. You can specify vendor-specific commands to allocated channels using the SEND parameter.
- C. If you have automatic channels configured and you issue a subsequent ALLOCATE CHANNEL command within a RUN block, the ALLOCATE CHANNEL command will be ignored.
- D. To specify multiple channels, the channels must be manually allocated using ALLOCATE CHANNEL commands.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You can specify vendor-specific commands to allocated channels using the SEND parameter. The SEND parameter is specified as SEND 'string', where the specified string is a vendor-specific command. The command is sent to all channels that are allocated.

The option that states you must specify a FORMAT parameter with each CONFIGURE CHANNEL or ALLOCATE CHANNEL command or an error occurs is incorrect. If you omit the FORMAT parameter, backups will be written to the flash recovery area, if it exists, or to an operating system-dependent location. The option that states if you have automatic channels configured and you issue a subsequent ALLOCATE CHANNEL command within a RUN block, the ALLOCATE CHANNEL command will be ignored is incorrect. You can manually configure channels even if you have automatic channels that have been configured with

CONFIGURE CHANNEL commands. You can include an ALLOCATE CHANNEL command within a RUN block to override your automatic channel configurations for the duration of the RUN block.

The option that states to specify multiple channels, the channels must be manually allocated using ALLOCATE CHANNEL commands is incorrect. You can specify multiple channels using CONFIGURE CHANNEL commands. RMAN will use these automatic channel settings during backup and restore operations.

You are modifying RMAN persistent configuration settings. You issue the following RMAN commands:

CONFIGURE RETENTION POLICY TO REDUNDANCY 1;

CONFIGURE BACKUP OPTIMIZATION ON;

CONFIGURE DEFAULT DEVICE TYPE TO DISK:

CONFIGURE CONTROLFILE AUTOBACKUP ON:

CONFIGURE CONTROLFILE AUTOBACKUP FORMAT FOR DEVICE TYPE DISK TO '/rdb1/orabk/%F';

CONFIGURE DEVICE TYPE DISK PARALLELISM 2;

CONFIGURE DATAFILE BACKUP COPIES FOR DEVICE TYPE DISK TO 3:

CONFIGURE CHANNEL 1 DEVICE TYPE DISK FORMAT '/rdb1/orabk/%d\_%U.bkup'; CONFIGURE CHANNEL 2 DEVICE TYPE DISK FORMAT '/rdb2/orabk/%d\_%U.bkup'; CONFIGURE MAXSETSIZE TO 100MB:

#### **QUESTION 50**

Which two statements about your RMAN persistent backup configuration settings are true? (Choose two.)

- A. Backups are retained indefinitely, and are not automatically marked as obsolete.
- B. Each time a datafile is backed up, two additional redundant backups of the datafile are also made.
- C. When you back up a datafile, it will be backed up to the flash recovery area by default.
- D. Each time you back up the entire database, a backup of the control file will also be performed.
- E. Backups will be compressed backup sets by default.

Correct Answer: BD Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

With the given settings, each time you back up a datafile, two additional redundant backups of the datafile will also be made. Also, each time you back up the entire database, a backup of the control file will also be performed. The CONFIGURE RMAN command is used to set persistent RMAN settings that remain in effect across different RMAN sessions until they are cleared or are reset to a different value. You can use the RMAN CONFIGURE command to configure the default device type, default backup destinations, a backup or archive log retention policy, as well as other configuration settings. In this scenario, you issued a CONFIGURE DATAFILE BACKUP COPIES FOR DEVICE TYPE DISK TO 3; command. This command specifies that each time you back up a datafile additional copies of the backup should be made. In this scenario, you set the value to 3, so two additional backups of the datafile will be made. In this scenario, you also specify a CONFIGURE CONTROLFILE AUTOBACKUP ON; command. This setting indicates that each time a backup is taken of the database, a tablespace, or a datafile, the control file will also be automatically backed up. The option that states backups are retained indefinitely and are not automatically marked as obsolete is incorrect. In this scenario, you have issued a CONFIGURE RETENTION POLICY TO REDUNDANCY 1; command. This configures a redundancy-based backup retention policy, and RMAN automatically marks backups as obsolete according to this retention policy. To remove the retention policy so that backups are retained indefinitely, you should issue the CONFIGURE RETENTION POLICY TO NONE; command. The option that states when you back up a datafile, it will be backed up to the flash recovery area by default is incorrect. In this scenario, you specify the FORMAT clause of each CONFIGURE CHANNEL command. This specifies a specific location to which backups should be written. If you do not specify a location, then the flash recovery area, if it exists, is the destination. Otherwise, the destination is a specific platform-dependent location. In this scenario, you specify values of '/rdb1/orabk/%d\_%U.bkup' and '/rdb2/orabk/%d\_% U.bkup'. The %d variable represents the database name, and the %U variable represents a unique name. Therefore, backups will be written to /rdb1/orabk and /rdb2/orabk, not the flash recovery area, by default. The option that states backups will be compressed backup sets by default is incorrect. To specify that backups should be compressed backup sets by default, you should issue the CONFIGURE DEVICE TYPE DISK BACKUP TYPE TO COMPRESSED BACKUPSET; command. In this scenario, you issued the CONFIGURE

DEVICE TYPE command without including the TO COMPRESSED BACKUPSET clause. Therefore, the backups will not be compressed backup sets by default.

#### **QUESTION 51**

The size of the largest datafile, data1.dbf, in your database is 30MB. You issued the following command: RMAN>CONFIGURE MAXSETSIZE 10MB;

What will be the impact of this setting?

- A. While performing a backup of datafile data1.dbf, one backup set is created.
- B. While performing a backup of datafile data1.dbf, two backup sets are created.
- C. While performing a backup of the datafile data1.dbf, three backup sets are created.
- D. While performing a backup of the datafile data1.dbf, the backup fails.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

While performing a backup of the datafile data1.dbf, the backup fails. The MAXSETSIZE parameter is used to configure the maximum size of each backup set. This parameter limits the number of datafiles within a backup set and forces RMAN to create another backup set. In this scenario, the size of the data1.dbf datafile is larger than the value of the MAXSETSIZE configuration parameter. Therefore, the command to back up the datafile will fail. No backup set will be created. You must ensure that the value of the MAXSETSIZE parameter is larger than the size of the largest datafile in your database.

All of the other options are incorrect because the command to back up datafile data1.dbf will fail.

#### **QUESTION 52**

You issued the RMAN SHOW ALL; command. The output of this command is as follows: After analyzing this output, which two conclusions can you draw? (Choose two.)

- A. If you perform a backup across a network, then the backup will use reduced bandwidth.
- B. If you perform a backup of a datafile, the backup will be the same as an operating system copy of the datafile.
- C. If you perform a backup of a single datafile, the control file will not be backed up.
- D. The maximum size of each backup set will be 10MB.
- E. The backups will be performed on disk.

Correct Answer: DE Section: (none) Explanation

## Explanation/Reference:

Explanation:

In this scenario, the maximum size of each backup set will be 10MB, and the backups will be performed on disk. The CONFIGURE RMAN command is used to set persistent RMAN settings that remain in effect across different RMAN sessions until they are cleared or are reset to a different value. You can use the RMAN CONFIGURE command to configure the default device type, the default backup destinations, a backup or archivelog retention policy, as well as other configuration settings. The CONFIGURE MAXSETSIZE TO 10MB; command specifies that the maximum size of each backup set is 10MB. The MAXSETSIZE parameter is used to configure the maximum size of each backup set. This parameter limits the number of datafiles within a backup set. For example, if two datafiles are associated with a tablespace, the size of the first datafile is 12MB, the size of the second datafile is 10MB, and the value of the MAXSETSIZE parameter is 15MB, then RMAN will create two backup sets, one for each datafile, when it performs a backup. The CONFIGURE DEFAULT DEVICE TYPE TO DISK BACKUP AS BACKUPSET; command specifies that the backup type to be performed by default is a backup set, and backups are performed on disk. The DEFAULT DEVICE TYPE clause indicates the default device used for backups. You can specify a value of DISK to perform backups to

disk or a media manager name, such as sbt or sbt\_tape. In this scenario, you specified a value of DISK, so backups will be written to disk.

The option stating that if you perform a backup across a network, then the backup will use reduced bandwidth is incorrect. Reducing the network bandwidth during backups is a feature of compressed backups. In this scenario, the CONFIGURE DEVICE TYPE DISK BACKUP TYPE TO BACKUPSET; setting indicates that the default backup type is a backup set, but backups are not compressed. The CONFIGURE DEVICE TYPE DISK BACKUP TYPE TO COMPRESSED BACKUPSET; command is used to configure compressed backup sets as the default backup type. A compressed backup set saves storage space on the storage media; therefore, the size of compressed backup sets is smaller than that of image copies or backup sets. Using a compressed backup set reduces network bandwidth if you are performing backups across a network.

The option stating that if you perform a backup of a datafile, the backup will be the same as an operating system copy of the datafile is incorrect. The default backup type is configured as a backup set. The backup set is not the same as an operating system copy. An image copy is the same as an operating system copy. Image copies are actual copies of the database files, archive logs, or control files. Image copies can be stored only on disk. An image copy in RMAN is equivalent to an operating system copy. You use the CONFIGURE DEVICE TYPE DISK BACKUP TYPE TO COPY; command to configure RMAN to backup image copies. The option stating that if you perform a backup of a single datafile, the control file will not be backed up is incorrect. The CONFIGURE CONTROLFILE AUTOBACKUP ON; command is used to configure RMAN to back up the control file whenever a backup of the database, a tablespace, or a datafile is performed.

#### **QUESTION 53**

Which three statements about space management of the flash recovery area are true? (Choose three.)

- A. A warning alert is automatically generated when the flash recovery area is 85% full.
- B. A critical alert is automatically generated when the flash recovery area is 97% full.
- C. If the flash recovery area is 100% full and a log switch occurs, the database instance aborts.
- D. Oracle automatically deletes transient files from the flash recovery area when additional space is needed.
- E. If the flash recovery area is full, you must increase the DB\_RECOVERY\_FILE\_DEST\_SIZE parameter.

Correct Answer: ABD Section: (none) Explanation

### **Explanation/Reference:**

Explanation:

The following statements about space management of the flash recovery area are true:

A warning alert is automatically generated when the flash recovery area is 85% full.

A critical alert is automatically generated when the flash recovery area is 97% full.

Oracle automatically deletes transient files from the flash recovery area when additional space is needed. The option that states if the flash recovery area is 100% full and a log switch occurs, the database instance aborts is incorrect. The log switch will temporarily hang until there is free space in the flash recovery area. The option that states if the flash recovery area is full, you must increase the

DB\_RECOVERY\_FILE\_DEST\_SIZE parameter is incorrect. Although you could increase the size, you might also choose to change your retention policy or delete files from the flash recovery area that have been backed up or are no longer needed.

### **QUESTION 54**

You issue the following RMAN command to set a retention policy on a database: RMAN>CONFIGURE RETENTION POLICY TO REDUNDANCY 2;

What will be the outcome of issuing this command?

- A. After two days, a backup will be marked obsolete.
- B. After two days, a backup will be deleted from the media.
- C. If the RMAN repository has records of two or more recent backups of a file, then older backups will be deleted from the media.
- D. If the RMAN repository has records of two or more recent backups of a file, then older backups will be marked obsolete.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The CONFIGURE RETENTION POLICY TO REDUNDANCY n; command is used to configure the retention policy for redundancy of backups. The retention policy can be configured by using a redundancy-based retention policy or a recovery window-based retention policy. If the redundancy-based retention policy is configured, then a backup of a file is considered to be obsolete when the RMAN repository contains a specified number of backups. Older backups of the file are marked obsolete. In this scenario, the CONFIGURE RETENTION POLICY TO REDUNDANCY 2; command configures the RMAN repository to store two recent backups of the file and marks the other older backups of this file as obsolete.

The option stating that a backup will be marked obsolete after two days is incorrect. You can specify that after n days, the backup will be marked obsolete by configuring the recovery window-based retention policy. The recovery window-based retention policy is configured using the following command:

CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF n DAYS;

The options stating that a backup will be deleted from the media after two days and the older backups will be deleted from the media if the RMAN repository has records of two more recent backups of a file are incorrect because the backups are not deleted from the media for any type of retention policy.

### **QUESTION 55**

You have configured the flash recovery area in your database. Which file(s) are NOT created in the flash recovery area?

- A. redo log file
- B. control file
- C. alert log file
- D. RMAN backups

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The alert log file will not be created in the flash recovery area. The following files are backed up to the flash recovery area:

current control files

control file and datafile copies

flashback logs

online and archived redo log files

control file autobackups

backup pieces

You enable the flash recovery area by setting the DB RECOVERY FILE DEST and

DB\_RECOVERY\_FILE\_DEST\_SIZE initialization parameters. The DB\_RECOVERY\_FILE\_DEST parameter is used to define the default location in which the database creates the RMAN backups when no format option is specified, the archive logs when no other local destination is configured, and the flashback logs. The DB\_RECOVERY\_FILE\_DEST parameter is also used to specify the default location of the online redo log files and the control files if the DB\_CREATE\_ONLINE\_LOG\_DEST\_n parameter is not specified. The DB\_RECOVERY\_FILE\_DEST\_SIZE parameter is used to specify the size of the flash recovery area.

### **QUESTION 56**

You are maintaining an OLTP database. You have configured the flash recovery area in your database. The flash recovery area is full because you have set the retention policy to NONE. What should you do to resolve the problem?

- A. Increase the value of the FAST START MTTR TARGET initialization parameter.
- B. Increase the value of the DB RECOVERY FILE DEST SIZE parameter.
- C. Increase the value of the PGA\_AGGREGATE\_TARGET initialization parameter.
- D. Increase the value of the SGA\_TARGET initialization parameter.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should increase the value of the DB\_RECOVERY\_FILE\_DEST\_SIZE parameter. To enable the flash ecovery area, you set the DB\_RECOVERY\_FILE\_DEST and DB\_RECOVERY\_FILE\_DEST\_SIZE parameters. The DB\_RECOVERY\_FILE\_DEST parameter is used to define the default location at which the database creates the RMAN backups when no format option is specified, the archive logs when no other local destination is configured, and the flashback logs. The DB\_RECOVERY\_FILE\_DEST parameter is used to specify the default location of the online redo log files and the control files if the

DB\_CREATE\_ONLINE\_LOG\_DEST\_n parameter is not specified. The DB\_RECOVERY\_FILE\_DEST\_SIZE parameter is used to specify the size of the flash recovery area. If the retention policy is set to NONE, the flash recovery area can be filled completely with no reclaimable space. The database issues a warning level alert when 85 percent of the flash recovery area is used. When 97 percent of the flash recovery area is used, the database issues a critical level alert. The database continues to consume space until the flash recovery area becomes full. When the flash recovery area is full, you receive the following error:

ORA-19809: limit exceeded for recovery files

ORA-19804: cannot reclaim nnnnn bytes disk space from mmmmm limit

To resolve the problem, you can increase the value of the DB\_RECOVERY\_FILE\_DEST\_SIZE initialization parameter.

Increasing the value of the FAST\_START\_MTTR\_TARGET initialization parameter will not resolve the problem in this scenario. The FAST\_START\_MTTR\_TARGET initialization parameter is used to specify the time required for instance recovery in seconds.

Increasing the value of the PGA\_AGGREGATE\_TARGET initialization parameter will not resolve the problem. Automatic PGA Memory Management (APMM) functionality is implemented by using the

PGA\_AGGREEGATE\_TARGET initialization parameter. By setting this parameter, the memory allocated to the PGA is dynamically managed and allocated.

Increasing the value of the SGA\_TARGET initialization parameter will not resolve the problem. The SGA\_TARGET initialization parameter is used to specify the total size of the system global area.

# **QUESTION 57**

You are using Recovery Manager (RMAN) for backup and recovery operations. Your backup and recovery policy is such that you are performing full database backup every Tuesday and Friday. You configure RMAN using the following command:

RMAN>CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF 4 DAYS; All backup and archived redo logs generated during the current week are as follows:

Which of the following files will be listed when issuing the REPORT OBSOLETE command on Sunday?

- A. the archived redo log with the log sequence 520
- B. the backup files from the full database backup performed on Tuesday
- C. the archived redo log with the log sequence 520 and the backup files from the full database backup performed on Tuesday
- D. archived redo logs with the log sequences 520, 521, 522 and the backup files from the full database backup performed on Tuesday

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

If the REPORT OBSOLETE command is issued on Sunday, only the archived redo log with the log sequence 520 will be listed. The retention policy is configured to a recovery window of four days. This means that RMAN retains all the backups and copies of datafiles, control files, and archived redo logs that are needed to recover the database, to a point in time in the last four days. In this scenario, point of recoverability is Wednesday. Therefore, all archived redo logs from the log sequence 521 through 524 are retained by RMAN. The backup files from the full database backup performed on Tuesday are also retained because, if needed, these backup files are used to recover the database up to Wednesday.

The backup files from the full database backup performed on Tuesday are not obsolete according to the given retention policy and, therefore, will not be listed using the REPORT OBSOLETE command.

The archived redo log with the log sequence 520 and the backup files from the full database backup performed on Tuesday are not obsolete because the backup files are required in the recovery process if the database must be recovered up to Wednesday.

The REPORT OBSOLETE command will not list the archived redo logs from the log sequence 520 through 522 and backup files from the full database backup performed on Tuesday. The archived redo logs with the log sequence 521 and 522 and the backup files from the full database backup performed on Tuesday are protected by the recovery window.

## **QUESTION 58**

Your database is running in ARCHIVELOG mode. You have set the DB\_RECOVERY\_FILE\_DEST and DB\_RECOVERY\_FILE\_DEST\_SIZE parameters to configure your flash recovery area as follows: DB\_RECOVERY\_FILE\_DEST = '/u01/oradata/fra1' DB\_RECOVERY\_FILE\_DEST\_SIZE = 8G If the flash recovery area fills up and additional space is needed, which statement about space management in the flash recovery area is true?

- A. The DB\_RECOVERY\_FILE\_DEST\_SIZE parameter value must be increased.
- B. An additional location must be specified for the DB\_RECOVERY\_FILE\_DEST parameter.
- C. Oracle Database automatically deletes flashback log files and online redo log files from the flash recovery area based on the retention policy.
- D. Oracle Database automatically deletes all transient files from the flash recovery area based on the retention policy.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

Oracle Database automatically deletes all transient files from the flash recovery area based on the retention policy. The flash recovery area stores backup- and recovery-related files. The files backed up to the flash recovery area include multiplexed copies of the current control file, online redo logs, archived redo logs, flashback logs, and RMAN backups. These files are either permanent or transient. When the flash recovery area fills up, Oracle Database automatically deletes transient files based on the retention policy to reclaim space. Transient files include archived redo log files, flashback logs, RMAN backups, and image copies of datafiles and control files.

The option that states the DB\_RECOVERY\_FILE\_DEST\_SIZE parameter value must be increased is incorrect. You might choose to increase the value, but this might not be required because Oracle Database will automatically remove files to reclaim space in the flash recovery area based on the retention policy. You might be required to increase the size of the flash recovery area if you were required to keep backups for a longer period and there was not enough disk space in the flash recovery area to do so. Then, Oracle Database would not be able to remove files to reclaim space. In such a scenario, you could allocate more disk space and increase the size of the flash recovery area.

The option that states an additional location must be specified for the DB\_RECOVERY\_FILE\_DEST parameter is incorrect because only one location can be specified.

The option that states Oracle Database automatically deletes flashback log files and online redo log files from the flash recovery area based on the retention policy is incorrect. Online redo log files are considered permanent, and Oracle Database will not remove these.

## **QUESTION 59**

You need to alter the destination and size of the flash recovery area.

Which two initialization parameters need to be changed to alter the destination and size of the flash recovery area? (Choose two.)

- A. DB\_RECOVERY\_FILE\_DEST
- B. DIAGNOSTIC DEST
- C. DB RECOVERY FILE DEST SIZE
- D. DB\_FLASH\_RECOVERY\_FILE\_DEST\_SIZE

Correct Answer: AC Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

To alter the destination and size of the flash recovery area, you need to alter the

DB\_RECOVERY\_FILE\_DEST parameter and DB\_RECOVERY\_FILE\_DEST\_SIZE parameters. The

DB\_RECOVERY\_FILE\_DEST parameter specifies the location of the flash recovery area, and the

DB\_RECOVERY\_FILE\_DEST\_SIZE parameter specifies the flash recovery area's maximum size. These two parameters are configured manually in the initialization parameter file. However, these two parameters are dynamic in nature and can be changed using the ALTER SYSTEM statement.

The DIAGNOSTIC\_DEST parameter specifies the location of the ADR Home. This is the location in which diagnostic information, such as alert logs, trace files, and incident files are stored.

The DB\_FLASH\_RECOVERY\_FILE\_DEST\_SIZE parameter does not exist in Oracle.

#### **QUESTION 60**

You have issued the following command:

RMAN>CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF 100 DAYS;

What will be the result of issuing this command?

- A. The backup metadata will be maintained in the control file for 100 days.
- B. The backup metadata will be maintained in the recovery catalog for 100 days.
- C. The backup metadata will be maintained in the flash recovery area for 100 days.
- D. After 100 days, the backup sets and image copies will be deleted from the media.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF 100 DAYS; command specifies that the metadata of the backup sets and image copies will be maintained in the recovery catalog for 100 days. The retention policy configured using the command is used to determine the length of time for which backups are retained in the recovery catalog. Instead of specifying a period of time for the retention policy, you can also specify the retention policy in terms of how many backups should be retained by using the CONFIGURE RETENTION POLICY TO REDUNDANCY n; command.

The option stating that the backup metadata will be maintained in the control file for 100 days is incorrect because the CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF n DAYS; command is used to specify the number of days for which the backup sets and the image copies will be maintained in the recovery catalog. If you use RMAN without the recovery catalog, the information about the target database will be stored in the control file of the target database. If the control file of the target database is the repository, the CONTROL\_FILE\_RECORD\_KEEP\_TIME initialization parameter is used to specify the duration for which the information that can be used by the RMAN is stored in the control file. The default value for the initialization parameter is 7 days, and the maximum limit you can specify is 365 days.

The option stating that the backup metadata will be maintained in the flash recovery area for 100 days is incorrect. The CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF 100 DAYS; command is used to ensure that the metadata of the backup sets and image copies is maintained in the recovery catalog, not the flash recovery area.

The option stating that the backup sets and image copies will be deleted from the media after 100 days is incorrect. After 100 days, the backup sets and image copies will be marked as obsolete instead of being automatically deleted from the media. After that, you must delete the obsolete backup sets and image copies by using the DELETE OBSOLETE command.

#### **QUESTION 61**

You have configured the flash recovery area to store online redo log files, control files, archived redo logs and RMAN backups.

Which of the following files can you successfully delete from the flash recovery area if you want to reclaim the

- A. space within it?
- B. multiplexed control files
- C. RMAN obsolete backups
- D. multiplexed online redo log files
- E. archived redo logs that have not been copied to tape

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

RMAN obsolete backups can be deleted from the flash recovery area. Within the flash recovery area, transient files are those files that can be deleted when they become obsolete as per the retention policy or when they have been backed up to tape. When the backups become obsolete they are not needed for recovery, and they can be deleted. Files such as archived redo logs, backup copies, and control file auto-backups are some examples of transient files. Transient files should only be deleted from the flash recovery area after they have been backed up to tape or are no longer needed.

Multiplexed control files are considered to be permanent files within the flash recovery area and cannot be deleted.

Multiplexed online redo log files are considered to be permanent files within the flash recovery area and cannot be deleted.

Archived redo logs that have not been copied to tape should not be deleted from the flash recovery area. They should only be deleted after they have been backed up or are no longer needed.

#### **QUESTION 62**

Your Oracle Database 11g database is running in ARCHIVELOG mode. You archive redo logs to multiple destinations, namely /u01/app/oracle/archive1 and /u01/app/oracle/archive2. Both locations contain logs 95-115.

Log 115 is deleted from /u01/app/oracle/archive1. You issue the following RMAN command:

RMAN> BACKUP ARCHIVELOG

2> FROM SEQUENCE 95 UNTIL SEQUENCE 115;

What is the result of this command?

- A. RMAN backs up all logs except log 115.
- B. RMAN backs up all logs in both archive destinations.
- C. RMAN backs up logs 95-114 from /u01/app/oracle/archive1 and log 115 from /u01/app/oracle/archive2.
- D. The backup fails.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

RMAN backs up logs 95-114 from /u01/app/oracle/archive1 and log 115

from /u01/app/oracle/archive2. This new feature is known as archived redo log failover. When archiving redo logs to multiple locations, RMAN can complete the backup even if a log in one of the locations is deleted or has corrupt blocks. RMAN uses the log in the other location or the flash recovery area if it is available. The option that states RMAN backs up all logs except log 115 is incorrect because RMAN will back up log 115

The option that states RMAN backs up all logs except log 115 is incorrect because RMAN will back up log 115 in /u01/app/oracle/archive2.

The option that states RMAN backs up all logs in both archive destinations is incorrect. RMAN backs up only a copy of logs with the same sequence number.

The option that states the backup fails is incorrect because the backup succeeds.

#### **QUESTION 63**

For your database instance, you configure the initialization parameters shown in the exhibit. (Click the Exhibit (s) button.)

You want to modify your parameter settings to ensure that if archive log files cannot be successfully written to the first archiving destination, the redo log files will not be overwritten.

Which action should you take?

- A. Increase the value of the LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST parameter.
- B. Set the LOG ARCHIVE MIN SUCCEED DEST parameter to 1.
- C. Modify the LOG\_ARCHIVE\_DEST\_1 parameter to use the SERVICE attribute instead of the LOCATION attribute.
- D. Add the MANDATORY attribute to the LOG\_ARCHIVE\_DEST\_1 parameter setting.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should add the MANDATORY attribute to the LOG\_ARCHIVE\_DEST\_1 parameter setting. When specifying an archive log destination, you can include the MANDATORY attribute. Doing so makes the archive log destination mandatory. For mandatory archive log destinations, if the archive log files cannot be written to the location successfully, the online redo log file will not be overwritten. If the MANDATORY attribute is not specified, then the archive log destination is optional.

You should not increase the value of the LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST parameter. The LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST parameter specifies the minimum number of locations to which archive

log files must be successfully written before the online redo log file can be overwritten, but does not specify a specific location as required in this scenario. You should note that even if all archive log destinations are optional, writing to at least one must succeed even if no LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST parameter is specified because this parameter defaults to 1.

You should not set the LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST parameter to 1 because this will only ensure that archive log files are successfully written to at least one location, not specifically to the first archive log destination as required in this scenario.

You should not modify the LOG\_ARCHIVE\_DEST\_1 parameter to use the SERVICE attribute instead of the LOCATION attribute. The SERVICE attribute is used to specify a remote location to which archive log files should be written.

#### **QUESTION 64**

You have set the following initialization parameters for your database instance:

LOG\_ARCHIVE\_DEST\_1 = 'LOCATION=/dsk1/arch' LOG\_ARCHIVE\_DEST\_2 = 'LOCATION=/dsk2/arch' LOG\_ARCHIVE\_DEST\_3 = 'LOCATION=/dsk3/arch MANDATORY' LOG\_ARCHIVE\_DEST\_4 = 'LOCATION=/dsk4/arch' LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST = 2

Which statement about the result of these settings is true?

A. If a flash recovery area is configured and archive log files are successfully written to the flash recovery

area, the online redo log file can be overwritten.

- B. If /dsk3/arch is not available, the online redo log file will not be overwritten.
- C. The online redo log file can only be overwritten if archive log files are successfully written to /dsk3/arch and at least two other archive log destinations.
- D. If archive log files are successfully written to /dsk1/arch and /dsk2/arch, the online redo log file can be overwritten.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

If /dsk3/arch is not available, the online redo log file will not be overwritten because you have specified this location as mandatory using the MANDATORY attribute. For mandatory archive log destinations, if the archive log files cannot be written to the location successfully, the online redo log file will not be overwritten. If the MANDATORY attribute is not specified, then the archive log destination is optional.

The option that states if a flash recovery area is configured and archive log files are successfully written to the flash recovery area, the online redo log file can be overwritten is incorrect because you have specified the third location as mandatory. Writing to that location must be successful, or the online redo log file will not be overwritten.

The option that states the online redo log file can only be overwritten if archive log files are successfully written to /dsk3/arch and at least two other archive log destinations is incorrect. In this scenario, you specified the third location as mandatory, so archive log files must be successfully written to that location. You also specified a LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST value of 2. The LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST parameter specifies the minimum number of locations to which archive log files must be successfully written before the online redo log file can be overwritten. Therefore, the archive log files must be successfully written to the third archive log destination and at least one other archive log destination before the online redo log files can be overwritten. You should note that even if all archive log destinations are optional, writing to at least one must succeed even if no LOG\_ARCHIVE\_MIN\_SUCCEED\_DEST parameter is specified because this parameter defaults to 1.

The option that states if archive log files are successfully written to /dsk1/archh and /dsk2/arch, the online redo log file can be overwritten is incorrect because you have specified the third archive log destination as mandatory using the MANDATORY attribute.

### **QUESTION 65**

At which redundancy level for disk groups in Automatic Storage Management are failure groups NOT used?

- A. High
- B. Primary
- C. External

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

Failure groups are not used for disk groups with external redundancy because the disks in an externall redundancy disk group are highly available. External redundancy provides no mirroring, and hardware mirroring should be used when you configure the disk groups for external redundancy. If a disk group is configured for external redundancy, no hardware mirroring is supported, and a disk fails,, all data onn the disk is lost.

Primary is an invalid redundancy level.

Failure groups are used at the following levels of redundancy for disk groups:

High redundancy: Provides three-way mirroring. There are three failure groups, and disk groups configured with high redundancy can withstand failure of a maximum of two failure groups.

Normal redundancy: Provides two-way mirroring. There are two failure groups, and disk groups configured with normal redundancy can withstand failure of a maximum of one failure group.

## **QUESTION 66**

Which three actions would cause dynamic disk group rebalancing to occur? (Choose three.)

- A. adding a disk to the disk group
- B. dropping a disk from the disk group
- C. mounting the disk group
- D. resizing a disk in the disk group
- E. verifying the internal consistency of the disk group metadata
- F. taking the disk group offline

Correct Answer: ABD Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The following three actions would cause dynamic disk group rebalancing to occur:

adding a disk to the disk group

dropping a disk from the disk group

resizing a disk in the disk group

When you add, drop, or resize a disk, ASM automatically performs rebalancing to evenly spread the data across disks in the disk group.

All of the other options are incorrect. Dynamic rebalancing does not occur when you mount a diskgroup, verify the internal consistency of the disk group metadata, or take a disk group offline.

#### **QUESTION 67**

Which Automatic Storage Management (ASM) instance initialization parameter is used to identify newly added disks to the disk group?

- A. DB UNIQUE NAME
- B. ASM DISKSTRING
- C. ASM DISKGROUPS
- D. ASM POWER LIMIT

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The ASM\_DISKSTRING parameter is used to identify newly added disks to the disk group. This parameter takes an operating system dependent value and limits the set of disks to be discovered by the ASM instance. An ASM instance that has a disk group mounted uses the ASM\_DISKSTRING parameter to discover the new disks added to the disk group.

The DB\_UNIQUE\_NAME parameter specifies the service provider name for which the ASM instance manages disk groups. The default value for the DB\_UNIQUE\_NAME parameter is +ASM.

The ASM\_DISKGROUPS parameter provides the list of names of disk groups that are mounted by an ASM instance at startup. If you do not specify a value for this parameter, no disk groups will be mounted, and you will receive an ORA-15110: no diskgroups mounted error at startup or when you attempt to issue an ALTER DISKGROUP ALL MOUNT; statement.

The ASM\_POWER\_LIMIT parameter is used to control the speed for rebalance operations. The default value for this parameter is 1, and you can specify a value up to 11 for this parameter. This parameter value is used as the default rebalancing power if no POWER clause is specified in an ALTER DISKGROUP statement or

when a rebalance is performed. Increasing this value increases the degree of parallelism used during rebalancing.

## **QUESTION 68**

You issued a CREATE DISKGROUP statement including the NORMAL REDUNDANCY clause and specified two failure groups. Which statement about the disk group is true?

- A. The disk group can withstand loss of one failure group with no data loss.
- B. If one of the failure groups is lost, the ASM instance aborts.
- C. If either of the failure groups is lost, data loss occurs.
- D. The disk group provides triple mirroring.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The disk group can withstand loss of one failure group with no data loss. In this scenario, you have configured the disk group for normal redundancy, so two-way mirroring is provided. If one of the failure groups is lost or damaged, ASM will continue to store data in the remaining available failure group, but data is not mirrored. The options that state if one of the failure groups is lost, the ASM instance aborts and if either of the failure groups is lost, data loss occurs are incorrect. A disk group configured with normal redundancy supports two-way mirroring, and can withstand the loss of one of the failure groups. Data will not be mirrored, and the available failure group is used to store the data.

The option that states the disk group provides triple mirroring is incorrect. Disk groups configured with normal redundancy provide two-way mirroring. For the disk group to provide three-way mirroring, it must be configured for high redundancy.

## **QUESTION 69**

Which statement about starting an ASM instance is true?

- A. After the instance starts, disk groups must be manually mounted.
- B. When the instance starts, disk groups identified by the ASM\_DISKGROUPS parameter are mounted, and disks within the disk group are discovered.
- C. When the instance starts, ordinary database instances that use the ASM instance are automatically started.
- D. Startup fails if you specify the NOMOUNT option with the STARTUP command.

Correct Answer: B Section: (none) Explanation

#### Explanation/Reference:

Explanation:

When the instance starts, disk groups identified by the ASM\_DISKGROUPS parameter are mounted, and disks within the disk group are discovered. The ASM\_DISKGROUPS parameter provides the list of names of disk groups that are mounted by an ASM instance at startup. If you do not specify a value for this parameter, no disk groups will be mounted, and you will receive an ORA-15110: no diskgroups mounted error at startup or when you attempt to issue an ALTER DISKGROUP ALL MOUNT; statement. After disk groups are mounted, ASM uses the value of the ASM\_DISKSTRING parameter to discover the available disks in the disk group.

The option that states after the instance starts, disk groups must be manually mounted is incorrect. Disk groups identified by the ASM\_DISKGROUPS parameter are automatically mounted at startup. The option that states when the instance starts, ordinary database instances that use the ASM instance are automatically started is incorrect. Starting the ASM instance does not affect the ordinary database instances that have access to the ASM instance.

The option that states startup fails if you specify the NOMOUNT option with the STARTUP command is incorrect. You can specify the NOMOUNT option. However, for an ASM instance, you cannot specify the OPEN option with the STARTUP command.

#### **QUESTION 70**

You are managing an ASM instance. You previously issued the following statements:

ALTER DISKGROUP dg1 DROP DISK disk2;

ALTER DISKGROUP dg1 DROP DISK disk3;

ALTER DISKGROUP dg1 DROP DISK disk5:

You want to cancel the disk drops that are pending for the DG1 disk group. Which statement should you issue?

- A. ALTER DISKGROUP dg1 UNDROP disk2, disk3, disk5;
- B. ALTER DISKGROUP dg1 UNDROP;
- C. ALTER DISKGROUP dg1 UNDROP DISKS;
- D. You cannot cancel the pending disk drops.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should issue the ALTER DISKGROUP dg1 UNDROP DISKS; statement to cancel the pending disk drops for the DG1 disk group. Any drops that have already completed will not be canceled. In addition, you cannot use this clause to undo disk drops that were the result of issuing a DROP DISKGROUP statement.

The other ALTER DISKGROUP statements are incorrect becaue they have invalid syntax.

The option that states you cannot cancel the pending disk drops is incorrect. You can cancel pending disk drop operations using the UNDROP DISKS clause of the ALTER DISKGROUP statement.

## **QUESTION 71**

You are using an ASM instance with high redundancy on Oracle 11g. You have a disk group named dg1 that has three disks, named disk1, disk2, and disk3. The disk1 disk is temporarily unavailable due to a disk controller problem.

Which statement is true?

- A. ASM automatically takes disk1 offline and drops it immediately.
- B. ASM takes disk1 offline and continues to track changed extents indefinitely until the disk is brought back online.
- C. ASM takes disk1 offline and continues to track changed extents until the time specified by the DISK\_REPAIR\_TIME ASM attribute elapses.
- D. ASM takes disk1 offline and continues to track changed extents until an ALTER DISKGROUP...OFFLINE DISK statement with the DROP AFTER clause is executed.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

In this scenario, ASM takes disk1 offline and continues to track changed extents until the time specified by the DISK\_REPAIR\_TIME ASM attribute elapses. This is a new feature of Oracle Database 11g known as ASM Fast Mirror Resync. In earlier versions with ASM instances using redundancy, if a disk became temporarily unavailable, ASM would offline the disk and no longer write to it. After ASM offlined the disk, it would drop the disk from the disk group by re-creating the extents from the failed disk to one of the remaining disks in the disk group. This would take a long time. With 11g, ASM takes the failed disk offline, but does not drop it immediately. By default, it will continue to track extents that change while the disk is unavailable for a default

time period of 3.6 hours. You can set the time period explicitly by setting the DISK\_REPAIR\_TIME ASM attribute. If the time period elapses before the disk becomes available, the disk is dropped. However, if the disk becomes available before the time period elapses, Oracle can quickly resynchronize only the disk extents that changed while the disk was unavailable. This allows you to minimize the time required to recover after a temporary disk failure. You can also override the DISK\_REPAIR\_TIME attribute by using an ALTER DISKGROUP...OFFLINE DISK statement that includes a DROP AFTER clause. The value specified in the DROP AFTER clause will be used instead of the DISK\_REPAIR\_TIME attribute.

The option stating that ASM automatically takes disk1 offline and drops it immediately is incorrect because ASM does not immediately drop the disk. It will keep the disk until the default time period or specified time period elapses.

The option stating that ASM takes disk1 offline and continues to track changed extents indefinitely until the disk is brought online is incorrect. ASM tracks changed extents until the default time period or specified time period elapses.

The option stating that ASM takes disk1 offline and continues to track changed extents until an ALTER DISKGROUP...OFFLINE DISK statement with the DROP AFTER clause is executed is incorrect. The ALTER DISKGROUP...OFFLINE DISK statement takes a disk offline. The DROP AFTER clause can be included to override the value specified for the DISK\_REPAIR\_TIME attribute. For example, the following statement takes the disk3 disk in disk group dg4 offline and drops it after 45 minutes:

ALTER DISKGROUP dg4 OFFLINE DISK disk3 DROP AFTER 45m;

Note that you can take a disk offline and drop it immediately using a similar statement and specifying either 0m or 0h in the DROP AFTER clause.

## **QUESTION 72**

You are managing an ASM instance with Oracle Database 11g. The ASM redundancy level is set to high, the ASM compatibility attribute is set to 11.1, and you previously executed this statement:

ALTER DISKGROUP dg1 SET ATTRIBUTE 'DISK\_REPAIR\_TIME' = '24';

The disk1 disk in disk group dg1 temporarily loses power and is unavailable. After forty-five minutes, power is restored. You want to bring only the disk1 disk online and make it available for use. What should you do?

- A. Issue the ALTER DISKGROUP dg1 ONLINE DISKS ALL; statement.
- B. Issue another ALTER DISKGROUP statement, setting the DISK REPAIR TIME attribute to a higher value.
- C. Issue the ALTER DISKGROUP dg1 ONLINE DISK disk1; statement.
- D. You cannot bring disk1 of dg1 online because ASM has dropped the disk.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should issue the ALTER DISKGROUP dg1 ONLINE DISK disk1; statement. The ALTER DISKGROUP...ONLINE DISK statement brings an offline disk back online and resynchronizes it with other redundant copies. After a transient failure, such as a power outage, has been resolved and the disk is available for use, you execute the ALTER DISKGROUP statement using the ONLINE DISK clause. This brings the disk online and then copies all extents that were modified during the outage from their redundant copies. Only the extents that changed during the outage are resynchronized so less time is needed to recover after the failure.

You should not issue the ALTER DISKGROUP dg1 ONLINE DISKS ALL; statement because this will bring all disks in disk group dg1 online, not just disk1.

You should not issue another ALTÉR DISKGROUP statement, setting the DISK\_REPAIR TIME attribute to a higher value, because this will not bring the disk online. Setting the DISK\_REPAR\_TIME \_attribute changes the time period for which ASM will retain an offlined disk before dropping it. The DISK\_REPAIR\_TIME attribute can be specified in minutes or hours, but if no unit is specified as in this scenario, the default is hours. Therefore, with the current attribute settings, ASM will continue to track extent changes for disk1 until 24 hours has elapsed, which is adequate for this scenario.

## **QUESTION 73**

You are maintaining the SALES database. You have added a new disk to a disk group. Automatic Storage Management performs the rebalancing activity. You want to speed up the rebalancing activity. Which parameter should you specify to control the speed of the rebalancing activity?

- A. ASM POWER LIMIT
- B. ASM\_DISKSTRING
- C. ASM\_DISKGROUPS
- D. INSTANCE TYPE

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should use the ASM\_POWER\_LIMIT parameter to control the speed of the rebalancing activity. To ensure that rebalancing operations do not interfere with the ongoing user I/O, the ASM\_POWER\_LIMIT parameter controls the speed of rebalancing operations. The value for the ASM\_POWER\_LIMIT parameter ranges from 0 to 11. The default value of 1 indicates low overhead. This is a dynamic parameter; therefore, you can set this to a low value during the day and to a higher value overnight whenever a disk rebalancing operation must occur. You can also control the speed of rebalancing by specifying a POWER clause in an ALTER DISKGROUP statement or when rebalancing.

The option stating that the ASM\_DISKSTRING parameter is used to control the speed of rebalancing is incorrect. The ASM\_DISKSTRING parameter specifies one or more strings, which are operating system dependent, to limit the disk devices that can be used to create disk groups.

The option stating that the ASM\_DISKGROUPS parameter is used to control the speed of rebalancing is incorrect. The ASM\_DISKGROUPS parameter specifies a list containing the names of the disk groups that will be automatically mounted by the ASM instance at startup or by the ALTER DISKGROUP ALL MOUNT; statement.

The option stating that the INSTANCE\_TYPE parameter is used to control the speed of rebalancing is incorrect. The INSTANCE\_TYPE parameter identifies the instance as an ASM instance or non-ASM instance. For an ASM instance, this parameter must be set to a value of ASM.

#### **QUESTION 74**

You execute the following command on the Automatic Storage Management (ASM) instance: SQL>SHUTDOWN ABORT;

When you execute this command, which statement is true about the dependent database instance?

- A. The database instance will crash.
- B. The database instance will shut down normally.
- C. The database instance will continue functioning normally.
- D. The database instance will continue functioning normally, but all the connected sessions will be killed.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

When you issue the SHUTDOWN ABORT command on an ASM instance, the instance immediately aborts. As a consequence, the dependent database instance will also immediately abort or crash, and recovery will be required the next time you start the instance.

The option stating that the database instance will shut down normally is incorrect because when the ASM instance aborts, the dependent database instance will also abort.

The option stating that the dependent database instance will continue functioning normally is incorrect because after the ASM instance aborts, the dependent database will also abort or crash.

The option stating that the database instance will continue functioning normally, but all the connected sessions

will be killed is incorrect because the database instance will crash if the SHUTDOWN ABORT command is issued to the ASM instance.

## **QUESTION 75**

Which of the following options is true about shutting down an Automatic Storage Management (ASM) instance?

- A. If the SHUTDOWN IMMEDIATE command is issued to the ASM instance, the ASM instance immediately shuts down.
- B. If the SHUTDOWN ABORT command is issued to the ASM instance, the ASM instance will shut down all the database instances and then shut down immediately.
- C. If the SHUTDOWN NORMAL command is issued to the ASM instance, before shutting down, the ASM instance waits for connected sessions to disconnect.
- D. If the SHUTDOWN TRANSACTIONAL command is issued to the ASM instance, the ASM instance passes the same SHUTDOWN command to the dependent database instances, but does not wait for any active transactions to complete before it shuts down.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

If the SHUTDOWN NORMAL command is issued to the ASM instance, before shutting down, the ASM instance waits for connected sessions to disconnect. In addition, the shutdown will fail with an ORA-15097: cannot SHUTDOWN ASM instance with connected RDBMS instance error if there are currently database instances connected to the ASM instance.

The option stating that the ASM instance immediately shuts down if the SHUTDOWN IMMEDIATE command is issued to the ASM instance is incorrect because using this command, the ASM instance waits for any active transactions to complete and then shuts down. However, it does not wait for the sessions to exit. The SHUTDOWN IMMEDIATE command, when issued to an ASM instance, works exactly the same way as the SHUTDOWN TRANSACTIONAL command.

The option stating that the ASM instance will shut down all the database instances and then shut down immediately when the SHUTDOWN ABORT is issued is incorrect. The ASM will immediately abort operations when this command is issued and will not shut down any database instances. All the open connections and dependent databases will be terminated immediately, and recovery will be required the next time the instance is started.

The option stating that if the SHUTDOWN TRANSACTIONAL command is issued to the ASM instance the ASM instance passes the same SHUTDOWN command to the dependent database instances, but does not wait for any active transactions to complete before it shuts down is incorrect. When the SHUTDOWN TRANSACTIONAL command is issued to an ASM instance, the ASM instance waits for any active transactions to complete and then shuts down.

#### **QUESTION 76**

Which statement about Automatic Storage Management (ASM) disks and disk groups is true?

- A. A disk group configured for normal redundancy does not support mirroring.
- B. Files in an ASM disk group are evenly striped across all disks in the disk group.
- C. A disk group must be manually rebalanced if a disk is added to the disk group.
- D. An ASM file can spread across multiple disk groups.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

#### **Explanation:**

Files in an ASM disk group are evenly striped across all disks in the disk group. This provides consistent load balancing across all disks in the ASM disk group.

The option that states a disk group configured for normal redundancy does not support mirroring is incorrect. A disk group configured for normal redundancy provides two-way mirroring.

The option that states a disk group must be manually rebalanced if a disk is added to the disk group is incorrect. When a disk is added, dropped, or resized, ASM performs dynamic rebalancing to evenly spread the data across disks in the disk group.

The option that states an ASM file can spread across multiple disk groups is incorrect. An ASM file must be contained within a single disk group.

#### **QUESTION 77**

Which background process of a database instance, using Automatic Storage Management (ASM), connects as a foreground process into the ASM instance?

- A. ASMB
- B. PMON
- C. RBAL
- D. SMON

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The ASMB process of a database instance, using ASM, connects as a foreground process into the ASM instance. This ASMB process is responsible for the communication between the database and the ASM instance.

The process monitor (PMON) process does not connect as a foreground process into the ASM instance. The PMON process cleans up failed user processes and frees up all the resources used by the failed processes. The RBAL process does not connect as a foreground process into the ASM instance. The RBAL process is new background process of an ASM instance, and this process coordinates rebalancing activity for disk groups.

The system monitor (SMON) process does not connect as a foreground process into the ASM instance. The SMON process performs instance recovery at database start up by using the online redo log files.

## **QUESTION 78**

You need to use Automatic Storage Management (ASM) to manage disk groups. Which statement is NOT true about using ASM instances?

- A. ASM instances do not mount the databases.
- B. An ASM instance is started after the database instance is started.
- C. An ASM instance and a database instance have access to a common set of disks called disk groups.
- D. ASM instances can be connected to by using operating system authentication, or you can connect to the ASM instance remotely, using the password file.
- E. By default, ASM instances use Automatic Memory Management.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

An ASM instance is not started after the database instance is started. The ASM instance maintains metadata that is used to manage the disks to which other database instances have access. The ASM instance must be started before the database instance that will be accessing disks.

ASM instances do not mount the databases. During startup of an ASM instance, ASM mounts the disk groups specified by the ASM DISKGROUPS initialization parameter. The ASM DISKGROUPS parameter specifies a list containing the names \_of the disk groups that will be automatically mounted by the ASM instance at startup or by the ALTER DISKGROUP ALL MOUNT; statement.

An ASM instance and a database instance have access to a common set of disks called disk groups. Database instances directly access the ASM files stored in these disk groups. Database instances communicate with the ASM instance only to obtain information about the layout of these files. An ASM instance make ASM files available to ordinary database instances by managing metadata information. ASM instances can be connected to by using operating system authentication, or you can connect remotely using the password file. You can connect to the ASM instance only as an administrator because ASM instances do not have a data dictionary. Therefore, you use operating system authentication and connect to ASM instance as SYSDBA, SYSOPER, or SYSASM or connect remotely using the password file. By default, ASM instances use Automatic Memory Management. Even if you do not set the MEMORY\_TARGET initialization parameter explicitly, Automatic Memory Management is enabled by default.

#### **QUESTION 79**

Which task does the RBAL process perform?

- A. coordinates rebalancing activity for disk groups
- B. performs the actual extent rebalancing
- C. issues alerts when specific metric thresholds are exceeded
- D. automatically manages failures involving distributed transactions

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The RBAL process coordinates rebalancing activity for disk groups.

The ARBn processes perform the actual extent rebalancing in an Automatic Storage Management (ASM) instance.

The MMON process issues alerts when specific metric thresholds are exceeded.

The RECO process automatically manages failures involving distributed transactions.

## **QUESTION 80**

Which statement regarding Automatic Storage Management (ASM) disk group mirroring is true?

- A. ASM performs mirroring at the disk level.
- B. Disk groups configured for high redundancy support two-way mirroring.
- C. A disk group configured for external redundancy will have more space available than a disk group of the same size configured for normal redundancy.
- D. Disk groups configured for normal reduncancy do not support dynamic rebalancing.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

A disk group configured for external redundancy will have more space available than a disk group of the same size configured for normal redundancy because mirroring is not provided. Automatic Storage Management (ASM) disk groups can be configured with the following types of redundancy:

External redundancy - Provides no mirroring, and hardware mirroring should be used.

High redundancy - Provides three-way mirroring. There are three failure groups, and disk groups configured with high redundancy can withstand failure of a maximum of two failure groups.

Normal redundancy - Provides two-way mirroring. There are two failure groups, and disk groups

configured with normal redundancy can withstand failure of a maximum of one failure group.

The option that states ASM performs mirroring at the disk level is incorrect. ASM performs mirroring at the allocation unit (AU) level, not the disk level.

The option that states disk groups configured for high redundancy support two-way mirroring is incorrect. Disk groups configured for high redundancy support three-way mirroring.

The option that states disk groups configured for normal reduncancy do not support dynamic rebalancing is incorrect. Dynamic rebalancing occurs automatically for all ASM disk groups regardless of the type of redundancy used. When a disks or added, dropped, or resized, ASM automatically performs rebalancing of the disk group by distributing data evenly across disks in the disk group.

## **QUESTION 81**

You have configured your database in ARCHIVELOG mode. You are performing full database backups on a weekly basis using Recovery Manager (RMAN). You determine that three data blocks in a non-SYSTEM tablespace datafile are corrupt.

What is the best option to quickly recover the corrupted data blocks without loss of data?

- A. using the DBMS\_REPAIR package
- B. using the RECOVER...BLOCK command
- C. using the RECOVER DATAFILE command
- D. using Flashback Database technology

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The best option is using the RECOVER...BLOCK RMAN command. Block Media Recovery (BMR) is implemented using the RMAN RECOVER...BLOCK command. This command is useful for recovering only the corrupted data blocks without the need to recover the entire datafile. You should also note that to successfully perform BMR using RMAN, the database must be mounted or open. In addition, your database must be running in ARCHIVELOG mode, Flashback Database must be enabled, and you must have the necessary full or level 0 backups required to restore the corrupt blocks.

Although you can use the DMBS\_REPAIR package to recover the corrupted data blocks, this is a very complex procedure. Moreover, if you are not familiar with this package, Oracle recommends that you enlist the help from an Oracle Support Services analyst. If it is not done properly, you might lose important data in these corrupted blocks, or you might introduce logical inconsistencies into your database.

Although you can use the RECOVER DATAFILE command to recover the entire datafile, it is not necessary to do so. In this scenario, you need to recover the corrupt data quickly; therefore, you should use BMR because it reduces the Mean Time To Recover (MTTR). The time to recover only the corrupted blocks is less than the time to recover the entire datafile. The other advantage of BMR over datafile recovery is that during BMR, the datafile containing the corrupted blocks is accessible. This means that the users can still access this datafile while recovery is taking place. However, the corrupt blocks that being recovered cannot be accessed. You should not use Flashback Database in this scenario. Flashback Database would rewind the database to a prior point in time by undoing all changes made since that time. This feature uses the flashback data stored in the Flashback Database logs to undo the changes. The Flashback Database logs might not have recorded the before images of the data blocks prior to the corruption. Therefore, recovery of the corrupted data blocks is not guaranteed. Using Flashback Database is preferable in situations such as when a user is erroneously dropped from a database.

#### **QUESTION 82**

You issue the following statement:

SQL> SELECT firstname, lastname FROM hr.employee; You receive the following error:

01578: ORACLE data block corrupted (file# 6, block # 54) ORA-01110 : data file 6: 'u01/oracle/oradata/ data1.dbf'

How should you resolve this problem of data block corruption while reducing the mean time to recover (MTTR)?

- A. by using the DBMS\_REPAIR package
- B. by using the DBVERIFY utility
- C. by using Block Media Recovery
- D. by issuing the ANALYZE TABLE hr.employee VALIDATE STRUCTURE; command
- E. by issuing the BACKUP VALIDATE DATABASE; RMAN command
- F. by issuing a BLOCKRECOVER RMAN command

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should resolve this block corruption problem using Block Media Recovery (BMR). BMR is an RMAN feature that is used to recover an individual block or a group of corrupt blocks in a datafile. This allows you to recover individual data blocks instead of the whole datafile. BMR is best used where block corruption is minimal. BMR reduces the mean time to recover (MTTR) because only the affected data blocks are restored and recovered instead of the whole datafile. To perform BMR, you use the RMAN RECOVER...BLOCK command, specifying the specific file and block numbers to be recovered. For example, in this scenario, you could issue the following command at the RMAN prompt to perform BMR:

RECOVER DATAFILE 6 BLOCK 54;

You can also perform BMR to recover all blocks that are identified as corrupt in the V\$DATABASE\_BLOCK\_CORRUPTION view. For example, the following command recovers all corrupt blocks identified in the V\$DATABASE\_BLOCK\_CORRUPTION view and removes them from the view. RECOVER CORRUPTION LIST:

You should also note that to successfully perform BMR using RMAN, the database must be mounted or open. In addition, your database must be running in ARCHIVELOG mode, Flashback Database must be enabled, and you must have the necessary full or level 0 backups required to restore the corrupt blocks.

You cannot resolve the problem of data block corruption and minimize the MTTR by using the DBMS\_REPAIR package. The DBMS\_REPAIR package is a set of procedures that enables you to detect and fix corrupted blocks in tables and indexes. The DBMS\_REPAIR package consists of several procedures. Each procedure performs different actions. For example, the CHECK\_OBJECT procedure and the FIX\_CORRUPT\_BLOCKS procedure of the DBMS\_PACKAGE are used to check the object and fix the corrupted blocks of the object, respectively.

You cannot resolve the problem of data block corruption and minimize the MTTR by using the DBVERIFY utility. The DBVERIFY utility is used to check whether a datafile is corrupt. The DBVERIFY utility is not used to repair the corrupted blocks. The name and location of the DBVERIFY utility is dependent on the operating system. The DBVERIFY utility can be used only with datafiles. This utility checks the data blocks from the starting block in the file to the end of the file. You can specify the starting and ending data block in a file to ensure explicit checks. For example, to perform an integrity check on the tbs\_52.f datafile on the UNIX operating system, you can run the following dbv command:

% dbv file=tbs\_52.f

You cannot resolve the problem of block corruption by issuing the ANALYZE TABLE hr.employee VALIDATE STRUCTURE; command at the RMAN prompt. The ANALYZE utility validates the integrity of the structure of the object being analyzed. The ANALYZE TABLE table\_name VALIDATE STRUCTURE command is either successful or unsuccessful at the object level. If this command returns an error for the object to be analyzed, then you will be required to completely rebuild the object. If no error is returned, then the object is not corrupted and should be re-created.

You cannot resolve the problem of block corruption by issuing the BACKUP VALIDATE DATABASE; command. This command only identifies if block corruptions exist, but will not recover the corrupt blocks. The command uses the V\$DATABASE BLOCK CORRUPTION view to identify corrupt blocks.

You cannot resolve the problem of block corruption by issuing a BLOCKRECOVER RMAN command. The BLOCKRECOVER command was used in previous Oracle Database versions to perform BMR, but has been deprecated in Oracle Database 11g. With Oracle 11g, you should use the RECOVER...BLOCK command instead.

# **QUESTION 83**

Which statements about using Enterprise Manager Support Workbench are true? (Choose all that apply.)

- A. Support Workbench allows you to collect diagnostic data for one or more problems into an incident package.
- B. Support Workbench allows you to add additional diagnostic data to an incident package.
- C. Support Workbench can only be used to package and upload incident data.
- D. Support Workbench can only be used to track Service Requests.
- E. Support Workbench can be accessed using the ADRCI command-line utility.

Correct Answer: AB Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

Support Workbench allows you to collect diagnostic data for one or more problems into an incident package. Also, Support Workbench allows you to add additional diagnostic data to an incident package. Support Workbench is an Enterprise Manager wizard that provides a graphical interface for many ADR tasks related to identifying, reporting, and resolving problems. You can view information stored in the ADR for problems and incidents, run other advisors to get recommendations on how to resolve problems, package and upload problem and incident data, track Service Requests, and close resolved problems. You can also use Support Workbench to generate additional diagnostic data for a problem by generating dumps and SQL test cases, or manually run health checks.

The options that state Support Workbench can only be used to package and upload incident data or track Service Requests are incorrect. Support Workbench also allows you to view diagnostic information for problems and incidents, add additional diagnostic data to a problem, and perform many other tasks. The option that states Support Workbench can be accessed using the ADRCI command-line utility is incorrect. The ADRCI command-line tool can be used to view ADR diagnostic data, package incident problems, and view and query trace files. The ADRCI command-line tool uses the same libraries as Support Workbench, but you cannot access Support Workbench directly using the ADRCI command-line utility. You are using Block Media Recovery (BMR) to recover the blocks that are marked as corrupt since the last backup.

## **QUESTION 84**

Which view should you query to display information about the data blocks that are marked as corrupt since the last backup?

- A. the V\$BACKUP CORRUPTION view
- B. the V\$COPY\_CORRUPTION view
- C. the V\$DATABASE\_BLOCK\_CORRUPTION view
- D. the RC\_BACKUP\_CORRUPTION view

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should query the V\$DATABASE BLOCK CORRUPTION view. The

V\$DATABASE\_BLOCK\_CORRUPTION view is used to display information about the blocks that were marked as corrupt since the last backup. This view can be used to display information pertaining to physical or logical corruptions. The V\$DATABASE\_BLOCK\_CORRUPTION view returns the following columns:

FILE# NUMBER - Displays the absolute file number of the datafile containing any corrupt blocks

BLOCK# NUMBER - Displays the block number of the first corrupt block

BLOCKS - displays the number of corrupt blocks

CORRUPTION\_CHANGE# - Displays the change number at which the logical corruption was found CORRUPTION\_TYPE - Displays the type of block corruption

You should not query the V\$BACKUP\_CORRUPTION view to display the information about blocks that were

marked corrupt since the last backup. The V\$BACKUP\_CORRUPTION view is used to display information about the corrupt blocks in datafile backups from the control file.

You should not query the V\$COPY\_CORRUPTION view to display the information about blocks that were marked corrupt since the last backup. The V\$COPY\_CORRUPTION view displays information about the corrupted blocks in the datafile copies from the control file.

You should not query the RC\_BACKUP\_CORRUPTION view to display information about blocks that were marked corrupt since the last backup. The RC\_BACKUP\_CORRUPTION view is used to display information about the corrupted blocks in the datafile backups.

#### **QUESTION 85**

You issued the following command at the RMAN prompt:

**RECOVER** 

DATAFILE 6 BLOCK 12 DATAFILE 8 BLOCK 21:

What will be the outcome of issuing this command?

- A. Two blocks will be recovered.
- B. The V\$DATABASE BLOCK CORRUPTION view will be updated automatically.
- C. The command will fail because you cannot specify multiple blocks to recover using the RECOVER command.
- D. The command will fail if the database is mounted or open.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

In this scenario, the RECOVER command recovers two blocks. Block Media Recovery (BMR) is an RMAN feature that is used to recover an individual corrupt block or a group of corrupt blocks in a datafile. You can perform BMR using the RECOVER...BLOCK RMAN command. BMR allows you to recover individual data blocks instead of the entire datafile. BMR is preferable when block corruption is minimal. BMR reduces the mean time to recover (MTTR) because only the affected data blocks are restored and recovered instead of the entire datafile.

The option stating that the V\$DATABASE\_BLOCK\_CORRUPTION view will be updated automatically is incorrect. The V\$DATABASE\_BLOCK\_CORRUPTION view will not be updated until a new backup is taken. The V\$DATABASE\_BLOCK\_CORRUPTION view displays the information about the corrupt data blocks in your database. However, you can use the RECOVER CORRUPTION LIST; command to recover all corrupt blocks recorded in the V\$DATABASE\_BLOCK\_CORRUPTION view and update the view accordingly. The option stating that the command will fail because you cannot specify multiple blocks to recover using the RECOVER command is incorrect. You can specify multiple blocks to be recovered using a single command. The command will be executed successfully. Block 12 of datafile 6 and block 21 of datafile 8 will be recovered. The option stating that the command will fail if the database is mounted or open is incorrect. To successfully perform block media recovery, the database must be mounted or open. In addition, your database must be running in ARCHIVELOG mode, Flashback Database must be enabled, and you must have the necessary full or level 0 backups required to restore the corrupt blocks.

# **QUESTION 86**

Which two statements are true about Block Media Recovery (BMR)? (Choose two.)

- A. BMR increases the Mean Time To Recover (MTTR).
- B. BMR can only be implemented using Recovery Manager (RMAN).
- C. The blocks that need to be recovered are accessible during BMR.
- D. BMR cannot be performed using cumulative incremental backups.
- E. The datafile must be restored if most of the blocks in the datafile are corrupt.

Correct Answer: BD Section: (none)

## **Explanation**

## **Explanation/Reference:**

Explanation:

The following two statements are true about BMR:

BMR can only be implemented using Recovery Manager (RMAN).

BMR cannot be performed using cumulative incremental backups.

RMAN must be used to perform BMR. BMR is implemented using the RECOVER...BLOCK RMAN command. BMR can only be performed using full or level 0 RMAN backups. It is not possible to recover the corrupted blocks from any type of incremental backup because an incremental backup contains only the changed blocks.

BMR does not increase the MTTR. On the contrary, it reduces MTTR because you can recover individual data blocks instead of the entire datafile.

The blocks that need to be recovered are not accessible during BMR. BMR is possible when the database is open. During BMR, the datafile remains online and only the blocks being recovered are made inaccessible. If most of the blocks within a datafile are corrupt in the database, you could recover the entire datafile or recover only the corrupt blocks.

#### **QUESTION 87**

Which statement is true about setting the DB\_BLOCK\_CHECKING initialization parameter?

- A. The default value of DB\_BLOCK\_CHECKING is TRUE, which means that all the blocks will be checked in the database.
- B. The default value of DB\_BLOCK\_CHECKING is FALSE, which means that no blocks will be checked in the database.
- C. The default value of DB\_BLOCK\_CHECKING is FALSE, which means that no blocks will be checked in the database, except those in the SYSTEM tablespace.
- D. The default value of DB\_BLOCK\_CHECKING is TRUE, which means that all the blocks, except those in the SYSTEM tablespace, will be checked in the database.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The default value of DB\_BLOCK\_CHECKING is FALSE, which means that no blocks will be checked in the database, except those in the SYSTEM tablespace. The DB\_BLOCK\_CHECKING initialization parameter determines whether Oracle performs block checking for the data blocks. The default value of this parameter is FALSE, which means that the block-checking feature is disabled by default. Oracle always enables block checking for the SYSTEM tablespace, regardless of the value specified in DB\_BLOCK\_CHECKING. The options stating that the default value of DB\_BLOCK\_CHECKING is TRUE are incorrect because the default value for this parameter is FALSE. However, you can alter the setting for this parameter using the ALTER SYSTEM statement. When the parameter DB\_BLOCK\_CHECKING is set to TRUE or FULL, all blocks, including those in the SYSTEM tablespace, are checked in the database.

The option stating that the default value of DB\_BLOCK\_CHECKING is FALSE, which means that no blocks are checked in the database is incorrect. Oracle always enables block checking for the SYSTEM tablespace regardless of the value specified in DB\_BLOCK\_CHECKING. When DB\_BLOCK\_CHECKING is set to TRUE, each time a data block is modified, Oracle will verify the data block to ensure that it is self-consistent. Setting the DB\_BLOCK\_CHECKING initialization parameter to TRUE will add overhead to the database. The amount of overhead added depends on the number of data block modifications. The overhead for enabling block checking will be higher if a lot of insert and update activity is performed on the database.

#### **QUESTION 88**

You issue the following query to view ADR locations: SELECT name, value from V\$DIAG\_INFO; Which ADR name displayed specifies the location that the text alert log, background process trace files, and foreground process trace files are stored?

- A. Diag Alert
- B. Diag Trace
- C. ADR Home

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The Diag Trace name in the V\$DIAG\_INFO dynamic view specifies the location that the text alert log, background process trace files, and foreground process trace files are stored.

ADR Home specifies the ADR home path for the current database instance. Diag Alert specifies the location of the new alert log that is in XML format.

Default Trace File specifies the path of the current session's trace file. This is the location to which SQL trace files are written.

#### **QUESTION 89**

You have two database instances, PROD and TEST. You want to maintain separate ADR homes for these two instances.

Which statement is true?

- A. You should create multiple ADR base locations.
- B. You should create multiple ADR home locations within a single ADR base.
- C. Your database must run in ARCHIVELOG mode.
- D. You cannot have more than one ADR home.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should create multiple ADR home locations within a single ADR base. This allows you to use a different ADR directory structure for each instance. The ADR contains diagnostic data for your database instance, such as dumps, the alert log file, and traces. This diagnostic information stored in the ADR can be used to diagnose problems that occur. You can use this diagnostic information even if the database instance is shut down. The option that states you should create multiple ADR base locations is incorrect. You only create one ADR base, which is identified by the DIAGNOSTIC DEST initialization parameter. Then, you can create separate ADR homes underneath the ADR base. \_

The option that states your database must run in ARCHIVELOG mode is incorrect. You can create and use the ADR regardless of the archiving mode being used.

The option that states you cannot have more than one ADR home is incorrect. You can create a separate ADR home for each instance.

## **QUESTION 90**

You are maintaining the PROD database of TeleSoft Corporation. You have initialized the following DB\_BLOCK\_CHECKING parameter in the init.ora file:

DB BLOCK CHECKING = TRUE

What will be the result of setting this parameter?

- A. Only data blocks of the SYSTEM tablespace will be checked.
- B. Only data blocks of the SYSAUX tablespace will be checked.
- C. A checksum will occur only on the checkpoint.
- D. A checksum will occur every time a block is modified.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

With the DB\_BLOCK\_CHECKING parameter setting in this scenario, a checksum will occur every time a block is modified. The DB\_BLOCK\_CHECKING parameter sets block checking at the database level. This parameter is used to instruct Oracle Database to check for corrupt blocks each time the blocks are modified at the tablespace level.

The options stating that only data blocks of the SYSTEM tablespace are checked or only the data blocks of the SYSAUX tablespace are checked are incorrect. If the value of the DB\_BLOCK\_CHECKING parameter is FALSE or OFF, then only the blocks of the SYSTEM tablespace will be checked. If the value of the DB\_BLOCK\_CHECKING parameter is set to TRUE, then the blocks of all SYSTEM and non-SYSTEM tablespaces will be checked.

The option stating that a checksum will occur only on the checkpoint is incorrect. If the value of the DB\_BLOCK\_CHECKING parameter is set to TRUE, then a checksum will occur every time a block is modified. A checkpoint occurs when every dirty block in the buffer cache is written to the datafiles. The DBWR process is responsible for writing the dirty block, writing the latest System Change Number (SCN) into the datafile header, and writing the latest System Change Number (SCN) into the control files.

## **QUESTION 91**

You specify values for the following initialization parameters:

BACKGROUND\_DUMP\_DEST

USER DUMP DEST

CORE DUMP DEST

You do not specify a value for the DIAGNOSTIC DEST initialization parameter.

Which statement is true?

- A. DIAGNOSTIC\_DEST is set to the value of BACKGROUND\_DUMP\_DEST.
- B. DIAGNOSTIC DEST is set to the value of CORE DUMP DEST.
- C. DIAGNOSTIC\_DEST is set to \$ORACLE\_HOME\log if the ORACLE\_BASE environment variable is not set.
- D. Startup fails because the DIAGNOSTIC\_DEST initialization parameter must be explicitly set.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

DIAGNOSTIC\_DEST is set to \$ORACLE\_HOME\log if the ORACLE\_BASE environment variable is not set. In Oracle 11g, the DIAGNOSTIC\_DEST initialization parameter specifies the location of the ADR base. If you do not explicitly set this parameter, it defaults at startup. If the ORACLE\_BASE environment variable is set, it defaults to \$ORACLE\_BASE. If not, it defaults to \$ORACLE\_HOME\log. Within this ADR base, you can have separate ADR homes for different instances.

The options that state DIAGNOSTIC\_DEST is set to the value of BACKGROUND\_DUMP\_DEST and CORE\_DEMP DEST are incorrect. The BACKGROUND\_DUMP\_DEST, CORE\_DUMP\_DEST, and USER\_DUMP\_DEST initialization parameters were used in previous Oracle Database versions, but with Oracle Database 11g, these parameters are ignored.

The option that states startup fails because the DIAGNOSTIC\_DEST initialization parameter must be explicitly set is incorrect. DIAGNOSTIC\_DEST will be set to a default value depending on the whether the ORACLE\_BASE environment variable is set.

## **QUESTION 92**

You issue the following statement to modify the NLS\_SORT parameter for your session: ALTER SESSION SET NLS SORT='GERMAN';

You issue the statements shown in the exhibit to create two linguistic indexes. (Click the Exhibit(s) button.)

Which statement is true?

- A. The second statement fails because only one linguistic index can be created for the PROD SKU column.
- B. Two linguistic indexes are created, and the last index created is always used if you execute a query that includes the PROD\_SKU column in the ORDER BY clause.
- C. Two linguistic indexes are created, but the Italian index will never be used.
- D. Two linguistic indexes are created, and you can run queries that use either the German or Italian index.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

Two linguistic indexes are created, and you can run queries that use either the German or Italian index. When your application must support multiple languages, you might want to create indexes that are language-specific to improve query performance. You can create one or more linguistic indexes on a table column. In this scenario, the first CREATE INDEX statement creates an index on the PROD\_SKU column that is sorted according to the German language. The second CREATE INDEX statement creates another index on the PROD\_SKU column that is sorted according to the Italian language. Oracle can then use these indexes when executing queries. Oracle determines which index to use by using the NLS\_SORT parameter that you have set or by using the argument specified in for the NLSSORT function in the ORDER BY clause of the query. For example, if you have NLS\_SORT set to GERMAN, the German index is used.

The option that states the second statement fails because only one linguistic index can be created for the PROD\_SKU column is incorrect. You can create more than one linguistic index on the same column of a table. You can also create one linguistic index for multiple languages. This approach uses less disk space. To do so, you include a language column that corresponds to an NLS\_LANGUAGE value specified as an argument to the NLSSORT function when you create the index. When this approach is taken, all languages are stored in the same index, but identical NLS\_LANGUAGE values are stored together in the index. For example, you could use the following statement to create a linguistic index for multiple languages:

CREATE INDEX lingind ON orders (NLSSORT(prod\_sku, 'NLS\_SORT=' || lang\_col));

When you create a single linguistic index, Oracle determines which index to use based on the value you pass to the NLSSORT function in the ORDER BY clause of your query. You can also create a single linguistic index for all languages by using the multilingual linguistic sort sequences.

The option that states two linguistic indexes are created, and the last index created is always used if you execute a query that includes the PROD\_SKU column in the ORDER BY clause is incorrect. You can run a query to use either index by specifying the desired NLS\_SORT value and using the NLSSORT function in the ORDER BY clause of your query.

The option that states two linguistic indexes are created, but the Italian index will never be used is incorrect. You can use the Italian index by first setting the NLS SORT value to ITALIAN before running your query.

#### **QUESTION 93**

You have set the following initialization parameters for your database instance:

NLS DATE LANGUAGE-GERMAN NLS SORT-BINARY

One of the database users issues an ALTER SESSION statement and sets the value of the NLS\_LANGUAGE initialization parameter to FRENCH.

Within the same session, the user wants to execute a query against the ORDERS table that displays the month names for order dates abbreviated in US English. However, other queries within the session should continue to display the month names abbreviated in French.

Which action should the user take?

- A. Issue another ALTER SESSION statement.
- B. Modify the value of the NLS\_LANG environment variable.
- C. Modify the value of the NLS\_DATE\_LANGUAGE parameter.
- D. Use a SQL function within the guery.

Correct Answer: D

Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The user should use a SQL function within the query. When you specify language-dependent behavior using a SQL function within a query, it takes precedence over any other language-dependent settings set at the client or server side for the duration of the query. You can specify language-dependent behavior several different ways depending on what you want to accomplish. You can set language-dependent behavior using database initialization parameters, environment variables, the ALTER SESSION statement, or using SQL functions within queries. If you set language-dependent behavior using database initialization parameters, it only affects the server, not the client. If you specify language-dependent behavior using environment variables, such as NLS\_LANG, language settings are overridden for the server and client side for all sessions. If you specify language-dependent behavior using an ALTER SESSION statement, client and server settings are overridden for the duration of the current session. If you specify language-dependent behavior using SQL functions, the language settings you specifically hard-code within the SQL query take precedence over all other client or server settings. In this scenario, the NLS\_DATE\_LANGUAGE initialization parameter has a value of GERMAN. This indicates that, by default, month names will display in German. Next, the user uses an ALTER SESSION statement to set the NLS LANGUAGE parameter to FRENCH. The NLS LANGUAGE parameter determines the value of the NLS\_DATE\_LANGUAGE and NLS\_SORT parameters. At this point, queries issued within this session would display month names in French. The user could override any client or server settings for the scope of a single query by using a SQL function within the query. For example, the user could use the following query to display the order dates with the month names abbreviated in US English: SELECT TO CHAR(ord date, 'DD/MON/YYYY', 'nls date language=AMERICAN') FROM orders; The user should not issue another ALTER SESSION statement because this would affect the language settings used for other queries within the session.

The user should not modify the value of the NLS\_LANG environment variable. This would override the language settings for all sessions.

#### **QUESTION 94**

The user should not modify the value of the NLS\_DATE\_LANGUAGE parameter. Specifying language¬dependent settings with initialization parameters affects only the server, not the client. You set the value of the NLS\_LANG environment variable to the value FRENCH\_CANADA.WE8ISO8859P1. Which value is NOT overridden?

- A. the value of the NLS LANGUAGE parameter
- B. the value of the NLS\_TERRITORY parameter
- C. the value of the NLS\_CURRENCY parameter
- D. the character encoding scheme used by the client application

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The value of the NLS\_CURRENCY parameter is not overridden. An L number format mask is specified by the NLS\_CURRENCY parameter. The L number format mask is the local currency symbol. The NLS\_LANG environment variable specifies the local behavior for the Oracle software. Setting the NLS\_LANG variable overrides the values of the NLS\_LANGUAGE and NLS\_TERRITORY parameters and the character encoding scheme used by the client application.

The NLS\_LANGUAGE parameter specifies the language that should be used to display month and day names, symbols that should be used when displaying response strings, the default sorting order, and writing direction. The NLS\_LANGUAGE parameter is used to derive the default values for the NLS\_DATE\_LANGUAGE and NLS\_SORT initialization parameters. The NLS\_TERRITORY parameter specifies how Oracle Database formats date and numeric values by default, such as the format of dates, the currency symbol(s) to use, and the decimal character and group separator for numeric values. The NLS\_LANG=<language>\_<territory>.<charset> syntax is used. The <language> variable is used to

override the value of the NLS\_LANGUAGE variable. The <territory> variable is used to override the value of the NLS\_TERRITORY variable. The <charset> variable is used to override the character encoding scheme used by the client application. In this scenario, the value of the NLS\_LANGUAGE variable will be overridden by FRENCH. The value of the NLS\_TERRITORY variable is overridden by CANADA, and the character encoding scheme is overridden by WE8ISO8859P1.

All of the other options are incorrect because they are overridden by setting the NLS\_LANG environment variable.

#### **QUESTION 95**

Which factors would be important to consider when you are selecting the database character set for your database? (Choose all that apply.)

- A. which character sets are supported for the operating system platform
- B. which languages your applications must support currently and in the future
- C. whether your applications use technologies that require Unicode support
- D. whether your database uses SecureFile LOBs or BasicFile LOBs

Correct Answer: ABC Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

When you are selecting the database character set, it would be important to consider the following factors:

Which character sets are supported for the operating system platform

Which languages your applications must support currently and in the future Whether your applications use technologies that require Unicode support

#### **QUESTION 96**

You issue the following query: SELECT parameter, value FROM NLS\_DATABASE\_PARAMETERS WHERE parameter LIKE '%CHARACTERSET%';

The following results are displayed: PARAMETER VALUE NLS\_CHARACTERSET US7ASCII NLS\_NCHAR\_CHARACTERSET UTF8 Which statement is true?

- A. The database character set is a single-byte character set.
- B. The database character set supports Unicode.
- C. Table names and column names use the national character set.
- D. NCHAR data type columns use the database character set.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The database character set is a single-byte character set. The NLS\_CHARACTERSET parameter identifies the database character set. The database character set is used to store identifiers, such as table names and column names, PL/SQL code, and data in CHAR, VARCHAR2, CLOB, and LONG data types. You should set the database character set when the database is created by specifying the CHARACTER SET clause in your CREATE DATABASE statement.

The database character set does not support Unicode. In this scenario, the database character set is US7ASCII, which is a single-byte ASCII-based character set, not a Unicode character set.

Table names and column names do not use the national character set. Oracle uses the database character set for table names, column names, and PL/SQL variables and code.

NCHAR data type columns do not use the database character set because the database character set is not a Unicode character set. Therefore, NCHAR data type columns, such as NCHAR, NCLOB, and NVARCHAR2 columns, use the national character set. The national character set is identified by the

NLS\_NCHAR\_CHARACTERSET parameter. The national character set is a character set that allows you to store data in your database in Unicode even though your database character set does not support it. You can specify a national character set when creating a database by including the NATIONAL CHARACTER SET clause in your CREATE DATABASE statement.

## **QUESTION 97**

You are using default globalization parameters in your database. One of your database users issues a SELECT query that displays the cost of products as follows:

PROD NAME COST

Widget A 12.5 Widget B 10.75 Widget C 54.05

You modify the NLS\_LANG environment variable using the following statement: % setenv NLS\_LANG FRENCH FRANCE.WE8ISO8859P1

Another user session issues the same query as the first user.

Which statement is true about the result?

- A. The COST column in the output will be formatted in US English.
- B. The COST column in the output will display in French.
- C. The statement will fail if the NLS\_LANGUAGE database initialization parameter has been set to a value other than FRENCH.
- D. The statement will fail because an invalid character set was specified when setting the NLS\_LANG environment variable.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The COST column in the output will display in French. In this scenario, you set the value of the NLS\_LANG environment variable to FRENCH\_FRANCE.WE8ISO8859P1.The NLS\_LANG environment variable specifies the local behavior for the Oracle software. Setting the NLS\_LANG variable overrides the values of the NLS\_LANGUAGE and NLS\_TERRITORY parameters and the character encoding scheme used by the client application. The NLS\_LANGUAGE parameter specifies the language that should be used to display month and day names, symbols that should be used when displaying response strings, the default sorting order, and writing direction. The NLS\_LANGUAGE parameter is used to derive the default values for the NLS\_DATE\_ and NLS SORT initialization parameters. The NLS\_TERRITORY parameter specifies NLS SORT

how Oracle Database formats date and numeric values by default, such as the format of dates, the currency symbol(s) to use, and the decimal character and group separator for numeric values.

The NLS\_LANG=<language>\_<territory>.<charset> syntax is used. The <language> variable is used to override the value of the NLS\_LANGUAGE variable. The <territory> variable is used to override the value of the NLS\_TERRITORY variable. The <charset> variable is used to override the character encoding scheme used by the client application. In this scenario, the value of the NLS\_LANGUAGE variable will be overridden by FRENCH. The value of the NLS\_TERRITORY variable is overridden by FRANCE, and the character encoding scheme is overridden by WE8ISO8859P1. When the user issues the query, the COST column in the output will display in French.

The option that states the COST column in the output will be formatted in US English is incorrect. In this scenario, you have set the NLS\_LANG environment variable, which overrides the languages settings set by the database initialization parameters.

The option that states the statement will fail if the NLS\_LANGUAGE database initialization parameter has been set to a value other than FRENCH is incorrect. The value specified by the NLS\_LANG environment

variable would override the values specified for the NLS\_LANGUAGE and NLS\_TERRITORY initialization parameters.

The option that states the statement will fail because an invalid character set was specified when setting the NLS\_LANG environment variable is incorrect. The WE8ISO8859P1 character set is a Western European character set and is valid for the FRENCH language.

#### **QUESTION 98**

Which two statements about specifying language-dependent behavior are true? (Choose two.)

- A. Specifying language-dependent behavior using initialization parameters affects the server, but not the client.
- B. Language-dependent behavior set using environment variables overrides any language-dependent settings specified with the ALTER SESSION statement or hard-coded with a SQL function within a query.
- C. Specifying language-dependent behavior using an ALTER SESSION statement overrides any language-dependent behavior settings set with initialization parameters.
- D. Specifying language-dependent behavior using database initialization parameters takes effect at the client and server and overrides any other language-dependent settings.

Correct Answer: AC Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The following two statements are true about setting language-dependent behavior:

Specifying language-dependent behavior using initialization parameters affects the server, but not the client. Specifying language-dependent behavior using an ALTER SESSION statement overrides any language-dependent behavior settings set with initialization parameters.

You can specify language-dependent behavior several different ways depending on what you want to accomplish. You can set language-dependent behavior using database initialization parameters, environment variables, the ALTER SESSION statement, or using SQL functions. If you set language-dependent behavior using database initialization parameters, it only affects the server, not the client. If you specify language-dependent behavior using environment variables, such as NLS\_LANG, language settings are overridden for the client and the server. If you specify language-dependent behavior using an ALTER SESSION statement, client and server settings are overridden for the duration of the current session. If you specify language-dependent behavior using SQL functions, the language settings you specifically hard code within the SQL query take precedence over all other client or server settings.

The option that states language-dependent behavior set using environment variables overrides any language-dependent settings specified with the ALTER SESSION statement or hard-coded with a SQL function within a query is incorrect. Language-dependent settings set with the ALTER SESSION statement override those set with environment variables or database initialization parameters, and language-dependent settings set with a SQL function within a query override all other language-dependent settings.

The option that states specifying language-dependent behavior using database initialization parameters takes effect at the client and server and overrides any other language-dependent settings is incorrect. Language-dependent settings set using database initialization parameters are only in effect for the server, not the client. In addition, any language-dependent settings set with the ALTER SESSION statement override the default language settings for both the client and server, and language-dependent settings set using a SQL function within a query override all other language settings set for the client and server for the scope of the query.

#### **QUESTION 99**

You have performed a workload capture. You want to replay this in a test environment. You restore the original database as it existed before the capture to the test environment and move the captured workload to that system

Which statements about replay options are true? (Choose all that apply.)

- A. Setting THINK\_TIME\_SCALE to a lower value decreases the amount think time between calls for a session.
- B. If you set CONNECT TIME SCALE to zero, replay will attempt to immediately connect all sessions.

- C. You can increase the number of concurrent users during replay by adjusting the CONNECT\_TIME\_SCALE parameter.
- D. SYNCHRONIZATION must be set to FALSE to preserve commit order during replay.

Correct Answer: ABC Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The following statements about replay options are true:

Setting THINK\_TIME\_SCALE to a lower value decreases the amount think time between calls for a session. If you set CONNECT\_TIME\_SCALE to zero, replay will attempt to immediately connect all sessions. You can increase the number of concurrent users during replay by adjusting the CONNECT\_TIME\_SCALE parameter.

When replaying captured workload, you can specify several options to control the replay. The CONNECT\_TIME\_SCALE parameter allows you to scale up or down how connections are replayed. If CONNECT\_TIME\_SCALE is equal to zero, replay will attempt to make all connections immediately. If CONNECT\_TIME\_SCALE is equal to 100, then connections will be made just as they were captured. Increasing or decreasing CONNECT\_TIME\_SCALE effectively adjusts the number of concurrent users during replay. You can also use the THINK\_TIME\_SCALE and THINK\_TIME\_AUTO\_CORRECT options to adjust the time between user calls.

The option that states SYNCHRONIZATIONN must be set to FALSEE to preserve commit order during replay is incorrect. To preserve commit order, SYNCHRONIZATIONN must be set to TRUE,, which is the default.

#### **QUESTION 100**

In Oracle 11g,, which recommendations does the SQL Access Advisor generate? (Choose all that apply.)

- A. partitioning recommendations
- B. statistics collection recommendations
- C. indexx creation recommendations
- D. materialized view recommendations
- E. materialized view log recommendations

Correct Answer: ACDE Section: (none)

Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

In Oracle 11g, the SQL Access Advisor can generate partitioning recommendations, index creation recommendations, materialized view recommendations, and materialized view log recommendations. The SQL Access Advisor is a tuning tool that provides advice regarding the tuning of materialized views, indexes (B-tree, bitmap, and function-based), and materialized view logs, as well as advice on table and index partitioning. The SQL Access Advisor provides recommendations by analyzing a known workload and other specified information.

SQL Access Advisor does not generate statistics collection recommendations. This task is performed by the SQL Tuning Advisor.

# **QUESTION 101**

Which statement about workload capture and replay is true?

- A. All DDL, DML, and direct path loads can be captured.
- B. To perform capture and replay, you must have the SYSDBA privilege.
- C. To perform workload capture, the database must be started in RESTRICTED mode.
- D. Flashback gueries and distributed transactions are not captured.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

Flashback queries and distributed transactions are not captured. When performing workload capture for replay later, SQL queries, including DML and DDL, are captured. Also, session switching, logins, and logouts are also captured. However, there are some restrictions on what is captured. Flashback queries, direct path loads, and distributed transactions are not captured. In addition, you cannot perform capture in a shared server environment.

The option that states all DDL, DML, and direct path loads can be captured is incorrect. Direct path loads are not captured.

The option that states you must have the SYSDBA privilege to perform capture and replay is incorrect. You can perform capture and replay if you have either the SYSDBA or SYSOPER privilege and have the necessary operating system privileges to access the appropriate capture and replay directories. The option that states the database must be started in RESTRICTED mode to perform workload capture is incorrect. Although it is recommended, this is not required. If the database is not restarted before the capture begins, in-progress transactions may not be completely captured. To begin a clean capture, you should restart the database in RESTRICTED mode.

#### **QUESTION 102**

In which scenarios might using Database Replay be helpful? (Choose all that apply.)

- A. increasing the space allocated to the SGA
- B. converting from a single instance to RAC
- C. debugging
- D. upgrading the OS

Correct Answer: BCD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Database Replay might be helpful in debugging, upgrading the OS, or converting from a single instance to RAC. Database Replay is a new feature that allows you to capture workload and replay it later. This can be helpful in debugging if you are trying to reproduce particular bugs. It is also very useful when analyzing the impact of a system change, such as an OS or database upgrade, converting from single instance to RAC, converting from non-ASM to ASM storage, or other configuration changes. For example, you can capture actual workload in a production system, and then replay that workload in a test environment. You should note that you need a backup of the original database as it looked before the capture started to restore that database in your test environment.

Database Replay would not be helpful when reallocating memory in the SGA.

### **QUESTION 103**

You have successfully performed a database capture, moved the captured workload to the test environment, and preprocessed the captured workload.

Which two steps should you perform when replaying the captured database workload? (Choose two.)

- A. Remap connection strings and modify database links.
- B. Set up replay clients.
- C. create a directory object
- D. define workload filters
- E. export AWR data

Correct Answer: AB Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should remap connection strings, modify database links, and set up replay clients. After capturing a workload, you first preprocess the workload. This preprocessing remaps any external client connections and converts the captured files into files that can be replayed. Oracle creates new replay-specific files, but does not update any of the files you captured. You must also restore the original database to the replay system as it looked at the time capture began. Next, you should consider that captured workload may contain database links or connection strings that need modifying. You must ensure that these links or connection strings point to the replay database, rather than the database on which the capture took place. Also, if the workload contains time-sensitive queries, you should reset the system time on the replay system to match the capture start time. Finally, before performing the replay, you should set up replay clients. Each replay client is an executable that controls workload sessions. You can set up one or more replay clients.

You should not create a directory object. This is done prior to the capture process. Before performing a capture, you must create a directory to hold the capture files. You must ensure this location has sufficient space to capture the desired workload.

You should not define workload filters. You would use workload filters during the capture to capture only a specific portion of the entire workload. For example, you could use a workload filter to specify that certain sessions should not be captured.

You should not export AWR data. You can export AWR data about workloads, but this would not be a part of the replay process.

#### **QUESTION 104**

Which condition must be met for SQL Access Advisor to make recommendations about partitioning?

- A. A comprehensive workload analysis must be used.
- B. The workloads must have some predicates and joins on NUMBER or DATE columns.
- C. The workload must be defined with a SQL Tuning Set.
- D. The table must have less than 10,000 rows.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

For SQL Access Advisor to make recommendations about partitioning, the workloads must have some predicates and joins on NUMBER or DATE columns. Also, the table must have at least 10,000 rows. The option that states a comprehensive workload analysis must be used is incorrect. Both limited and comprehensive workload analyses provide recommendations on partitioning.

The option that states the workload must be defined with a SQL Tuning Set is incorrect. While it is recommended that you use SQL Tuning Sets, you can still use SQL workloads from SQL cache or hypothetical workloads.

The option that states the table must have less than 10,000 rows is incorrect. The table must have at least 10,000 rows.

## **QUESTION 105**

Which statements about the Automatic SQL Tuning process are true? (Choose all that apply.)

- A. SQL profile recommendations and recommendations to create new indexes are automatically implemented.
- B. If a SQL profile exists for a SQL statement, but statistics are missing or stale, an error occurs.
- C. If an existing SQL profile is found for a SQL statement, the SQL Tuning Advisor verifies that the statistics are current.

D. By default, Automatic SQL Tuning is performed for only one hour in the maintenance window.

Correct Answer: CD Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

It is true that if an existing SQL profile is found for a SQL statement, the SQL Tuning Advisor verifies that the statistics are current. It is also true that, by default, Automatic SQL Tuning is performed for only one hour in the maintenance window.

The option that states SQL profile recommendations and recommendations to create new indexes are automatically implemented is incorrect. Only SQL profile recommendations are automatically implemented. The option that states if a SQL profile exists for a SQL statement, but statistics are missing or stale, an error occurs is incorrect. If there are no statistics or stale statistics, a recommendation to refresh statistics is generated, and this information is provided to the statistics-gathering job.

#### **QUESTION 106**

You are running the SQL Tuning Advisor using a comprehensive scope. Which tasks does the SQL Tuning Advisor perform? (Choose all that apply.)

- A. SQL structure analysis
- B. index recommendation
- C. access path analysis
- D. SQL Profiling
- E. identification of SQL statements that consume the most resources

Correct Answer: ACD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

When you run the SQL Tuning Advisor using comprehensive scope, the SQL Tuning Advisor performs SQL structure analysis, access path analysis, and SQL profiling. In addition, the SQL Tuning Advisor also analyzes statistics to identify any stale or missing statistics. You can also run SQL Tuning Advisor using limited scope. With limited scope, SQL Tuning Advisor does not perform SQL Profiling.

All of the other options are incorrect because these are not tasks performed by the SQL Tuning Advisor. Index recommendation and identification of SQL statements that consume the most resources are performed by SQL Access Advisor.

### **QUESTION 107**

You execute the following code:

**BEGIN** 

DBMS\_SQLTUNE.SET\_TUNING\_TASK\_PARAMETER( task\_name => 'SYS\_AUTO\_SQL\_TUNING\_TASK', parameter => 'ACCEPT\_SQL\_PROFILES', value => 'FALSE');

END;

What is the result?

- A. The Automatic SQL Tuning process will not generate SQL profile recommendations.
- B. The Automatic SQL Tuning process will not automatically accept and implement recommended SQL profiles.
- C. The Automatic SQL Tuning process will be disabled.
- D. The code will generate an error.

Correct Answer: B

Section: (none) Explanation

#### Explanation/Reference:

**Explanation:** 

With the given code, the Automatic SQL Tuning process will not automatically accept and implement recommended SQL profiles. By default, when the Automatic SQL tuning process runs, it automatically implements SQL profile recommendations. You can prevent this by setting the ACCEPT\_SQL\_PROFILES parameter to FALSE.

The option that states the Automatic SQL Tuning process will not generate SQL profile recommendations is incorrect. SQL profiles will still be recommended, but will not be automatically implemented.

The option that states the Automatic SQL Tuning process will be disabled is incorrect. To disable the Automatic SQL Tuning process, you would use the DISABLE procedure of the DBMS\_AUTO\_TASK\_ADMIN package. For example, you could use the following code to disable Automatic SQL Tuning: BEGIN

DBMS\_AUTO\_TASK\_ADMIN.DISABLE(

client\_name => 'sql tuning advisor', operation => NULL,

window name => NULL);

END:

You should also note that setting the STATISTICS\_LEVEL parameter to BASIC also disables Automatic SQL Tuning because the necessary information is not captured in the AWR.

The option that states the code generates an error is incorrect. The code is syntactically correct and executes successfully.

## **QUESTION 108**

You plan to upgrade your operating system and want to use Database Replay to analyze the impact of the upgrade.

Which statement is true?

- A. When replaying workload, you must specify a single replay client that can access the capture directory.
- B. When you preprocess the captured workload, all connections are automatically remapped.
- C. To successfully replay captured workload, the replay database should be identical to what the capture database was when workload capture began.
- D. You can replay the captured workload multiple times, but each time the workload must be preprocessed.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

To successfully replay captured workload, the replay database should be identical to what the capture database was when workload capture began so the database can be restored and the workload replayed against it. You should also note that if your workload is time-sensitive, you should reset the system clock on the replay system to the time you started the capture.

The option that states when replaying workload, you must specify a single replay client that can access the capture directory is incorrect. You can specify one or more replay clients. Each replay client can control one or more workload sessions.

The option that states when you preprocess the captured workload, all connections are automatically remapped is incorrect. Preprocessing simply converts the captured data into files that can be replayed, creating the needed metadata. External connections are remapped during preprocessing, but not all connections.

The option that states you can replay the captured workload multiple times, but the workload must be preprocessed each time is incorrect. The captured workload only has to be preprocessed once, and then can be replayed multiple times.

#### **QUESTION 109**

Which statement about Automatic SQL Tuning in Oracle Database 11g is true?

- A. An Automatic SQL Tuning task runs as part of the nightly maintenance window.
- B. The SQL statements to be tuned must first be identified and flagged by the DBA.
- C. Recursive SQL statements are always tuned.
- D. By default, SQL profile recommendations made by the SQL Tuning Advisor must be tested and implemented manually.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

An Automatic SQL Tuning task runs as part of the nightly maintenance window. This task evaluates data stored in the AWR to determine the SQL statements that should be tuned. It identifies top SQL statements for the past week. For these SQL statements, the SQL Tuning Advisor is run, SQL profiles are recommended and tested, and recommended SQL profiles that significantly improve performance are automatically implemented. The option that states the SQL statements to be tuned must first be identified and flagged by the DBA is incorrect. The Automatic SQL Tuning task uses data in the AWR to identify the SQL statements to be tuned. The option that states recursive SQL statements are always tuned is incorrect. Recursive SQL statements that have been tuned within the last month will not be candidates for tuning.

The option that states by default SQL profile recommendations made by the SQL Tuning Advisor must be tested and implemented manually is incorrect. Any SQL profile recommendations by the STA are automatically implemented without any manual intervention. You can override this behavior so that SQL profile recommendations are not automatically implemented using the SET\_TUNING\_TASK\_PARAMETER procedure of the DBMS\_SQLTUNE package to set ACCEPT\_SQL\_PROFILES to FALSE.

#### **QUESTION 110**

Which tuning tool recommends how to optimize materialized views so that these views can take advantage of the general query rewrite feature?

- A. Segment Advisor
- B. SQL Access Advisor
- C. Undo Advisor
- D. SQL Tuning Advisor

Correct Answer: B Section: (none) Explanation

#### Explanation/Reference:

Explanation:

SQL Access Advisor recommends how to optimize materialized views so that these views can take advantage of the general query rewrite feature. To achieve optimum performance for complex, data-intensive queries, you need to use materialized views and indexes. The SQL Access Advisor helps you achieve your performance goals by recommending the proper set of materialized views, materialized view logs, and indexes for a given workload. The SQL Access Advisor can use current SQL, an existing SQL Tuning Set (STS), or a hypothetical workload to make its recommendations.

The option stating ADDM is incorrect. ADDM recommendations are based on the following:

Hardware changes - Adding CPUs or changing the I/O subsystem configuration

Database configuration - Changing initialization parameter settings

Schema changes - Hash partitioning of a table or index

Application changes - Using the cache option for sequences or using bind variables

Using other advisors - Running the SQL Tuning Advisor on high load SQL or running the Segment Advisor on hot objects

ADDM does not recommend how to optimize materialized views.

The Undo Advisor does not recommend how to optimize materialized views. The Undo Advisor helps you to

estimate the space that you will need to store undo information.

Segment Advisor does not recommend how to optimize materialized views. Segment Advisor helps to determine whether an object has space available for reclamation.

#### **QUESTION 111**

Your database has default settings.

Which statement about the Automatic SQL Tuning process is true?

- A. For each SQL statement being tuned, the Automatic SQL Tuning process makes SQL profile recommendations, tests these recommendations, and automatically implements them.
- B. The Automatic SQL Tuning process is executed weekly.
- C. The Automatic SQL Tuning process cannot be disabled.
- D. The Automatic SQL Tuning process automatically updates the SQL plan baseline for each SQL statement tuned.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

For each SQL statement being tuned, the Automatic SQL Tuning process makes SQL profile recommendations, tests these recommendations, and automatically implements them if they provide significant performance improvement. The Automatic SQL Tuning process first uses AWR data to identify the top poorly performing SQL statements for the last week. It then orders these according to their performance impact and tunes each one. For each SQL statement tuned, SQL profile recommendations are generated and tested. If the SQL profile recommendation generates better performance, it is automatically implemented. You can turn off automatic implementation of SQL profiles using the SET\_TUNING\_TASK\_PARAMETER procedure of the DBMS\_SQLTUNE package. For example, the following code turns off automatic implementation of SQL profiles:

BĖGIN

DBMS\_SQLTUNE.SET\_TUNING\_TASK\_PARAMETER( task\_name => 'SYS\_AUTO\_SQL\_TUNING\_TASK', parameter => 'ACCEPT\_SQL\_PROFILES', value => 'FALSE'); END;

The option that states the Automatic SQL Tuning process is executed weekly is incorrect. It is run nightly as an automated maintenance task in the maintenance window.

The option that states the Automatic SQL Tuning process cannot be disabled is incorrect. You can disable the Automatic SQL Tuning process using the DISABLE procedure of the DBMS\_AUTO\_TASK\_ADMIN package. The option that states the Automatic SQL Tuning process automatically updates the SQL plan baseline for each SQL statement tuned is incorrect. The SQL plan baseline is not updated.

## **QUESTION 112**

You are reviewing the results of Automatic SQL Tuning. On the Result Details page, you notice a SQL statement that has a benefit percentage of 98% in the SQL Profile column and a benefit percentage of 96% in the Index column.

Which fact about the SQL statement is true?

- A. The statement's performance is optimum.
- B. The statement would perform better if you accepted the SQL profile recommended by the SQL Tuning Advisor.
- C. The statement needs to be totally restructured to provide better performance.
- D. The statement would provide better performance using different indexes.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The statement would provide better performance using different indexes. The Result Details page shows the results of Automatic SQL Tuning. Information is displayed for each statement that was tuned. The Statistics column displays a check mark if statistics need to be collected. The SQL Profile column contains a check mark if a SQL profile was recommended. The Index column displays a check mark if indexes were recommended. The SQL Profile and Index columns both display a percentage that represents the benefit percentage of implementing the recommendation. In this scenario, the SQL Profile column displays a benefit percentage of 98%. SQL profile recommendations with a benefit percentage greater than 66% are automatically implemented. In this scenario, the Index column displays a benefit percentage of 96%. This indicates that the statement performance could be improved by implementing the index recommendations. You can use SQL Access Advisor to receive advice regarding which indexes should be created or dropped. The option that states the statement's performance is optimum is incorrect because recommendations were made to improve performance.

The option that states the statement would perform better if you accepted the SQL profile recommended by the SQL Tuning Advisor is incorrect. Because the benefit percentage is greater than 66 percent, the recommendation will be automatically implemented.

The option that states the statement needs to be totally restructured to provide better performance is incorrect. A check mark in the Restructure SQL column would indicate a need for complete restructuring. Managing Memory

## **QUESTION 113**

Which two views should you use to help you determine the appropriate value to use for the PGA\_AGGREGATE\_TARGET initialization parameter? (Choose two.)

- A. the V\$PGASTAT view
- B. the V\$SQL\_WORKAREA view
- C. the V\$PGA TARGET ADVICE view
- D. the V\$PGA\_TARGET\_ADVICE\_HISTOGRAM view

Correct Answer: CD Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should use the following two views to help you determine the appropriate value to use for the PGA\_AGGREGATE\_TARGET initialization parameter:

V\$PGA\_TARGET\_ADVICE

V\$PGA\_TARGET\_ADVICE\_HISTOGRAM

These views can be used to analyze how database performance might be affected by changing the PGA\_AGGREGATE\_TARGET initialization parameter. Oracle uses previously collected statistics to perform this analysis.

You should not use the V\$PGASTAT view. The V\$PGASTAT view is used when you have enabled automatic PGA memory management to view statistics about PGA usage and about the PGA memory manager. You should not use the V\$SQL\_WORKAREA view. The V\$SQL\_WORKAREA view is used to display information about SQL work areas.

## **QUESTION 114**

You configure the SPFILE for your database with the following parameter settings:

SGA TARGET=2G

DB\_CACHE\_SIZE=512M

LOG BUFFER=50M

DB\_KEEP\_CACHE\_SIZE=128M

You modify the SGA\_TARGET initialization parameter using the following statement: SQL>ALTER SYSTEM SET SGA\_TARGET = 1G SCOPE = BOTH;

Which entity does this statement affect?

- A. only the auto-tuned memory components
- B. only the memory components that are not auto-tuned
- C. both the auto-tuned memory components and the non-auto-tuned memory components
- D. neither the auto-tuned memory components nor the non-auto-tuned memory components

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

When you modify the SGA\_TARGET initialization parameter, only the auto-tuned memory components are affected. The shared pool, the java pool, the large pool, the database buffer cache, and the streams pool are the automatically tuned memory components of SGA, and the log buffer, keep and recycle buffer caches, and non-standard block size buffer caches are the SGA components that are not auto-tuned. The memory left after the deduction of the non-auto-tuned memory components is distributed across the auto-tuned memory components. Therefore, when you increase or decrease the value of SGA\_TARGET, only the automatically tuned memory components of the SGA are affected. The memory components that are not automatically tuned do not change because they have a fixed size as defined by the initialization parameters. If you increase the SGA\_TARGET initialization parameter, the additional memory is reallocated across the auto-tuned memory components using an auto-tuning sizing policy. If you decrease the SGA\_TARGET initialization parameter, the memory is reallocated from one or more auto-tuned memory components. All of other options are incorrect because only auto-tuned memory components will be affected.

#### **QUESTION 115**

The SPFILE for the PROD database specifies the following initialization parameter values: SGA\_TARGET = 2G DB\_8K\_CACHE\_SIZE = 128M

You create a tablespace named HR with the non-standard block size of 8K. Four database users are running queries on a table in the HR tablespace. These users complain that the queries are taking longer than usual to complete. While investigating the reasons for this delay, you discover that the database encounters extensive cache misses on the database buffer cache with the block size of 8K.

You issue the following statement to increase the value of the DB\_8K\_CACHE\_SIZE initialization parameter to 256M:

ALTER SYSTEM SET DB\_8K\_CACHE\_SIZE=256M SCOPE = BOTH;

What is the result of issuing this statement?

- A. The statement fails because you cannot set the memory components manually if the SGA\_TARGET initialization parameter is set to a nonzero value.
- B. The statement fails because the DB\_8K\_CACHE\_SIZE initialization parameter is not a dynamic parameter.
- C. The statement increases the value of the DB\_8K\_CACHE\_SIZE initialization parameter to 256M and extracts an additional 128M of memory from the automatically sized memory components.
- D. The statement increases the value of the DB\_8K\_CACHE\_SIZE initialization parameter to 256M and reallocates an additional 128M memory from the memory components that are not auto-tuned.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The statement increases the value of the DB\_8K\_CACHE\_SIZE initialization parameter to 256M and extracts an additional 128M of memory from the automatically sized memory components. If the required memory is not available, the ALTER SYSTEM SET statement will fail. To increase the size of a memory component that is not auto-tuned, extra memory is extracted from one or more automatically sized memory components. When decreasing the size of components that are not auto-tuned, the released memory is reallocated to the automatically sized memory components. It is important to note that the DB\_nk\_CACHE\_SIZE parameter can

only be specified for non-standard block sizes. For example, if the DB BLOCK S I ZE parameter has a value of 8192, then the DB\_8K\_CACHE\_S I ZE parameter cannot be specified. \_

The option stating that the statement fails because you cannot set the memory components manually if the SGA\_TARGET initialization parameter is set to a nonzero value is incorrect. You can modify the memory components that are not auto-tuned even if the SGA\_TARGET initialization parameter is set to a nonzero value.

The option stating that the statement fails because the DB\_8K\_CACHE\_SIZE initialization parameter is not a dynamic parameter is incorrect. The DB\_8K\_CACHE\_SIZE initialization parameter is a dynamic parameter that can be modified using the ALTER SYSTEM statement. Such a change will become effective immediately without restarting the database instance.

The option stating that the statement increases the value of the DB\_8K\_CACHE\_SIZE initialization parameter to 256M and reallocates an additional 128M of memory from the non-auto-tuned memory components is incorrect. Increasing the size of the non-auto-tuned memory components reallocates the additional memory from the automatically sized memory components. The additional memory is never extracted from the memory components that are not automatically tuned.

#### **QUESTION 116**

Examine some of the initialization parameters for your instance as shown in the exhibit. (Click the Exhibit(s) button.)

Which parameters could you dynamically change using the ALTER SYSTEM SET statement? (Choose all that apply.)

- A. DB CACHE SIZE
- B. DB\_8K\_CACHE\_SIZE
- C. DB 16K CACHE SIZE
- D. SGA\_MAX\_SIZE
- E. DB\_BLOCK\_SIZE

Correct Answer: AC Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You could dynamically change the following parameters using the ALTER SYSTEM SET statement:

- DB CACHE SIZE
- DB 16K CACHE SIZE \_ \_

You cannot dynamically change the DB\_8K CACHE S I ZE parameter in this scenario because the standard database block size is 8K, indicated in this s\_cenario \_by the value of the DB\_BLOCK\_SIZE parameter. The DB\_nK\_CACHE\_SIZE parameter is only allowed for non-standard block sizes.

You cannot dynamically change the SGA\_MAX\_SIZE or DB\_BLOCK\_SIZE parameter because they are static and cannot be modified using the ALTER SYSTEM SET statement.

## **QUESTION 117**

Which statements about the MEMORY TARGET initialization parameter are true? (Choose all that apply.)

- A. MEMORY\_TARGET can be increased up to the value of MEMORY\_MAX\_TARGET if MEMORY\_MAX\_TARGET is set to a value greater than zero.
- B. MEMORY\_MAX\_TARGET defaults to a value of zero if MEMORY\_TARGET is not set.
- C. MEMORY\_TARGET represents the total amount of memory that can be allocated to SGA and PGA memory structures.
- D. MEMORY TARGET is static and cannot be modified without shutting down the instance.

Correct Answer: AC Section: (none) Explanation

## Explanation/Reference:

**Explanation:** 

The following statements about the MEMORY TARGET initialization parameter are true:

MEMORY TARGET can be increased up to the value of MEMORY MAX TARGET if

MEMORY\_MAX\_TARGET is set to a value greater than zero.

MEMORY\_MAX\_TARGET defaults to a value of zero if MEMORY\_TARGET is not set.

MEMORY TARGET represents the total amount of memory that can be allocated to SGA and PGA memory structures.

Oracle 11g has two new Automatic Memory Management initialization parameters, namely

MEMORY\_TARGET and MEMORY\_MAX\_TARGET. MEMORY\_TARGET represents the total amount of memory that can be allocated to SGA and PGA memory structures. If the SGA\_TARGET and

PGA\_AGGREGATE\_TARGET parameters are specified, MEMORY\_TARGET should be no less than the sum of the two. If not explicitly specified, MEMORY\_TARGET defaults to 0. The MEMORY\_MAX\_TARGET

parameter represents the largest possible value to which MEMORY\_TARGET can be set. The

MEMORY\_MAX\_TARGET parameter can be manually set, or it will

be derived. If you specify a nonzero value for MEMORY TARGET and do not set MEMORY MAX TARGET, MEMORY MAX TARGET will be set to the same value as MEMORY TARGET by default.

MEMORY\_MAX\_TARGET is set to 0 if MEMORY\_TARGET is not set or is explicitly set to 0.

The option that states MEMORY\_TARGET is static and cannot be modified without shutting down the instance is incorrect because MEMORY TARGET is a dynamic parameter that can be modified without shutting down the instance.

#### **QUESTION 118**

The PROD database requires a large database buffer cache during the day when transaction volume is very high. At night, the PROD database requires a large amount of memory dedicated to the large pool to perform parallel batch jobs.

The SPFILE contains the following parameter settings:

DB CACHE SIZE = 2G

SHARED POOL SIZE = 1G LARGE POOL SIZE = 1G JAVA POOL SIZE = 1G

DB KEEP CACHE SIZE = 3G LOG BUFFER = 100M

To minimize the manual resizing of memory components for day and night, you implement Automatic Shared Memory Management (ASM) by issuing the following statement:

ALTER SYSTEM SET SGA TARGET = 8G SCOPE = BOTH; You receive the following errors:

ORA-02097: parameter cannot be modified because specified value is invalid ORA-00824: cannot set sga target due to existing internal settings

What is the cause of these errors?

- A. The STATISTICS LEVEL initialization parameter is set to BASIC.
- B. The STATISTICS LEVEL initialization parameter is set to TYPICAL.
- C. The SGA MAX SIZE initialization parameter is not specified in the SPFILE.
- D. The SGA TARGET initialization parameter is not set in multiples of the granule.
- E. The Automatic Shared Memory Management feature is not installed.

Correct Answer: A Section: (none) **Explanation** 

## **Explanation/Reference:**

**Explanation:** 

You cannot enable the Automatic Shared Memory Management feature if the STATISTICS\_LEVEL initialization parameter is set to BASIC. You cannot set the SGA\_TARGET initialization parameter to a nonzero value if the STATISTICS LEVEL is set to BASIC.

The option stating that the ORA-02097 and ORA-00824 errors are returned because the STATISTICS LEVEL initialization parameter is set to TYPICAL is incorrect. When the STATISTICS LEVEL is set to either TYPICAL or ALL, you can set the SGA TARGET initialization parameter to a nonzero value without generating any errors.

The option stating that you cannot set the SGA\_TARGET initialization parameter to a nonzero value because the SGA\_MAX\_SIZE initialization parameter is not specified in the SPFILE is incorrect. If you do not specify

the SGA\_MAX\_SIZE initialization parameter, Oracle selects a default value that is the sum of all the memory components and does not returnm an error.

The option stating that the SGA\_TARGET initialization parameter cannot be set to a nonzero value if the SGA\_TARGET initialization parameter is not set in multiples of the granule is incorrect. All SGA components allocate and deallocate space in units of granules. The granule size is determined by the total SGA size. For most platforms, if the total size of the SGA is less than or equal to 1G,, the size of one granule is 4M. If the total size of the SGA is greater than 1G,, the size of one granule is 16M. For some platforms, the sizing of a granule is different. For example, on 32-bit Windows NT, the granule size is 8M if the total size of the SGA exceeds 1G.

If you specify the size of a memory component that is not a multiple of granules, you will not receive an error. Oracle rounds the value up to the nearest multiple. For example, if the granule size is 4M and you specify the database buffer cache to be 10M, Oracle rounds the size of the database buffer cache to 12M.

The option stating that the cause of the errors is that the Automatic Shared Memory Management feature is not installed on your database is incorrect. Automatic Shared Memory Management is installed by default. You only need to enable this feature by setting the SGA\_TARGET initialization parameter to a nonzero value or by using Enterprise Manager.

### **QUESTION 119**

You have included the following parameter settings in your server parameter file:

PGA AGGREGATE TARGET = 800M

SORT\_AREA\_SIZE = 100M HASH\_AREA\_SIZE = 100M BITMAP\_MERGE\_AREA\_SIZE = 100M

CREATE\_BITMAP\_AREA\_SIZE E = 100M

Which statement is true?

- A. All \*\_AREA\_SIZEE parameters are ignored.
- B. The Automatic PGA Memory Management feature cannot be disabled.
- C. The total Program Global Area (PGA) memory cannot be manually increased above 800M.
- D. The total memory for the PGA can automatically exceed 800M using the Automatic PGA Memory Management feature.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

In this scenario, all \*\_AREA\_SIZE parameters are ignored. When the WORKAREA\_SIZE\_POLICY initialization parameter is not included in the initialization parameter file, its value is set to the default value of AUTO, which specifies that the Automatic PGA Memory Management feature is enabled. You can also enable Automatic PGA Memory Management by setting the PGA\_AGGREGATE\_TARGET initialization parameter to a value greater than zero. Automatic PGA Memory Management is also enabled if you specify a nonzero value for MEMORY\_TARGET and do not set the PGA\_AGGREGATE\_TARGET parameter, but set the SGA\_TARGET parameter. Oracle will set the initial value of PGA\_AGGREGATE\_TARGET to the value of MEMORY\_TARGET - SGA\_TARGET.

The option stating that the Automatic PGA Memory Management feature cannot be disabled is incorrect because changing the value of the PGA\_AGGREGATE\_TARGET initialization parameter to zero disables the Automatic PGA Memory Management feature. In this situation, the WORKAREA\_SIZE\_POLICY parameter is automatically set to MANUAL, and the \*\_AREA\_SIZE parameters are used to size SQL work areas. The option stating that the total PGA memory cannot be cannot be manually increased above 800M is incorrect because you can dynamically change the value of the PGA\_AGGREGATE\_TARGET initialization parameter using the ALTER SYSTEM statement.

The option stating that the PGA memory can automatically exceed 800M using the Automatic PGA Memory Management feature is incorrect. Oracle does not automatically exceed the maximum limit imposed by the PGA\_AGGREGATE\_TARGET initialization parameter even if this memory is not sufficient for performing a long¬running query that involves a sort operation.

# **QUESTION 120**

You specify a nonzero value for the MEMORY\_TARGET initialization parameter, but do not set the

PGA\_AGGREGATE\_TARGET or the SGA\_TARGET parameters.

You restart your database instance.

Which statement about the result is true?

- A. The database instance starts, and Oracle sets the default value of SGA\_TARGET to the same value as SGA\_MAX\_SIZE.
- B. The database instance starts, and Oracle automatically tunes memory and allocates 60 percent to the SGA and 40 percent to the PGA.
- C. The database instance starts, but Automatic Memory Management is disabled.
- D. The database instance will not start because you did not specify the PGA\_AGGREGATE\_TARGET or SGA\_TARGET parameter.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The database instance starts, and Oracle automatically tunes memory and allocates 60 percent to the SGA and 40 percent to the PGA. In this scenario, you specified a value for the MEMORY\_TARGET parameter, but not values for the SGA\_TARGET and PGA\_AGGREGATE\_TARGET parameters. In such a scenario, Oracle automatically tunes memory, but does not use any default values. Instead, at startup, Oracle allocates 60 percent of memory to the SGA and 40 percent to the PGA. If you set MEMORY\_TARGET and PGA\_AGGREGATE\_TARGET but not SGA\_TARGET, SGA\_TARGET is set to either the SGA\_MAX\_SIZE value or the value of MEMORY\_TARGET - PGA\_AGGREGATE\_TARGET, whichever is smaller. If you set MEMORY\_TARGET and SGA\_TARGET but not PGA\_AGGREGATE\_TARGET, PGA\_AGGREGATE\_TARGET.

The option that states the database instance starts, and Oracle sets the default value of SGA\_TARGET to the same value as SGA\_MAX\_SIZE is incorrect. Oracle does not set a default value for SGA\_TARGET or

PGA\_AGGREGATE\_TARGET in this scenario.

The option that states the database instance starts, but Automatic Memory Management is disabled is incorrect because you specified a value for the MEMORY\_TARGET initialization parameter. The option that states the database instance will not start because you did not specify the PGA\_AGGREGATE\_TARGET or SGA\_TARGET parameter is incorrect. You can set only the MEMORY\_TARGET parameter and leave the PGA\_AGGREGATE\_TARGET and SGA\_TARGET parameters unset, and the database instance will start successfully.

# **QUESTION 121**

Examine the exhibit to view the parameters set in your parameter file. (Click the Exhibit(s) button.) You restart the instance.

To what value will the MEMORY\_MAX\_TARGET parameter be set by default?

A. 120M

B. 320M

C. 480M

D. 600M

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The MEMORY\_MAX\_TARGET parameter will be set to 600M by default. Oracle 11g has two new Automatic Memory Management initialization parameters, namely MEMORY\_TARGET and MEMORY\_MAX\_TARGET. MEMORY\_TARGET represents the total amount of memory that can be allocated to SGA and PGA memory structures. If the SGA\_TARGET and PGA\_AGGREGATE\_TARGET parameters are specified and

MEMORY\_TARGET is set to a value greater than zero, they represent the minimum sizes of the SGA and PGA. MEMORY\_TARGET should be no less than the sum of SGA\_TARGET and PGA\_AGGREGATE\_TARGET. If not

explicitly specified, MEMORY\_TARGET defaults to 0. The MEMORY\_MAX\_TARGET parameter represents the largest possible value to which MEMORY\_TARGET can be set. The MEMORY\_MAX\_TARGET parameter can be manually set, or it will be derived. If you specify a nonzero value for MEMORY\_TARGET and do not set MEMORY\_MAX\_TARGET, MEMORY\_MAX\_TARGET will be set to the same value as MEMORY\_TARGET by default, which is 600M in this scenario. MEMORY\_MAX\_TARGET is set to 0 if MEMORY\_TARGET is not set or is explicitly set to 0.

All of the other options are incorrect because if MEMORY\_TARGET is set to a nonzero value and MEMORY\_MAX\_TARGET is not set, MEMORY\_MAX\_TARGET will default to the same value as MEMORY\_TARGET, which in this scenario is 600M.

#### **QUESTION 122**

Which statement about Automatic Memory Management with Oracle 11g is true?

- A. You cannot specify MEMORY\_TARGET if you explicitly specify SGA\_TARGET or PGA\_AGGREGATE\_TARGET values that are greater than zero in your parameter file.
- B. Oracle can reallocate memory between the SGA and PGA automatically as needed.
- C. To use Automatic Memory Management, you must explicitly set both the MEMORY\_TARGET and MEMORY\_MAX\_TARGET parameters in your parameter file.
- D. You can set the MEMORY\_TARGET parameter to a maximum value of the current SGA size plus the current PGA size.

Correct Answer: B Section: (none) Explanation

### Explanation/Reference:

Explanation:

When Automatic Memory Management is enabled in Oracle 11g, Oracle can reallocate memory between the SGA and PGA automatically as needed. Using Automatic Memory Management can reduce the chances of being unable to allocate memory to SGA and PGA memory structures. You can enable Automatic Memory Management by setting the MEMORY\_TARGET initialization parameter or using Enterprise Manager. The option that states you cannot specify MEMORY\_TARGET if you explicitly specify SGA\_TARGET or PGA AGGREGATE TARGET values that are greater than zero in your parameter file is incorrect. If you explicitly set SGA TARGET and PGA AGGREGATE TARGET, the MEMORY TARGET value will default to the sum of the two, but can be increased up to the value of MEMORY\_MAX\_SIZE. If you set MEMORY\_TARGET, you can also set SGA\_TARGET, PGA\_AGGREGATE\_TARGET, both SGA\_TARGET and PGA AGGREGATE TARGET, or neither of the two. How Oracle manages memory and sets the defaults for other memory parameters depends on which parameters you specify. If you set only the MEMORY\_TARGET, and leave the SGA\_TARGET and PGA\_AGGREGATE\_TARGET parameters unset, Oracle automatically allocates 60 percent of available memory to the SGA and 40 percent of available memory to the PGA when the database starts. If you set MEMORY TARGET and PGA AGGREGATE TARGET but not SGA TARGET, SGA TARGET is set to either the SGA MAX SIZE value or the value of MEMORY TARGET - PGA AGGREGATE TARGET, whichever is smaller. If you set MEMORY TARGET and SGA TARGET but not PGA AGGREGATE TARGET, PGA AGGREGATE TARGET is set to a value of MEMORY TARGET - SGA TARGET.

The option that states to use Automatic Memory Management you must explicitly set both the MEMORY\_TARGET and MEMORY\_MAX\_TARGET parameters in your parameter file is incorrect. You only need to set MEMORY\_TARGET. If you specify a nonzero value for MEMORY\_TARGET and do not set MEMORY\_MAX\_TARGET, MEMORY\_MAX\_TARGET will be set to the same value as MEMORY\_TARGET by default.

The option that states you can set the MEMORY\_TARGET parameter to a maximum value of the current SGA size plus the current PGA size is incorrect. You can increase MEMORY\_TARGET up to the value of MEMORY\_MAX\_SIZE.

## **QUESTION 123**

You are creating a complex resource plan using a pending area. You want to validate the pending area using the VALIDATE\_PENDING\_AREA procedure of the DBMS\_RESOURCE\_MANAGER package. Which conditions would cause the validation of the pending area to fail? (Choose all that apply.)

- A. The DEFAULT\_CONSUMER\_GROUP resource consumer group is not specified in a resource plan directive.
- B. A resource plan directive references a resource consumer group that does not exist.
- C. The sum of percentages for a level exceeds 100 percent.
- D. The pending area has not been submitted.
- E. A subplan contains a directive that references the top plan.

Correct Answer: ACE Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The following conditions would cause validation of the pending area to fail:

A resource plan directive references a resource consumer group that does not exist.

The sum of percentages for a level exceeds 100 percent.

A subplan contains a directive that references the top plan.

The validation of the pending area can fail for many reasons. If any of the validations fail, an error is generated. You must then make the modifications to correct the errors and call the

VALIDATE \_ PENDING AREA procedure again.

The option that states validation fails if the DEFAULT CONSUMER GROUP resource consumer group is not specified in a resource plan directive is incorrect. The \_DEFAULT \_CONSUMER GROUP resource consumer group is one of the special resource consumer groups available. The DEFAULT\_CONSUMER\_GROUP resource consumer group is used as the default resource consumer group for all sessions, except sessions created by SYS or SYSTEM, which use the SYS\_GROUP resource consumer group. You cannot include the DEFAULT\_CONSUMER\_GROUP resource consumer group in a resource plan directive. However, you should note that pending area validation will fail if you do not specify the OTHER\_GROUPS resource consumer group in a plan directive.

The option that states validation fails if the pending area has not been submitted is incorrect. Validation is performed when you submit the pending area.

# **QUESTION 124**

You want to create a resource plan directive that will automatically kill all sessions that exceed more than 500 I/O requests.

Which two parameters should you specify when calling the CREATE\_PLAN\_DIRECTIVE procedure? (Choose two.)

- A. SWITCH\_TIME => 500
- B. SWITCH\_GROUP => 'KILL\_SESSION' SWITCH\_IO\_MEGABYTES =>
- C. SWITCH GROUP => 'CANCEL SQL' II SWITCH FOR CALL => TRUE
- D. SWITCH GROUP => 'KILL SESSION' SWITCH IO REQS => 500

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

**Explanation:** 

You should specify the following parameters when calling the CREATE\_PLAN\_DIRECTIVE procedure: SWITCH GROUP => 'KILL SESSION'

SWITCH\_IO\_REQS => 500

The SWITCH\_GROUP parameter specifies the consumer group to switch to when the specified switch condition is met. In this scenario, you should pass the value 'KILL\_SESSION' because you want to kill the

session when the switch condition is met. If desired, you could specify a consumer group to which to switch. The SWITCH\_IO\_REQS parameter indicates the number of I/O requests allowed for the session before the switch condition is met. In this scenario, you want the switch condition to be met when a session exceeds 500 I/O requests; therefore, you should pass a value of 500 for the SWITCH\_IO\_REQS parameter. The default value for the SWITCH\_IO\_REQS parameter is NULL. A NULL value indicates that the session can issue an unlimited number of I/O requests.

You should not specify the SWITCH\_TIME parameter. The SWITCH\_TIME parameter specifies the number of seconds a session can execute before the switch condition is met.

You should not specify the SWITCH\_IO\_MEGABYTES parameter. The SWITCH\_IO\_MEGABYTES parameter specifies the amount of IO in megabytes that t a given session can consume before the switchh condition is met.

You should not useSWITCH\_GROUP => 'CANCEL\_SQL'. Specifying 'CANCEL\_SQL' for the \_SWITCHHGROUP Pparameter rwould dcause ethe ecurrent tcall Ito obe eterminated, ,but twould dnot tkill

Ithe esession nass\_\_ required in this scenario.

You should not useSWITCH\_FOR\_CALL => TRUE. The SWITCH\_FOR\_CALL parameter indicates to which \_
consumer group the session returns after an action is taken as a result of the

SWITCH\_TIME,SWITCH\_IO\_MEGABYTES, and SWITCH\_IO\_REQS parameter settings. The SWITCH FOR CALL parameter

accepts either a TRUE or FALSE value. A TRUE value indicates that the session should return to the original consumer group, and a FALSE value, which is the default, indicates that the session should remain in the consumer group to which it was switched.

### **QUESTION 125**

You recently activated a resource plan named OLTP\_PLAN in your database. Several users are concurrently running long transactions. You decide to monitor the Resource Manager to determine if the resource allocation formulated in the OLTP\_PLAN is sufficient for peak database hours.

Which dynamic performance view should you use to display the CPU time consumed by all the sessions within the resource groups?

- A. V\$SYSSTAT
- B. V\$SESSSTAT
- C. V\$RSRC PLAN
- D. V\$RSRC CONSUMER GROUP

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should use the V\$RSRC\_CONSUMER\_GROUP dynamic performance view to display the CPU time consumed by all the sessions within the resource groups. The V\$RSRC\_CONSUMER\_GROUP dynamic performance view is used to monitor the CPU usage for active resource plans. The following columns are some of the columns displayed in the V\$RSRC\_CONSUMER\_GROUP dynamic performance view: name - The consumer group name

active sessions - The number of sessions active for the consumer group

requests - The total number of requests for the consumer group

cpu\_wait\_time - The total amount of time that sessions for the consumer group waited for CPU resources cpu\_waits - The total number of times that sessions for the consumer group waited for CPU resources consumed\_cpu\_time - The total amount of CPU time used by the sessions in the consumer group queue\_length - The number of sessions queued

For example, the following statement will display the cumulative amount of CPU time consumed by all the sessions in each consumer group:

SELECT name, consumed\_cpu\_time FROM V\$RSRC\_CONSUMER\_GROUP;

The V\$SYSSTAT dynamic performance view is incorrect because this view is used to display the CPU usage per session in the database.

The V\$SESSTAT dynamic performance view is incorrect because this view is used to display the aggregate CPU usage for all the sessions in the database.

The V\$RSRC\_PLAN dynamic performance view is incorrect because this view is used to display the names of all the currently active resource plans in the database.

## **QUESTION 126**

You set the undo pool resource plan directive for the consumer group named DSS\_USERS that is assigned to the DAY\_SHIFT plan.

The database users SCOTT and BLAKE belong to the DSS\_USERS resource group. The user SCOTT initiates a database session and executes a batch operation that inserts millions of rows into the HISTORY table.

Which two options are true if the total undo space allocated to the DSS\_USERS group exceeds the value specified in the undo pool resource plan directive? (Choose two.)

- A. The batch operation started by SCOTT terminates with an error.
- B. The batch operation started by SCOTT hangs, and you are required to increase the undo pool resource plan directive.
- C. The batch operation started by SCOTT runs uninterrupted because the database uses the SYSTEM tablespace for the undo operation.
- D. BLAKE cannot start a transaction that uses any DML operations until you increase the value of the undo pool resource plan directive.
- E. BLAKE can start a transaction that uses any DML operations after the batch operation started by SCOTT terminates with an error.

Correct Answer: AD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

In this scenario, the batch operation started by SCOTT terminates with an error. Also, BLAKE cannot start a transaction that uses any DML operations until you increase the value of the undo pool resource plan directive. If you set the undo pool resource plan directive for a consumer group and the total undo space used by the sessions belonging to this consumer group exceeds the amount specified in the undo pool resource plan directive, the current operation will be aborted with an error. Other sessions that have been assigned to this consumer group cannot execute the INSERT, UPDATE, and DELETE statements unless the undo space is freed by other sessions of the same group or the value of the undo pool resource plan directive the group is increased. Queries are not blocked and are allowed to execute even if the sessions exceed the undo space specified in the undo pool resource plan directive.

The option stating that the batch operation started by SCOTT hangs, and you are required to modify the undo pool resource plan directive is incorrect. The database would not hang if the total undo space used by the DSS\_USERS resource group exceeded the value of the undo pool resource plan directive. The batch operation started by the user SCOTT would be terminated with an error.

The option stating that the batch operation started by SCOTT runs uninterrupted because the database uses the SYSTEM tablespace for the undo operation is incorrect because the batch operation would be terminated with an error. In this scenario, the SYSTEM tablespace will not be used for the undo operation, and SCOTT continues to use the undo tablespace assigned to him.

The option stating that BLAKE can start a transaction that uses any DML operation after the batch operation started by SCOTT terminates with an error is incorrect. BLAKE cannot start a transaction that uses any DML operations until the undo space used by the other sessions of the DSS\_USERS group is freed or the value for the undo pool resource plan directive is increased.

## **QUESTION 127**

While creating the resource plan directive, you have specified the value of the MAX\_IDLE\_BLOCKER\_TIME parameter as 10 seconds.

What will be the impact of specifying this parameter?

- A. Any session can remain idle up to 10 seconds before the session is killed.
- B. A session locking a resource required by another session can remain idle up to 10 seconds before being

killed.

- C. A session that requires a resource that is locked by another session can remain idle up to 10 seconds before being killed.
- D. A session will execute up to 10 seconds before a group switch occurs.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

While creating a Resource Plan Directive, the MAX\_IDLE\_BLOCKER\_TIME parameter specifies the number of seconds that a blocking session can remain idle before the session is killed. A blocking session is the session that locks a resource required by another session. The default value of the

MAX\_IDLE\_BLOCKER\_TIME parameter is NULL, indicating that no idle time limit is imposed.

The option stating that any session can remain idle up to 10 seconds if the value of the

MAX\_IDLE\_BLOCKER\_TIME parameter is 10 seconds is incorrect. The MAX\_IDLE\_TIME parameter is used to define the number of seconds for which any session can remain idle before the session is killed.

The option stating that the session that requires a resource locked by another session can remain idle for up to 10 seconds is incorrect. The MAX\_IDLE\_BLOCKER\_TIME parameter is used to specify the time for which a session locking a resource required by another session can remain idle before the session is killed.

The option stating that if the value of the MAX\_IDLE\_BLOCKER\_TIME parameter is 10 seconds, a session will execute up to 10 seconds before a group switch will occur is incorrect. The SWITCH\_TIME parameter is used to specify the number of seconds a session can execute before some action is taken. The default value is NULL, which indicates that no limit is imposed.

## **QUESTION 128**

You are using the Database Resource Manager to manage database resources. You created a resource plan directive for the MANAGERS resource consumer group under the SALES\_PLAN using the following statement:

SQL>EXEC DBMS\_RESOURCE\_MANAGER.CREATE\_PLAN\_DIRECTIVE (
PLAN => 'SALES\_PLAN', GROUP\_OR\_SUBPLAN => 'MANAGERS', MGMT\_P1 => 100,

MGMT\_P2 => 0, SWITCH GROUP => 'CLERKS', SWITCH IO REQS => 5000, SWITCH IO MEGABYTES => 1000,

SWITCH\_FOR\_CALL => TRUE);
A user, SCOTT, who is assigned to the MANAGERS group, starts a database session and executes a query on the database.

What is the outcome if the query takes approximately 8,000 I/O requests to complete?

- A. The query starts under the CLERKS group, and SCOTT's session automatically switches back to the MANAGERS group after the query completes.
- B. The query starts under the MANAGERS group, but terminates with an error when the execution time exceeds 10 minutes.
- C. The query starts under the MANAGERS group, and SCOTT's session automatically switches back to the CLERKS group when the execution time of the query exceeds 10 minutes.
- D. The query starts under the MANAGERS group, and SCOTT's session automatically switches back to the CLERKS group when the I/O requests exceed 5,000. It then switches back to the MANAGERS group after the query completes.

Correct Answer: D Section: (none) Explanation

### Explanation/Reference:

**Explanation:** 

In this scenario, the query starts under the MANAGERS group, and the user SCOTT's session switches automatically to the CLERKS group when the I/O requests exceed 5,000. It then finally switches back to the

MANAGERS group after the query completes. According to the plan directive for the MANAGERS resource group, the SWITCH\_GROUP parameter specifies the resource group to which a user session is switched when the switch condition is met. In this scenario, you specified the SWITCH\_IO\_REQS and SWITCH\_IO\_MEGABYTES parameters, which indicates that the switch condition will be met if the number of I/O requests exceeds 5,000 or if the number of megabytes of I/O exceeds 1,000. You also specified the SWITCH\_FOR\_CALL parameter. The SWITCH\_FOR\_CALL parameter indicates to which consumer group the session returns after an action is taken as a result of the SWITCH\_TIME, SWITCH\_IO\_MEGABYTES, and SWITCH\_IO\_REQS parameter settings. The SWITCH\_FOR\_CALL parameter accepts a TRUE or FALSE value. A TRUE value indicates that the session should return to the original consumer group, and a FALSE value, which is the default, indicates that the session should remain in the consumer group to which it was switched.

The option stating that the query starts under the CLERKS group and the user SCOTT switches back to the MANAGERS group after the query completes is incorrect. The query initially starts under the MANAGERS resource group.

The option stating that the query starts under the MANAGERS group but terminates with an error when the execution time exceeds 10 minutes is incorrect. The query starts under the MANAGERS resource group but would not terminate with an error when the execution time exceeds 10 minutes.

## **QUESTION 129**

You want to create the resource plan directives for the IT\_MANAGERS group to enforce the following requirements:

If a user starts an operation, Oracle should estimate the execution time for the operation before starting the operation.

If the estimated execution time is more than 600 seconds, the operation should be allowed to run under the LOW GROUP consumer group.

If the estimated execution time is more than 5,400 seconds, the operation should not be allowed to start.

After switching to the LOW\_GROUP consumer group, the switched sessions should not be switched back to the IT MANAGERS group.

Which statement must you execute to create the resource plan directives for the IT\_MANAGERS group?

```
A. EXEC DBMS RESOURCE MANAGER.CREATE PLAN DIRECTIVE (PLAN => 'DSS PLAN',
  GROUP OR SUBPLAN => 'IT MANAGERS',
  MGMT P1 => 100, MGMT P2 => 0,
  SWITCH GROUP => 'LOW GROUP',
  SWITCH_ESTIMATE => TRUE,
  SWITCH_TIME => 5400);
B. EXEC DBMS RESOURCE MANAGER.CREATE PLAN DIRECTIVE (PLAN => 'DSS PLAN',
  GROUP_OR_SUBPLAN => 'IT_MANAGERS',
  MGMT P1 => 100, MGMT P2 => 0,
  SWITCH GROUP => 'LOW GROUP',
  SWITCH ESTIMATE => FALSE,
  SWITCH_TIME => 600,
  MAX_EST_EXEC_TIME => 5400);
C. EXEC DBMS RESOURCE MANAGER.CREATE PLAN DIRECTIVE (PLAN => 'DSS PLAN',
  GROUP_OR_SUBPLAN => 'IT_MANAGERS',
  MGMT P1 => 100, MGMT P2 => 0,
  SWITCH GROUP => 'LOW GROUP',
  SWITCH ESTIMATE => TRUE.
  SWITCH TIME => 600,
  MAX EST EXEC TIME => 5400);
D. EXEC DBMS RESOURCE MANAGER.CREATE PLAN DIRECTIVE
  (PLAN => 'DSS PLAN',
```

MGMT\_P1 => 100, MGMT\_P2 => 0, SWITCH\_GROUP => 'LOW GROUP', SWITCH ESTIMATE =>

TRUE, SWITCH FOR CALL => TRUE, MAX EST EXEC TIME => 5400);

Correct Answer: C

GROUP\_OR\_SUBPLAN => 'IT\_MANAGERS',

Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

In this scenario, you must execute the following statement to create the resource plan directives for the IT MANAGERS resource group:

EXEC DBMS\_RESOURCE\_MANAGER.CREATE\_PLAN\_DIRECTIVE (PLAN => 'DSS\_PLAN', GROUP OR SUBPLAN => 'IT MANAGERS'.

MGMT\_P1 => 100, MGMT\_P2 => 0, SWITCH\_GROUP => 'LOW\_GROUP', SWITCH\_ESTIMATE => TRUE,

SWITCH TIME => 600,

## MAX\_EST\_EXEC\_TIME => 5400);

You must set the value of the SWITCH GROUP parameter of the CREATE PLAN DIRECTIVE procedure to LOW GROUP to ensure that the user session is switched to the LOW GROUP resource group when the estimated execution time is more than 600 seconds. The SWITCH\_GROUP parameter specifies the resource consumer group to which the user sessions will be switched if the switch criteria are met. You must set the value of the SWITCH ESTIMATE parameter to TRUE so that Oracle will estimate the execution time for an operation before starting the operation. If the estimated execution time exceeds the time allowed specified by the SWITCH\_TIME parameter to complete an operation, the user session automatically switches to the consumer group before starting the operation. If the SWITCH ESTIMATE parameter is set to FALSE, then Oracle will not calculate the estimated execution time and will start the operation under the current resource group. During execution, the user session is switched to the consumer group only when the execution time exceeds the time allowed to complete the operation. You must set the value of the SWITCH\_TIME parameter to 600 because the user session should be switched to the LOW GROUP resource group if the execution time is more than 600 seconds. You must set the value of the MAX\_EST\_EXEC\_TIME parameter to 5400 to ensure that Oracle estimates the execution time to complete the operation before starting the operation. If the estimated execution time exceeds the maximum time allowed for an operation, the operation will not be started.

All of the other options are incorrect because they do not provide the correct parameters to the CREATE\_PLAN\_DIRECTIVE procedure to meet the requirements in this scenario.

The SWITCH\_FOR\_CALL parameter indicates to which consumer group the session returns after an action is taken as a result of the SWITCH\_TIME, SWITCH\_IO\_MEGABYTES, and SWITCH\_IO\_REQS parameter settings. The SWITCH\_FOR\_CALL parameter accepts a TRUE or FALSE value. A TRUE value indicates that the session should return to the original consumer group, and a FALSE value, which is the default, indicates that the session should remain in the consumer group to which it was switched.

### **QUESTION 130**

You are monitoring the Resource Manager. You query the V\$RSRC\_CONSUMER\_GROUP dynamic performance view.

Which statement about the columns of the V\$RSRC\_CONSUMER\_GROUP view is NOT true?

- A. The requests column displays the total number of requests for a session.
- B. A queue\_length column value greater than zero indicates that new sessions will be queued.
- C. The current\_undo\_consumption column displays the amount of undo space currently used by the consumer group.
- D. The cpu\_waits column displays the total number of times that sessions for the consumer group waited for CPU resources.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The requests column displays the total number of requests for the consumer group, not a session.

All of the other options are incorrect because they are true about the columns of the

V\$RSRC\_CONSUMER\_GROUP view. The V\$RSRC\_CONSUMER\_GROUP dynamic performance view is used to monitor the CPU usage for the active resource plan. The following columns are some of the columns displayed in the V\$RSRC\_CONSUMER\_GROUP dynamic performance view:

name - The consumer group name

active\_sessions - The number of sessions active for the consumer group

requests - The total number of requests for the consumer group

cpu\_wait\_time - The total amount of time that sessions for the consumer group waited for CPU resources cpu\_waits - The total number of times that sessions for the consumer group waited for CPU resources consumed\_cpu\_time - The total amount of CPU time used by the sessions in the consumer group queue\_length - The number of sessions queued

current\_undo\_consumption - The amount of undo space currently used by the consumer group For example, the following statement will display the total amount of CPU time consumed by all the sessions in each consumer group and the total number of times sessions in the consumer group waited for CPU resources:

SELECT name, consumed cpu time, cpu waits FROM V\$RSRC CONSUMER aOUT);

You should note that the cpu\_waits and cpu\_wait\_time columns do not include waits related to I/O or latch contention. These columns only include the CPU waits that occurred because of resource management. The V\$SYSSTAT dynamic performance view is incorrect because this view is used to display the CPU usage per session in the database.

The V\$SESSTAT dynamic performance view is incorrect because this view is used to display the aggregate CPU usage for all the sessions in the database.

The V\$RSRC\_PLAN dynamic performance view is incorrect because this view is used to display the names of all the currently active resource plans in the database.

### **QUESTION 131**

For which two situations would you use functionality provided by the Resource Manager? (Choose two.)

- A. setting idle timeout limits on resource plans
- B. saving storage space by using compressed backup sets
- C. creating jobs that will run automatically at a scheduled time
- D. assigning priorities to jobs to manage access to system resources
- E. creating alerts to perform notification when tablespaces are low on available space resources

Correct Answer: AD Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The Resource Manager provides the functionality of setting idle timeout limits on resource plans and assigning priorities to jobs to manage access to system resources. The Resource Manager feature of an Oracle database provides a set of APIs that allow you to manage resources automatically. The Resource Manager allows you to distribute processing resources to users so that they are used efficiently, create undo pools to be used by specific groups of users, create session pools for users, limit the number of active sessions for a specific group of users, and prevent processing-intensive jobs from executing longer than expected or from generating more I/O than you specify.

RMAN provides the functionality of saving storage space by using compressed backup sets.

The Scheduler provides the functionality of creating jobs that will run automatically at a scheduled time. The Tablespace Monitoring feature provides the functionality of creating alerts to perform notification when tablespaces are low on available space resources.

Monitoring and Tuning RMAN

## **QUESTION 132**

You issue the following query to monitor RMAN I/O performance:

SELECT filename, long\_wait\_time\_total, long\_waits/io\_count waitratio FROM V\$BACKUP\_ASYNC\_IO; In the query output, what would indicate that a disk group is causing an asynchronous I/O bottleneck?

- A. The disk group's LONG\_WAIT\_TIME\_TOTAL is zero.
- B. The disk group's LONG\_WAIT\_TIME\_TOTAL is larger than its WAITRATIO.
- C. The disk group's WAITRATIO value is greater than that of the other disk groups.
- D. The disk group's WAITRATIO value is less than that of the other disk groups.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

If a disk group's WAITRATIO value is greater than that of the other disk groups, then it is most likely the cause of an asynchronous I/O bottleneck. The V\$BACKUP\_ASYNC\_IO view is used to monitor asynchronous I/O and identify asynchronous I/O bottlenecks. The LONG\_WAITS column indicates the number of times a blocking wait was issued and the OS had to wait until I/O completed. The IO\_COUNT column indicates the number of I/Os performed. To determine which file is causing an asynchronous I/O bottleneck, you should divide the LONG\_WAITS column by the IO\_COUNT column. The file with the largest value for this ratio is most likely the cause of the asynchronous I/O bottleneck.

The option that states a disk group's LONG\_WAIT\_TIME\_TOTAL being zero indicates an asynchronous I/O bottleneck is incorrect. The LONG\_WAIT\_TIME\_TOTAL column indicates the total time of blocking waits. To avoid asynchronous I/O bottlenecks, this value and the value of SHORT\_WAIT\_TIME\_TOTAL should be zero. The option that states a disk group's LONG\_WAIT\_TIME\_TOTAL being larger than its WAITRATIO indicates an asynchronous I/O bottleneck is incorrect. The relationship between these two values does not allow you to infer anything about asynchronous I/O bottlenecks.

The option that states a disk group's WAITRATIO value being less than that of other disk groups indicates an asynchronous I/O bottleneck is incorrect. A large value for this ratio, not a small value, indicates a bottleneck.

### **QUESTION 133**

You are using RMAN to perform database backups. Your database is running in ARCHIVELOG mode. You are backing up your database, containing six datafiles, using a single channel with the following RMAN RUN block:

RUN {

ALLOCATE CHANNEL c1 DEVICE TYPE disk MAXOPENFILES 3; BACKUP DATABASE FILESPERSET 6;

Which statement about the backup is true?

- A. The backup created is a multisection backup.
- B. RMAN reads three files at a time and writes to the backup piece.
- C. The RMAN multiplexing level for this backup is 6.
- D. The backup fails because the MAXOPENFILES value is too small.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

With the given BACKUP command, RMAN reads three files at a time on the channel and writes to the backup piece. In this scenario, you allocate one channel for the backup and specify a MAXOPENFILES value of 3. The MAXOPENFILES option specifies the number of datafiles that RMAN can simultaneously read on the channel. Therefore, RMAN will read three files at a time and write them to the backup piece. The BACKUP DATABASE command includes a FILESPERSET value of 6. The FILESPERSET option specifies the maximum number of datafiles RMAN will include in each backup set. With these settings, RMAN reads the first three datafiles simultaneously and writes to the backup piece, and then reads the remaining three datafiles simultaneously and writes to the backup piece, creating a single backup set.

The option that states the backup created is a multisection backup is incorrect. To create a multisection backup, you specify the SECTION SIZE parameter in the RMAN BACKUP command, which you did not

specify in this scenario.

The option that states the RMAN multiplexing level for this backup is 6 is incorrect. With RMAN, the multiplexing level is determined using the values of the FILESPERSET and MAXOPENFILES options. First, you determine the number of files in each backup set. This value is derived. This is either the number of files read by each channel or the FILEPERSET value, whichever is lower. Then, you can determine the level of multiplexing. The level of multiplexing represents the number of input files RMAN simultaneously reads and writes into the same backup piece. The level of multiplexing is either the MAXOPENFILES value or the number of files in each backup set, whichever is smaller. In this scenario, the level of multiplexing would be 3. The option that states the backup fails because the MAXOPENFILES value is too small is incorrect. The MAXOPENFILES value is acceptable and the backup runs successfully.

#### **QUESTION 134**

In which scenario would you adjust the tape buffer size by specifying the BLKSIZE option in your CONFIGURE CHANNEL RMAN command?

- A. to limit the size of backup pieces within a backup set
- B. to control the number of bytes per second that RMAN reads for the channel
- C. to specify the maximum number of open input files during a backup
- D. to adjust the size of the tape buffer so tape streaming will be performed

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You would adjust the tape buffer size by specifying the BLKSIZE option in your CONFIGURE CHANNEL RMAN command to adjust the size of the tape buffer so that tape streaming will be performed. The block size specifies the amount of data that can be written in a single operation.

You would not use the BLKSIZE option to limit the size of backup pieces within a backup set. The MAXPIECESIZE parameter is used to limit the size of backup pieces.

You would not use the BLKSIZE option to control the number of bytes per second that RMAN reads for the channel. The RATE parameter is used to control the number of bytes per second RMAN reads for a channel. You would not use the BLKSIZE option to specify the maximum number of open input files during a backup. The MAXOPENFILES parameter indicates the maximum number of files that can be open concurrently during a backup or copy.

# **QUESTION 135**

You are using RMAN for backup and recovery. You want to configure RMAN to perform parallel backups to increase performance.

Which two actions could you take to accomplish this? (Choose two.)

- A. Use the RMAN CONFIGURE command to set BACKUP OPTIMIZATION to ON.
- B. Use the RMAN CONFIGURE command and set the PARALLELISM option to the specified value before performing the backups.
- C. Remove all ALLOCATE CHANNEL commands from your RMAN RUN block.
- D. Within a session, manually allocate multiple channels before performing the backup.

Correct Answer: BD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

To accomplish the desired objective, you could perform either of the following tasks:

Use the RMAN CONFIGURE command and set the PARALLELISM option to the specified value before performing the backups.

Within a session, manually allocate multiple channels before performing the backup.

In this scenario, you want to increase performance by performing backups in parallel using multiple channels. To accomplish this, you can use the RMAN CONFIGURE command to configure the desired number of automatic channels that RMAN allocates for all jobs. This setting will persist across all sessions. If you have configured RMAN to perform backups and restores using multiple channels and decide later that you want to change this persistent setting, you can issue another CONFIGURE command to change this setting for a specific device type. The PARALLELISM option specifies the number of channels that RMAN allocates for all backups and restores. The same number of channels will be used during instance recovery. Automatic channels that are configured using the CONFIGURE command apply to all RMAN jobs. However, if you want to override this, you can manually allocate channels within a RUN block using the ALLOCATE CHANNEL command. If you include multiple ALLOCATE CHANNEL commands within your RUN block and back up more than one file, RMAN will perform the backup in parallel using the channels you allocated. For example, you could use the following RUN block, and RMAN would use parallelization during the backup: RUN {

ALLOCATE CHANNEL c1 DEVICE TYPE sbt; ALLOCATE CHANNEL c2 DEVICE TYPE sbt; ALLOCATE CHANNEL c3 DEVICE TYPE sbt; BACKUP

INCREMENTAL LEVEL = 0

(DATAFILE 1,2,3 CHANNEL c1)

(DATAFILE 4,5,6 CHANNEL c2)

(DATAFILE 7,8,9 CHANNEL c3);

The option that states you should use the RMAN CONFIGURE command to set BACKUP OPTIMIZATION to ON is incorrect. Backup optimization is used to instruct RMAN not to back up files that have already been successfully backed up. This minimizes the time required for RMAN to perform the backup.

The option that states you should remove all ALLOCATE CHANNEL commands from your RMAN RUN block is incorrect. To perform parallelization, you include multiple ALLOCATE CHANNEL commands within your RUN block. Alternatively, you can set the PARALLELISM option using the CONFIGURE command and omit ALLOCATE CHANNEL commands in your RUN block.

### **QUESTION 136**

You are tuning RMAN to optimize performance. You want tape I/O to be asynchronous when you perform tape backups.

Which action should you take?

- A. Set the BACKUP\_TAPE\_IO\_SLAVES parameter to FALSE.
- B. Set the BACKUP\_TAPE\_IO\_SLAVES parameter to TRUE.
- C. Use compression when performing tape backups.
- D. Configure multiple SBT channels.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should set the BACKUP\_TAPE\_IO\_SLAVES parameter to TRUE. When this parameter is set to TRUE, RMAN uses I/O server processes to perform reads and writes when performing backups, copies, or restores to or from tape. When asynchronous tape I/O is configured, tape buffers are allocated from the SGA, rather than the PGA. With asynchronous I/O, the server process can perform multiple I/O operations at the same time. For example, it can begin a read/write operation and perform other tasks while waiting for the current I/O operation to finish. You should note that the support for asynchronous I/O is dependent on the operating system. Not all operating systems support asynchronous tape I/O.

You should not set the BACKUP\_TAPE\_IO\_SLAVES parameter to FALSE. This would configure RMAN to use synchronous tape I/O, which is the default value. With synchronous tape I/O, a server process can perform only one operation at a time, and tape buffers are allocated from the PGA.

All of the other options are incorrect. Using compression or multiple channels does not configure RMAN to use asynchronous tape I/O.

### **QUESTION 137**

You are using RMAN for backup and recovery. You perform a full database backup using the following RMAN command:

**BACKUP DATABASE FILESPERSET 5**;

While the backup is running, you periodically query the V\$SESSION\_LONGOPS dynamic view to monitor the progress of the backup.

Which two statements are true about the information available in the V\$SESSION\_LONGOPS view? (Choose two.)

- A. Each row provides information about a single RMAN BACKUP or RESTORE command.
- B. Each detail row provides information about the files being processed by a single RMAN BACKUP or RESTORE command.
- C. Each detail row provides information about the files being processed by a single job step.
- D. Each aggregate row is updated at the completion of a job step.
- E. Each aggregate row contains information about all the RMAN backup and restore operations performed during the current session.

Correct Answer: CD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The following two statements are true about the V\$SESSION LONGOPS view:

Each detail row provides information about the files being processed by a single job step.

Each aggregate row is updated at the completion of a job step.

In this scenario, you are monitoring an RMAN backup using the V\$SESSION\_LONGOPS view. The V\$SESSION\_LONGOPS view contains information that you can use to monitor RMAN backup and restore jobs. The view contains detail rows that provide information about the files being processed by a single job step, which is the processing of a single backup set or datafile copy. The view also contains aggregate rows that provide information about the files processed by all job steps for an RMAN BACKUP or RESTORE command. In this scenario, you issued an RMAN BACKUP command that included the FILESPERSET clause. The FILESPERSET clause specifies the number of files to be included in each backup set created during the backup. For example, in this scenario, RMAN will split the backup into separate backup sets, including five files per backup set. In the V\$SESSION\_LONGOPS view, each detail row for this backup will provide information about the files being processed for a single backup set, and the aggregate row for this backup will provide information about all the files being processed by the BACKUP command you issued.

For RMAN jobs, you can query the following columns in the V\$SESSION\_LONGOPS dynamic view:

SID - The session ID for the RMAN channel

SERIAL# - The serial number of the server session

OPNAME - A description of what the row includes, such as RMAN: datafile copy, RMAN: full datafile backup, RMAN full datafile restore, RMAN: aggregate input, or RMAN: aggregate output

CONTEXT - The context associated with the row, which is 2 for rows pertaining to backup output and 1 for other types of rows, except rows associated with proxy copies

SOFAR - The work completed at the time the query is issued, which is the number of blocks read for image copies, the number of blocks read for files being backed up, the number of blocks written to the backup piece for backups, the number of blocks processed by a single job step for restores, and the number of files copied for proxy copies

TOTALWORK - The work to be performed at the time the query was issued, which is the total number of blocks in the file for image copies, the total number of blocks to be read for files backed up by a single job step for backups, the number of blocks in all files to be restored in a single job step for restores, or the number of files to be copied in a single job step for proxy copies

For example, in this scenario, you could issue the following query to monitor the progress of the BACKUP command at a detail level, and it would provide information about the progress as each backup set was created:

SELECT sid, opname, context, sofar, totalwork, ROUND(sofar/totalwork, 2) "% Complete" FROM V\$SESSION\_LONGOPS WHERE opname LIKE 'RMAN%'

```
AND opname NOT LIKE '%aggregate%'
AND totalwork != 0
AND sofar <> totalwork;
You could issue the following query to monitor the progress of the entire BACKUP command you issued:
SELECT sid, opname, context, sofar, totalwork, ROUND(sofar/totalwork, 2) "% Complete"
```

FROM V\$SESSION\_LONGOPS WHERE opname LIKE 'RMAN%' AND opname LIKE '%aggregate%' AND totalwork != 0

AND sofar <> totalwork:

The option that states each row provides information about a single RMAN BACKUP or RESTORE command is incorrect. The view provides detail and aggregate rows. Detail rows provide information for each job step, and aggregate rows provide information for the entire RMAN BACKUP or RESTORE command.

The option that states each detail row provides information about the files being processed by a single RMAN BACKUP or RESTORE command is incorrect. Each detail row provides information about the files being processed in a single job step, which is a backup set or datafile copy.

The option that states each aggregate row contains information about all the RMAN backup and restore operations performed during the current session is incorrect. Each aggregate row contains information about a single RMAN BACKUP or RESTORE command.

### **QUESTION 138**

You want to perform RMAN backup operations in different RMAN sessions. You want to be able to monitor the progress of the backup jobs using the V\$PROCESS and V\$SESSION views, and you want to be able to easily correlate the server sessions with the channel that is being used for each backup. Which action should you take to accomplish this?

- A. In each session, use the CONFIGURE command to instruct RMAN to capture session information.
- B. Query the V\$SESSION LONGOPS view instead of the V\$PROCESS and V\$SESSION views.
- C. In each session, use the SET COMMAND ID command to set the command ID to a unique value before performing the backup.
- D. Set the STATISTICS LEVEL initialization parameter to ALL.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

In each session, you should use the SET COMMAND ID command to set the command ID to a unique value before performing the backup. When you issue the SET COMMAND ID command, the value you specify for the command ID is recorded in the CLIENT\_INFO column of the V\$SESSION view for all allocated channels. This additional information will help you easily correlate server sessions to channels. For example, in one session, you could use the following RMAN backup script:

```
RUN
{
ALLOCATE CHANNEL c1 TYPE disk;
SET COMMAND ID TO 'sessa';
BACKUP DATABASE;
}
In another session, you could use the following RMAN backup script:
RUN
{
ALLOCATE CHANNEL c1 TYPE sbt;
SET COMMAND ID TO 'sessb';
BACKUP DATABASE;
}
```

Each of these scripts issues the SET COMMAND ID command that specifies a different value after allocating the channel and before performing the backup. Therefore, the additional session information will be recorded

in V\$SESSION.CLIENT\_INFO in the format id=command\_id, rman channel=channel\_id. You can also identify which server sessions are using which channels by using the sid value displayed in the output of an RMAN command in your SQL query.

The option that states in each session you should use the CONFIGURE command to instruct RMAN to capture session information is incorrect. The CONFIGURE command is used to set persistent RMAN configuration settings that will remain in effect for all sessions. However, there is no option available for the CONFIGURE command that instructs RMAN to capture session information.

The option that states you should query the V\$SESSION\_LONGOPS view instead of the V\$PROCESS and V\$SESSION views is incorrect. The V\$SESSION\_LONGOPS view can be used to monitor the progress of backup, restore, and copy jobs, but it does not contain the channel and session information that is required in this scenario.

The option that states you should set the STATISTICS\_LEVEL initialization parameter to ALL is incorrect. Setting the STATISTICS\_LEVEL initialization parameter does not affect the information that is captured about channels being used for RMAN operations.

### **QUESTION 139**

You want to perform fully automated Tablespace Point-in-Time Recovery (TSPITR) using RMAN to recover the TBS1 tablespace.

Which two tasks does RMAN NOT perform when performing fully automated TSPITR? (Choose two.)

- A. creating the auxiliary instance
- B. restoring a backup control file to the auxiliary instance
- C. configuring the needed channels
- D. bringing the recovered tablespaces back online
- E. restoring datafiles from the recovery set and auxiliary set

Correct Answer: CD Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

When performing fully automated TSPITR, RMAN does not configure the needed channels or bring the recovered tablespaces back online. When performing fully automated TSPITR, you must configure the channels needed for performing the recovery, and you must issue a RECOVER TABLESPACE command that includes the AUXILIARY DESTINATION clause. RMAN then performs the following tasks for you automatically:

Creates the auxiliary instance at the destination you specified in the AUXILIARY DESTINATION clause.

Starts the auxiliary instance it created, and connects to it.

Takes the tablespaces you specified in the RECOVER command offline.

Restores a backup control file to the auxiliary instance based on the UNTIL clause specified in the RECOVER command.

Restores the needed datafiles from the recovery set.

Restores the datafiles from the auxiliary set.

Recovers the datafiles restored to the time specified in the UNTIL clause of the RECOVER command.

Opens the auxiliary database using the RESETLOGS option.

Exports and re-imports dictionary metadata into the target database.

Deletes all files, including all auxiliary set datafiles, from the auxiliary destination.

When RMAN completes these tasks, the recovered tablespaces remain offline. You should then back up the recovered tablespaces because any backups prior to the TSPITR are unusable. Finally, you can bring the recovered tablespaces back online.

All of the other options are incorrect because they are tasks that RMAN performs during fully automated TSPITR.

## **QUESTION 140**

You want to use Tablespace Point-in-Time Recovery (TSPITR) to recover the TBS1 tablespace to a point in time in the past. However, you are concerned that additional database objects have been created in the TBS1 tablespace that may be lost as a result of performing TSPITR.

What is the first action you should take?

- A. Export all objects in the TBS1 tablespace using Data Pump Export.
- B. Take the TBS1 tablespace offline and back it up.
- C. Query the TS\_PITR\_OBJECTS\_TO\_BE\_DROPPED view.
- D. Rename all the objects in the TBS1 tablespace, giving each a dummy name.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The first action you should take is to query the TS\_PITR\_OBJECTS\_TO\_BE\_DROPPED view. The TS\_PITR\_OBJECTS\_TO\_BE\_DROPPED view contains information you can use to identify which database objects might be lost when performing TSPITR. The TS\_PITR\_OBJECTS\_TO\_BE\_DROPPED view contains the following columns:

OWNER - The owner of the object NAME - The name of the object

CREATION\_TIME - The timestamp at which the object was created

TABLESPACE NAME - The tablespace in which the object resides

You should query this view using TABLESPACE\_NAME and CREATION\_TIME in the query's WHERE clause to identify the objects that will be lost when performing TSPITR. For example, in this scenario, if you wanted to use a recovery point in time of July 25, 2008, 9:30:00 A.M., you could issue the following SELECT statement to identify the objects that would be lost during TSPITR:

SELECT owner, name

FROM TS\_PITR\_OBJECTS\_TO\_BE\_DROPPED

WHERE tablespace\_name = 'TBS1'

AND creation\_time > TO\_DATE('08-JUL-25:09:30:00', 'YY-MON-DD:HH24:MI:SS');

If you want to preserve the objects identified by the query results, you can export the objects before performing TSPITR, perform the TSPITR, and then re-import the objects after the TSPITR is complete.

The option that states you should export all objects in the TBS1 tablespace using Data Pump Export is incorrect. You would first determine if, in fact, any objects at all will be lost by querying the

TS\_PITR\_OBJECTS\_TO\_BE\_DROPPED view. If you discover that many database objects will be lost, then you can use Data Pump Import and Export to avoid losing these objects. Before performing TSPITR, you would perform an export that contained the objects to be lost, and then perform an import after the TSPITR was complete.

The option that states you should take the TBS1 tablespace offline and back it up is incorrect. Having a backup of the TBS1 tablespace would allow you to restore that tablespace later, and you could then analyze which objects were lost, and recover them. However, this would require much more effort. In this scenario, the first action you should take is to determine if any objects will even be lost during TSPITR.

The option that states you should rename all the objects in the TBS1 tablespace, giving each a dummy name is incorrect because the objects will be lost during TSPITR. TSPITR recovers the tablespace to the specified time in the past and will not recover database objects created or renamed since the recovery point in time.

# **QUESTION 141**

Which statement about Tablespace Point-in-Time Recovery (TSPITR) is true?

- A. If you are not using a recovery catalog, you can perform TSPITR only once.
- B. To successfully perform TSPITR, you must use a recovery catalog.
- C. You can perform TSPITR with a database running in NOARCHIVELOG mode.
- D. You can perform TSPITR if schema objects within the tablespace being recovered have relationships to objects in other tablespaces that are not in the recovery set.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

If you are not using a recovery catalog, you can perform TSPITR only once because, after completing TSPITR, you cannot use an earlier backup. To perform TSPITR multiple times to different target times, you must be using a recovery catalog.

The option that states to successfully perform TSPITR, you must use a recovery catalog is incorrect. You can perform TSPITR even if you are not using a recovery catalog.

The option that states you can perform TSPITR with a database running in NOARCHIVELOG mode is incorrect. To perform TSPITR, your database must be running in ARCHIVELOG mode.

The option that states you can perform TSPITR if schema objects within the tablespace being recovered have relationships to objects in other tablespaces that are not in the recovery set is incorrect. To do so, you should add the tablespace that contains the objects to the recovery set. You can also choose to remove the relationships or suspend them while you are performing TSPITR. You can use the TS\_PITR\_CHECK view to identify objects that might prevent successful TSPITR.

### **QUESTION 142**

In which scenario should you use Tablespace Point-in-Time recovery (TSPITR)?

- A. when you want to recover a tablespace that a user accidentally dropped
- B. when you want to recover the entire database up to, but not including, a specified SCN
- C. when you want duplicate a database but have the duplicate database include only a single tablespace
- D. when you want to recover a table that a user accidentally truncated without affecting other schema objects

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should use TSPITR when you want to recover a table that a user accidentally truncated without affecting other schema objects. TSPITR allows you to quickly recover a single tablespace or multiple tablespaces to a point in time in the past without affecting any other schema objects or tablespaces. You can also use TSPITR if a table in a tablespace is logically corrupt or if a user executes an erroneous DML statement that affects only a portion of the database. When you perform TSPITR, any schema objects that were created in the tablespaces after the specified point in time are not recovered. You should note that you cannot use TSPITR to recover a dropped tablespace or to recover a renamed tablespace as it existed before the rename operation. There are also restrictions on the types of objects you can recover using TSPITR. For example, with TSPITR, you cannot recover snapshots logs and tables or tables that contain external files, VARRAY columns, or nested tables. To perform TSPITR, you use the RECOVER TABLESPACE command specifying an UNTIL clause that reflects the point in time up to which recovery should be performed.

You should not use TSPITR when you want to recover a tablespace that a user accidentally dropped. You cannot use TSPITR to recover a dropped tablespace.

You should not use TSPITR when you want to recover the entire database up to, but not including, a specified SCN. In such a situation, you would perform incomplete recovery using the UNTIL SCN clause.

You should not use TSPITR when you want duplicate an existing database but have the duplicate database include only a single tablespace. You would use the RMAN DUPLICATE command with the TABLESPACE clause to perform this task. The TABLESPACE clause specifies the tablespace(s) that should be included in the duplicate database, and all other tablespaces are excluded from the duplicate database. You should note, however, that the SYSTEM and SYSAUX tablespaces and any tablespaces containing undo segments cannot be excluded.

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### **QUESTION 143**

Your database is in ARCHIVELOG mode. You have two online redo log groups, each of which contains one redo member. When you attempt to start the database, you receive the following errors: ORA-00313: open failed for members of log group 1 of thread 1 ORA-00312: online log 1 thread 1: 'D: \REDO01.LOG'

You discover that the online redo log file of the current redo group is corrupted. Which statement should you use to resolve this issue?

- A. ALTER DATABASE DROP LOGFILE GROUP 1;
- B. ALTER DATABASE CLEAR LOGFILE GROUP 1;
- C. ALTER DATABASE CLEAR UNARCHIVED LOGFILE GROUP 1:
- D. ALTER DATABASE DROP LOGFILE MEMBER 'D:\REDO01.LOG';

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should use the ALTER DATABASE CLEAR UNARCHIVED LOGFILE GROUP 1; statement to clear the corrupted online redo log file. When you issue this statement, the contents of the online redo log file are cleared, and the log file is initialized. Because the log file has not been archived, the UNARCHIVED keyword is used. This keyword overrides the archiving of the online redo log file in the redo group, and the cleared redo log files become available for use. Immediately after issuing this statement, you should perform a database backup.

The option stating that you will use the ALTER DATABASE DROP LOGFILE GROUP 1; statement to resolve the corrupted online redo log file is incorrect. If you attempt to drop the online redo log group that belongs to a current redo group, you will receive the following errors:

ORA-01623: log 1 is current log for thread 1 cannot drop ORA-00312: online log 1 of thread 1: 'D: \REDO01.LOG'

The option stating that you will use the ALTER DATABASE CLEAR LOGFILE GROUP 1; statement to resolve the corrupted online redo log file is incorrect. If you attempt to clear an online redo log file that must be archived without using the UNARCHIVED keyword, you will receive the following errors:

ORA-00350: log 1 of thread 1 needs to be archived ORA-00312: online log 1 thread 1: 'D:\REDO01.LOG' The option stating that you will use the ALTER DATABASE DROP LOGFILE MEMBER 'D:\REDO01.LOG'; statement to resolve the corrupted online redo log file is incorrect. Oracle does not allow you to drop an online redo log member that belongs to an active or current redo group. Therefore, if you attempt to drop such a member, you will receive the following error:

ORA-00361: cannot remove last log member 'D:\redo01.log for group 1'

# **QUESTION 144**

Consider the following strategy you are using in your database:

The database is running in ARCHIVELOG mode.

You take nightly backups of all datafiles and control files.

A batch update job that dropped two tables from the DATA1 tablespace and erroneously updated another critical table in the DATA1 tablespace was run by mistake a short time ago. Because few database changes have occurred since that time, you want to perform time-based incomplete recovery by using the RECOVER DATABASE statement to recover the database as it existed before the batch update job ran.

Which two actions should you take? (Choose two.)

- A. Restore a copy of the control file from backup.
- B. Restore all datafiles from the most recent backup.
- C. Restore all datafiles in the DATA1 tablespace from the most recent backup.
- D. Issue a RECOVER DATABASE statement that includes the UNTIL TIME clause.
- E. Identify the SCN at which the tables were dropped.
- F. Issue a RECOVER DATABASE statement that includes the UNTIL SCN clause.

Correct Answer: BD Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should restore all datafiles from the most recent backup and issue a RECOVER DATABASE statement that includes the UNTIL TIME clause. In this scenario, you want to perform time-based incomplete recovery to recover the database to the point in time before the batch update job ran. First, you should shut down the database. With the database closed, you should restore all of the datafiles from the most recent backup. After restoring all of the datafiles, you can mount the database and perform the recovery. In this scenario, you want to recover to a specific point in time, so you should issue a RECOVER DATABASE statement including the UNTIL TIME clause. You should note that after the recovery is complete, any database changes made after the time specified in the UNTIL TIME clause must be reentered.

You should not restore a copy of the control file from backup because you have not lost the control file. You should not restore all datafiles in the DATA1 tablespace from the most recent backup. You need to restore all the datafiles, not just the ones in the DATA1 tablespace, because other datafiles in other tablespaces may have also changed since the batch job was run.

You should not identify the SCN at which the tables were dropped and issue a RECOVER DATABASE statement that includes the UNTIL SCN clause. In this scenario, you want to perform time-based incomplete recovery. To perform time-based incomplete recovery, you use the UNTIL TIME clause, not the UNTIL SCN clause. The UNTIL SCN clause can be used to recover the database to a particular SCN.

## **QUESTION 145**

Your database is running in ARCHIVELOG mode. You took the binary backup of the control file. Which statement should you execute from the SQL\*Plus prompt?

- A. BACKUP CURRENT CONTROLFILE:
- B. CONFIGURE CONTROLFILE AUTOBACKUP ON;
- C. ALTER DATABASE BACKUP CONTROLFILE TO filename;
- D. ALTER DATABASE BACKUP CONTROLFILE TO TRACE;

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should execute the ALTER DATABASE BACKUP CONTROLFILE filename; statement. This statement generates a binary backup of the control file while the database is open. A binary backup contains more information than a backup created using the ALTER DATABASE BACKUP CONTROLFILE TO TRACE; statement. The additional information includes archived redo log history, tempfile entries, and offline range for read-only and offline tablespaces. You should note that it is important to back up the control file each time the structure of the database is changed, such as when datafiles are added, renamed, or dropped. You can use this binary copy of the control file to perform recovery if all control file copies are lost. You can restore the control file to its original location if it is still a valid location, or you can restore it to an alternate location. If all control file copies are lost, and the online redo logs and archived logs are available, you can restore the backup control file, perform complete recovery, and then open the database using the RESETLOGS option. You should not execute the ALTER DATABASE BACKUP CONTROLFILE TO TRACE; statement. This statement generates an ASCII representation of the binary control file as an Oracle trace file. This file is effectively a script that contains a CREATE CONTROLFILE statement that can be used to rebuild the binary control file

All of the other options are incorrect. In this scenario, RMAN is not used. BACKUP CURRENT CONTROLFILE and CONFIGURE CONTROLFILE AUTOBACKUP are RMAN commands.

# **QUESTION 146**

You issued the following statement:
ALTER DATABASE BACKUP CONTROLFILE TO TRACE;
What will be the result of issuing the statement?

- A. The control file will be re-created.
- B. The control file will be multiplexed.

- C. A script containing the CREATE CONTROLFILE statement will be created.
- D. A binary backup of the control file will be created.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

A script containing the CREATE CONTROLFILE statement will be created by using the ALTER DATABASE BACKUP CONTROLFILE TO TRACE; statement. This command generates an ASCII representation of the binary control file as an Oracle trace file. This file can be used to rebuild the binary control file. You should note that it is important to back up the control file each time the structure of the database is changed, such as when datafiles are added, renamed, or dropped.

The option stating that the control file will be multiplexed is incorrect. The control file is multiplexed by copying the control file to another disk and by making the changes in the initialization parameter file, the SPFILE, and the current control file.

The option stating that the control file will be re-created is incorrect. To re-create the control file, you would run the script created by the ALTER DATABASE BACKUP CONTROLFILE TO TRACE; statement. The option stating that a binary backup of the control file will be created is incorrect. A binary backup would be created by executing the ALTER DATABASE BACKUP CONTROLFILE TO filename; statement. A binary backup contains more information than a backup created using the ALTER DATABASE BACKUP CONTROLFILE TO TRACE; statement. The additional information includes archived redo log history, tempfile entries, and offline range for read-only and offline tablespaces. You can use this binary copy of the control file to perform recovery if all control file copies are lost.

### **QUESTION 147**

Your database is running in ARCHIVELOG mode. You are performing a user-managed backup of the DATA1 tablespace. You place the DATA1 tablespace in backup mode by issuing the following statement: ALTER TABLESPACE data1 BEGIN BACKUP:

While you are performing the backup, an error occurs that causes the instance to terminate abnormally. Which statement about the DATA1 tablespace is true?

- A. The DATA1 tablespace is automatically taken out of backup mode when the instance aborts.
- B. If you restart the database, the DATA1 tablespace will be automatically taken out of backup mode when the database is opened.
- C. If you restart the database, the DATA1 tablespace will be automatically taken out of backup mode when the database is mounted.
- D. If you restart the database, the database will not be opened.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

If you restart the database, the database will not be opened. The database will reach the MOUNT state, but will not be opened. An error will be generated indicating that media recovery is required. To successfully open the database, you should take the tablespace out of backup mode. You can do so by issuing the ALTER TABLESPACE data1 END BACKUP; statement, or you can issue an ALTER DATABASE END BACKUP; statement, which will take all datafiles in all tablespaces out of back up mode.

All of the other options are incorrect. The DATA1 tablespace is automatically taken out of backup mode when the instance aborts, when the instance is opened, or when the instance is mounted.

# **QUESTION 148**

Which statement about recovering from the loss of a redo log group is true?

- A. If the lost redo log group is ACTIVE, you should first attempt to clear the log file.
- B. If the lost redo log group is CURRENT, you must clear the log file.
- C. If the lost redo log group is ACTIVE, you must restore, perform cancel-based incomplete recovery, and open the database using the RESETLOGS option.
- D. If the lost redo log group is CURRENT, you must restore, perform cancel-based incomplete recovery, and open the database using the RESETLOGS option.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

If the lost redo log group is CURRENT, you must restore, perform cancel-based incomplete recovery, and open the database using the RESETLOGS option. A redo log group with a CURRENT status indicates that LGWR is currently writing to it. To recover from this failure, you must restore the database from a whole backup and perform cancel-based incomplete recovery. Then, you should open the database using the RESETLOGS option.

The option that states if the lost redo log group is ACTIVE, you should first attempt to clear the log file is incorrect. If the lost redo log group has a status of ACTIVE, it is needed for instance recovery. In that situation, you should first attempt to perform a checkpoint. After the checkpoint, the log file is no longer required for instance recovery.

The option that states if the lost redo log group is CURRENT, you must clear the log file is incorrect. You would clear the log file only if the status of the lost redo log group was INACTIVE. After clearing the log file, the log file may be reused.

The option that states if the lost redo log group is ACTIVE, you must restore, perform cancel-based incomplete recovery, and open the database using the RESETLOGS option. These actions are only necessary if the log file has a CURRENT status, which indicates LGWR is currently writing to it.

## **QUESTION 149**

Which statement about user-managed and server-managed backups is true?

- A. User-managed backups are performed using RMAN.
- B. Performing server-managed backups requires the use of operating system commands.
- C. User-managed backups require the use of a recovery catalog.
- D. User-managed backups can be performed regardless of the archive logging mode being used.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

User-managed backups can be performed regardless of the archive logging mode being used. User-managed backups are performed using operating system commands. You can perform user-managed backups if the database is in ARCHIVELOG mode or NOARCHIVELOG mode. To perform user-managed backups with a database in NOARCHIVELOG mode, you must first shut down the database. With a database running in ARCHIVELOG mode, you can take backups while the database remains open. To do so, before copying the files using operating system commands, you should issue either an ALTER TABLESPACE or ALTER DATABASE statement that includes the BEGIN BACKUP clause. You can restore user-managed backups using SQL\*Plus commands.

The option that states user-managed backups are performed using RMAN is incorrect. User-managed backups are performed by copying files using operating system commands. Server-managed backups are performed using RMAN.

The option that states performing server-managed backups requires the use of operating system commands is incorrect. Server-managed backups are performed using RMAN commands, not operating system commands. The option that states user-managed backups require you to use a recovery catalog is incorrect. A recovery

catalog is used with RMAN. User-managed backups are taken by copying files using operating system commands, not RMAN.

## **QUESTION 150**

Your database is running in ARCHIVELOG mode. After completing an online backup of the CURR\_ORDER tablespace, you issue this statement:

ALTER TABLESPACE curr order END BACKUP:

Which statement is true?

- A. This statement changes the CURR\_ORDER tablespace from read-only to read-write and makes it available for users to perform DML operations.
- B. This statement only unfreezes the headers of the datafiles associated with the CURR\_ORDER tablespace.
- C. This statement places the CURR\_ORDER tablespace back online and makes it available for users to query.
- D. This statement alters the backup mode of all of the datafiles associated with the CURR\_ORDER tablespace and unfreezes the headers of these datafiles.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

This statement alters the backup mode of all of the datafiles associated with the CURR\_ORDER tablespace and unfreezes the headers of these datafiles. In this scenario, your database is running in ARCHIVELOG mode. In this mode, you can perform online backups without shutting down the database. To do so, you can place either a single tablespace or the entire database in backup mode by including the BEGIN BACKUP clause in either the ALTER TABLESPACE or ALTER DATABASE statement. When a tablespace is in backup mode, Oracle freezes the checkpoint change number in datafile headers and writes additional information to the redo log file before a block is modified. Before a block is modified, Oracle writes an image of the block to the redo log. This information can be used to recover the block as it existed before it was modified. Then other redo data in the redo log file can be applied to ensure that the block is consistent. After the tablespace is placed in backup mode, you can back up the tablespace's datafiles by copying them to the desired destination using operating system commands. In this scenario, after the backup is complete, you take the tablespace out of backup mode by issuing an ALTER TABLESPACE statement that includes the END BACKUP clause. This will take all the datafiles in the CURR\_ORDER tablespace out of backup mode. This unfreezes the headers of the datafiles and prevents additional redo from being written to the redo log. You can also use the END BACKUP

clause with the ALTER DATABASE statement to take all datafiles in all tablespaces out of back up mode. The options that state the statement changes the CURR\_ORDER tablespace from read-only to read-write and makes it available for users to perform DML operations and the statement places the tablespace online and makes it available for users to query are incorrect. Placing a tablespace in backup mode or taking a tablespace out of backup mode does not affect the availability of the tablespace. It does not affect whether the tablespace is online or offline, or whether it is read-only or read-write. When a tablespace is in backup mode, users can continue to query the tables in the tablespace and perform DML operations on the tables in the tablespace.

The option that states this statement only unfreezes the headers of the datafiles associated with the CURR\_ORDER tablespace is incorrect. It takes the tablespace out of backup mode, which unfreezes the headers and prevents Oracle from writing the additional redo to the redo log when a block is first modified.

## **QUESTION 151**

In which situation would you use the BEGIN BACKUP clause of the ALTER TABLESPACE statement to perform a user-managed backup?

- A. when your database is running in NOARCHIVELOG mode and you need to back up a table in the tablespace using operating system commands
- B. when your database is running in ARCHIVELOG mode and you need to back up a table in the tablespace using RMAN

- C. when your database is running in NOARCHIVELOG mode and you need to back up an entire tablespace
- D. when your database is running in ARCHIVELOG mode and you want to back up a table in the tablespace while the database is open and the tablespace is available

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You would use the BEGIN BACKUP clause of the ALTER TABLESPACE statement when your database is running in ARCHIVELOG mode and you want to back up a table in the tablespace while the database is open and the tablespace is available. If a database is running in ARCHIVELOG mode, you can perform backups without shutting down the database. To do so, you can place either a single tablespace or the entire database in backup mode by including the BEGIN BACKUP clause in either the ALTER TABLESPACE or ALTER DATABASE statement. When a tablespace is in backup mode, Oracle freezes the checkpoint change number in datafile headers and writes additional information to the redo log file before a block is modified. Before a block is modified, Oracle writes an image of the block to the redo log. This information can be used to recover the block as it existed before it was modified. Then other redo data in the redo log file can be applied to ensure that the block is consistent. After the tablespace is placed in backup mode, you can back up the tablespace's datafiles using operating system commands. After the backup is complete, you should take the tablespace out of backup mode by issuing an ALTER TABLESPACE statement that includes the END BACKUP clause to prevent additional redo from being written to the redo log.

The options stating you would use the BEGIN BACKUP clause of the ALTER TABLESPACE statement when your database is running in NOARCHIVELOG mode are incorrect. When your database is running in NOARCHIVELOG mode, only closed database backups can be performed.

The option that states you would use the BEGIN BACKUP clause of the ALTER TABLESPACE statement to back up a table using RMAN is incorrect. The BEGIN BACKUP clause is used to perform user-managed backups while the database remains open. It is not used for server-managed backups taken with RMAN.

### **QUESTION 152**

Users report errors when they run queries. Upon investigation, you realize that a temporary file belonging to the default temporary tablespace was inadvertently deleted.

Which actions should you take to efficiently recover? (Choose all that apply.)

- A. Shut down the database instance.
- B. Restore the tempfile from an available backup.
- C. Drop the deleted tempfile from the default temporary tablespace.
- D. Issue an ALTER TABLESPACE statement that includes the ADD TEMPFILE clause to add a tempfile to the default temporary tablespace.
- E. Drop the default temporary tablespace and re-create it.

Correct Answer: CD Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should issue an ALTER TABLESPACE statement including the ADD TEMPFILE clause to add a tempfile to the default temporary tablespace, and then drop the deleted tempfile from the default temporary tablespace. This would be the most efficient way to recover because the database and default temporary tablespace would remain available. You could also shut down and restart the database, but this would not be the best approach. When a database is started, any missing tempfiles are automatically re-created. All of the other options are incorrect. You can recover a lost tempfile without shutting down the database instance, restoring from backup, or dropping and re-creating the default temporary tablespace.

#### **QUESTION 153**

Your database is open, and a tempfile in the default temporary tablespace is accidently deleted. Which statement about recovering from the tempfile loss is true?

- A. You must shut down the database instance to recover from the tempfile loss.
- B. You must drop the default temporary tablespace and re-create it.
- C. You can recover without shutting down the database instance or altering the availability of the temporary tablespace.
- D. You can recover only if you have a recent backup that contains the lost file.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You can recover without shutting down the database instance or altering the availability of the temporary tablespace. To do so, first issue an ALTER TABLESPACE statement that includes the ADD TEMPFILE clause to add a new tempfile. Afterwards, drop the tempfile that is missing or corrupt by issuing another ALTER TABLESPACE statement that includes the DROP TEMPFILE clause.

The option that states you must shut down the database instance to recover from the tempfile loss is incorrect. You can recover from the tempfile loss without shutting down and restarting the database. You can add a new tempfile to the tablespace and then drop the deleted one.

The option that states you must drop the default temporary tablespace and re-create it is incorrect. This would drop all files in the temporary tablespace, not just the one that was lost.

The option that states you can recover only if you have a recent backup that contains the lost file. Tempfiles contain temporary data, such as sort space for SQL statements that include an ORDER BY clause. Because the data is temporary, there is no need to restore from a backup. You only need to create a new tempfile in the tablespace and then drop the one that is missing or corrupt.

## **QUESTION 154**

You are maintaining the SALES database of TeleStar Corporation. The online redo log configuration of the database is as follows:

Printing of graphics has been disabled.

One of the redo log members, redo3b, is lost due to disk failure.

How will you recover the redo log member redo3b?

- A. by performing an incomplete recovery from the last backup
- B. by performing an import operation
- C. by performing a complete database recovery
- D. by dropping the lost member and adding a new redo log member

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

If a redo log member is lost or deleted and a mirrored log member continues to exist, then the redo log member can be easily rebuilt. This is an example of a noncritical recovery. Re-creating a redo log file is a straightforward process. The ALTER DATABASE ADD LOGFILE MEMBER statement will create a log file member if a log member has been lost or deleted. In this scenario, you are required to drop the lost redo log member, redo3b.log, and add a new redo log member using the ALTER DATABASE ADD LOGFILE MEMBER statement.

The option stating that you should perform an incomplete recovery is incorrect. You have one member, redo3a.log, of the redo log group, Group3, and you can recover the lost redo log group by dropping the lost redo log member and adding a new redo log member. Incomplete recovery is used if all the members of a redo log group are lost. For example, if all the members of a redo log group are lost, you must determine the

amount of data that can be recovered. To determine the amount of data, you should start the database in the MOUNT stage and query the V\$LOG view. The system change number (SCN) that is obtained enables you to recover the data. The first SCN stamped in the missing log is FIRST\_CHANGE#. This implies that the last SCN stamped in the previous log is 290254 (FIRST\_CHANGE#-1). This is the highest SCN to which you can recover. To perform an incomplete recovery, you must first restore all the datafiles to this SCN and then perform a database recovery up to this SCN.

The option stating that you should perform the import operation to recover the lost online redo log member is incorrect. The import operation is used to recover logical components, such as tables and tablespaces, of the database.

The option stating that you should perform a complete recovery to recover the lost redo log member is incorrect. If one multiplexed redo log member is missing, then you can recover the missing redo log member by dropping the lost redo log member and adding a new online redo log member. A complete recovery is used to recover one or more datafiles from the last backup if the database is in ARCHIVELOG mode.

## **QUESTION 155**

Consider the following scenario:

Your database is running in ARCHIVELOG mode.

You are using a user-managed backup and recovery strategy.

The KIT1 tablespace contains three datafiles, namely KIT1DATA1.DBF, KITDATA2.DBF, and KITDATA3.DBF. You have a recent backup of the KIT1 tablespace.

The KITDATA3.DBF datafile becomes corrupt, and you want to perform an online complete recovery to recover

the datafile up to the point of failure. The possible steps for performing this recovery are as follows:

- 1.Place the database in RESTRICTED mode.
- 2. Take the KITDATA3. DBF datafile offline.
- 3. Restore the KITDATA3. DBF datafile from the backup.
- 4. Place the KIT1 tablespace back online.
- 5.Bring the KITDATA3.DBF datafile online.
- 6.Recover the KIT1 tablespace.
- 7. Recover the KITDATA3. DBF datafile.
- 8. Drop and re-create the KIT1 tablespace.

Identify the correct sequence of steps to accomplish this.

A. 1, 2, 3, 4, 5

B. 1, 8, 3, 5

C. 2, 3, 6, 5

D. 2, 3, 7, 5

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The sequence of steps you should take is 2, 3, 7, 5. In this scenario, you want to perform a complete recovery of the corrupt KITDATA3.DBF datafile while the database in online. You first take the corrupt datafile offline. Next, restore the corrupt datafile from the available backup. After restoring, you should issue a RECOVER command to recover the datafile. This will apply the necessary redo, and the datafiles will be consistent with the latest SCN. After this process is complete, you can bring the datafile back online. You should note that to perform online complete recovery the database must be running in ARCHIVELOG mode.

All of the other options are incorrect because they are not required to perform online complete recovery of the corrupt datafile.

#### **QUESTION 156**

You are using the following backup strategy:

You are using a user-managed backup approach rather than RMAN.

Your database is running in ARCHIVELOG mode.

You perform complete closed backups on Monday, Wednesday, and Friday.

You perform open backups each evening after nightly batch processing.

In which two scenarios would you NOT perform complete database recovery? (Choose two.)

- A. to recover a corrupt datafile in a non-SYSTEM tablespace
- B. to recover an accidentally deleted datafile
- C. to restore a lost datafile in an index-only tablespace
- D. to restore a tablespace that was erroneously dropped

Correct Answer: CD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You would not perform complete database recovery in the following two situations:

To restore a lost datafile in an index-only tablespace

To restore a tablespace that was erroneously dropped

To restore a lost datafile in an index-only tablespace, you can drop the tablespace, re-create the tablespace, and then re-create the indexes. There is no need to perform recovery because the indexes can be rebuilt. To restore a tablespace that was erroneously dropped, you can use tablespace point-in-time recovery (TSPITR). All of the other options are incorrect because they represent scenarios in which you would perform complete recovery. Complete database recovery restores the database completely, including all committed data, with no data loss. To perform complete recovery, your database must be running in ARCHIVELOG mode. To perform complete recovery, you would restore the needed files from backup and apply all redo since the latest backup. To perform user-managed complete database recovery, you must have a current control file. You must also have backups available for the files that you need to recover and all archive redo log files since those backups.

## **QUESTION 157**

You are a Database Administrator with TXGlobal. You use a password file to establish remote connections to the HR database on the server located at the home office. Currently, two active remote sessions to this database exist. These sessions were established using the SYSDBA privilege from the remote machines. You accidentally deleted the password file.

What will be the consequence of this action?

- A. Both the sessions will be killed, and no new sessions will be created using the SYSDBA or SYSOPER privilege.
- B. Both the sessions will remain active, but no new sessions will be created using the SYSDBA or SYSOPER privilege.
- C. Both the sessions will be killed, but new sessions will be created using the SYSDBA or SYSOPER privilege when the database restarts.
- D. The database will crash, and no new sessions will be created using the SYSDBA or SYSOPER privilege when the database restarts.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

When two sessions are active and a password file is deleted, both the sessions will remain active, but no new sessions will be created using the SYSOPER or SYSDBA privilege. You must re-create the password file using orapwd and then restart the database at least once. The password file will not be used to connect to the database until you restart the database.

The option stating that both the sessions will be killed, and no new sessions will be created using the SYSDBA

or SYSOPER privilege is incorrect because deleting the password file will not kill the connected sessions. The option stating that both the sessions will be killed, but new sessions will be created using the SYSDBA or SYSOPER privilege when the database restarts is incorrect because deleting the password file will not kill the connected users' sessions. Moreover, the users will not be able to connect to the database using the SYSDBA or SYSOPER privilege until you re-create the password file.

The option stating that the database will crash, and no new sessions will be created using the SYSDBA or SYSOPER privilege when the database restarts is incorrect because deleting the password file will not cause the database instance to crash.

#### **QUESTION 158**

You are working on a 24X7 database. You want to design a backup strategy for your database that uses user-managed backups. You want to be able to perform all backups while the database remains online. Which statement about performing user-managed backups in a 24x7 environment is true?

- A. You must have change tracking enabled in your database.
- B. Your database must be running in NOARCHIVELOG mode.
- C. To back up a tablespace, it must be in backup mode.
- D. To back up a tablespace, it must first be taken offline.

Correct Answer: C Section: (none) Explanation

### **Explanation/Reference:**

**Explanation:** 

To back up a tablespace in a 24x7 environment, the tablespace must be in backup mode. In addition, the database must be running in ARCHIVELOG mode. In a 24x7 environment, the database must remain online because no down time is allowed. You can back up a tablespace in a database that is running in ARCHIVELOG mode without shutting the database down or taking the tablespace offline. To do so, you first put the tablespace in backup mode by issuing the ALTER TABLESPACE statement including the BEGIN BACKUP clause. For example, you could use the following statement to place the DATA1 tablespace in backup mode:

# ALTER TABLESPACE data1 BEGIN BACKUP;

When a tablespace is in backup mode, Oracle freezes the checkpoint change number in datafile headers and writes additional information to the redo log file before a block is modified. Before a block is modified, Oracle writes an image of the block to the redo log. This information can be used to recover the block as it existed before it was modified. Then other redo data in the redo log file can be applied to ensure the block is consistent. After the tablespace is placed in backup mode, you can back up the tablespace's datafiles using operating system commands. After the backup is complete, you should take the tablespace out of backup mode by issuing an ALTER TABLESPACE statement including the END BACKUP clause to prevent additional redo from being written to the redo log.

The option that states you must have change tracking enabled in your database is incorrect. You need not enable change tracking to perform an online user-managed backup in a 24x7 environment. The block change tracking feature is enabled to improve the performance of the backup process during an incremental backup. If block change tracking is enabled, a change tracking file keeps track of the blocks that have changed since the last backup. During an incremental backup, only the changed blocks are read instead of scanning the entire datafile.

The option that states your database must be running in NOARCHIVELOG mode is incorrect. When the database is running in NOARCHIVELOG mode, then it must be shut down before performing the backup. This is not possible in a 24x7 environment. In a 24x7 environment, your database should be running in ARCHIVELOG mode.

The option that states to back up a tablespace, it must first be taken offline is incorrect. The tablespace must remain online because you are working in a 24x7 environment. However, it must be placed in backup mode before performing the backup.

#### **QUESTION 159**

Your database is running in ARCHIVELOG mode, and you are using password authentication. You make user-managed complete consistent backups each night.

With your current backup strategy, which statement is true?

- A. If all archived redo log files since the last nightly backup are not available, only incomplete recovery would be possible.
- B. Incomplete recovery would be required if a user accidentally dropped a tablespace.
- C. If you lose a datafile in a SYSTEM tablespace, you must perform incomplete recovery.
- D. If your password file is lost, incomplete recovery must be performed to restore it.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

If all archived redo log files since the last nightly backup are not available, only incomplete recovery would be possible. A complete database recovery restores the database completely, including all committed data, with no data loss. To perform a complete recovery, you must have a current control file, the latest backup, and the necessary redo to apply the redo since the last backup. If any of these are not available, complete recovery is not possible. If all of the archived redo log files since the last nightly backup are not available, you would not be able to apply all the necessary redo to recover the database completely. Only incomplete recovery would be possible, and you would incur some data loss. When performing incomplete recovery, you can perform time-based recovery using the UNTIL TIME clause of the RECOVER command to recover the database up to a particular time, or you can perform changed-based recovery using the UNTIL CHANGE clause to recover the database up to a specified SCN. You can also perform cancel-based recovery. With cancel-based recovery, you are prompted for each redo log file to either apply the redo or cancel the recovery. After performing incomplete recovery, you should open the database with the RESETLOGS options. When you open the database with the RESETLOGS options and redo logs.

The option that states incomplete recovery would be required if a user accidentally dropped a tablespace is incorrect. You can use tablespace point-in-time recovery to recover a tablespace that is accidentally deleted. The option that states if you lose a datafile in a SYSTEM tablespace, you must perform incomplete recovery is incorrect. You can perform complete recovery if you have a current control file, the latest backup that contains the lost datafile, and the needed archived redo log files to apply the redo since the last datafile backup. However, you should note that to perform complete recovery of a datafile in a SYSTEM tablespace, the database must be closed.

The option that states if your password file is lost, incomplete recovery must be performed to restore it is incorrect. To recover from a lost password file, you only need to re-create the password file using the orapwd utility.

### **QUESTION 160**

In which scenario should you perform an incomplete recovery?

- A. when a table is dropped and stored in the Recycle Bin
- B. when all the control files are deleted
- C. when a member of a multiplexed redo log group is dropped
- D. when you are required to recover a table to its previous state

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should perform an incomplete recovery when all the control files are deleted. You would be required to perform an incomplete recovery from the last full database backup. All the transactions since the last backup will be lost. An incomplete recovery recovers the database to a specific point in time at which a failure occurred.

A complete database recovery restores the database completely, including all committed data, with no data loss. To perform a complete recovery, you must have a current control file, the latest backup, and the necessary redo to apply the redo since the last backup. In this scenario, you have no available control files, so complete recovery is not possible.

When performing incomplete recovery, you can perform time-based recovery using the UNTIL TIME clause of the RECOVER command to recover the database up to a particular time, or you can perform changed-based recovery using the UNTIL CHANGE clause to recover the database up to a specified SCN. You can also perform cancel-based recovery. With cancel-based recovery, you are prompted for each redo log file to either apply the redo or cancel the recovery. After performing incomplete recovery, you should open the database with the RESETLOGS options. When you open the database with the RESETLOGS option, the datafiles are synchronized with the control files and redo logs.

The option stating that you will perform the incomplete recovery when a table is dropped and stored in the Recycle Bin is incorrect. You are not required to perform an incomplete recovery to recover the dropped table. When you drop a table, the table is not dropped from the database, but is stored in the Recycle Bin. If the table exists in the Recycle Bin, then you can recover the dropped table using the Flashback Drop feature. If you are recovering a dropped table that has been purged from the Recycle Bin, then you must restore all the datafiles from the last backup and perform an incomplete recovery.

The option stating that you will perform an incomplete recovery when a member of a multiplexed redo log group is dropped is incorrect. If a member of a redo log group that is multiplexed is dropped, you can recover the member by copying the multiplexed image to the desired location.

The option stating that you will perform an incomplete recovery when you are required to recover a table to its previous state is incorrect. You are not required perform an incomplete recovery when you need to recover a table to its previous state. You can use the Flashback Table feature to recover a table to its previous state. The Flashback Table feature allows you to recover one or more tables to a specific point in time without performing time-consuming recovery operations, such as point-in-time recovery, which may also affect the availability of the rest of the database. The Flashback Table feature recovers the table by rolling back only the changes made to the tables or to their dependent objects, such as indexes.

## **QUESTION 161**

Your database is running in ARCHIVELOG mode. You are performing a user-managed backup of the DATA1 tablespace. You place the DATA1 tablespace in backup mode by issuing the following statement: ALTER TABLESPACE data1 BEGIN BACKUP:

Which statement is true about a tablespace that is in backup mode?

- A. Additional redo is generated while the tablespace is in backup mode.
- B. While the tablespace is in backup mode, it is flagged as read-only.
- C. You can perform queries on tables within a tablespace that is in backup mode, but you cannot perform DML operations.
- D. While the tablespace is in backup mode, it is temporarily taken offline and is placed back online when you issue an ALTER TABLESPACE statement with the END BACKUP clause.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

Additional redo is generated while the tablespace is in backup mode. When a tablespace is in backup mode, Oracle freezes the checkpoint change number in datafile headers and writes additional information to the redo log file before a block is modified. Before a block is modified, Oracle writes an image of the block to the redo log. This information can be used to recover the block as it existed before it was modified. Then, other redo data in the redo log file can be applied to ensure that the block is consistent. After the tablespace is placed in backup mode, you can back up the tablespace's datafiles using operating system commands. After the backup is complete, you should take the tablespace out of backup mode by issuing an ALTER TABLESPACE statement that includes the END BACKUP clause to prevent additional redo from being written to the redo log. The option that states you can perform queries on tables within a tablespace that is in backup mode, but you cannot perform DML operations is incorrect. When a tablespace is in backup mode, you can perform queries and other DML operations on tables within the tablespace, even while you are copying the datafiles to a

backup location using operating system commands.

All of the other options are incorrect. Putting a tablespace in backup mode does not flag it as read-only or take it offline.

### **QUESTION 162**

Your backup strategy is as follows:

Your database is running in ARCHIVELOG mode.

You take regular full backups weekly.

You take incremental backups nightly.

One of your datafiles in a non-SYSTEM tablespace is lost, and you want to perform user-managed complete database recovery while the database remains open.

Which statement about user-managed complete database recovery is true?

- A. User-managed complete database recovery can only be performed when the database is not online.
- B. You can perform complete online database recovery for the entire database or a tablespace, but not a single datafile.
- C. To perform user-managed complete database recovery, you must have a current control file.
- D. After performing user-managed complete database recovery, you must re-open the database using the RESETLOGS option.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

To perform user-managed complete database recovery, you must have a current control file. You must also have backups available for the files that you need to recover and all archive log files since those backups. Complete database recovery restores the database completely, including all committed data, with no data loss. To perform complete recovery, your database must be running in ARCHIVELOG mode. To perform complete recovery, you first use the V\$RECOVER\_FILE and V\$RECOVERY\_LOG views to determine which files need to be recovered and which archive logs are needed for the recovery, respectively. After doing so, you restore the needed files from backup, including applying incremental backups as necessary. Then, you must apply the necessary redo using archived and online redo log files. You can accomplish this using the RECOVER command. You can perform a complete recovery on the entire database, a tablespace, or individual

datafiles.

The option that states user-managed complete database recovery can only be performed when the database is not online is incorrect. You can perform user-managed complete database recovery while the database is online. However, some situations require that you perform complete closed database recovery, such as when a file in the SYSTEM tablespace must be restored and the instance aborts.

The option that states you can perform complete online database recovery for the entire database or a tablespace, but not a single datafile is incorrect. You can perform complete online database recovery for a single datafile if necessary. To do so, you take the affected datafile offline if it is not offline, restore the single datafile from a backup, issue the RECOVER command to apply the redo, and then bring the datafile back online.

The option that states after performing user-managed complete database recovery, you must re-open the database using the RESETLOGS option is incorrect. The RESETLOGS option should be used when you open a database after incomplete recovery. When you open the database with the RESETLOGS options, the datafiles are synchronized with the control files and redo logs.

# **QUESTION 163**

You work as a junior Database Administrator. You have erroneously dropped an important table from your database. The dropped table was owned by the SYS user. You decide to perform an incomplete recovery. Which actions should you take to recover the dropped table?

A. Mount the database, restore all the datafiles from the most recent backup, recover the database, and open the database with the RESETLOGS option.

- B. Mount the database, restore the lost datafiles from the most recent backup, recover the database, and open the database with the RESETLOGS option.
- C. Mount the database, restore all the datafiles from the most recent backup, recover the database, and open the database with the NORESETLOGS option.
- D. Mount the database, restore the lost datafiles from the most recent backup, recover the database, and open the database with the NORESETLOGS option.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

To perform an incomplete recovery, you must mount the database, restore all the datafiles from the most recent backup, recover the database, and open the database with the RESETLOGS option. Incomplete database recovery restores the database to up to the point of failure. When performing incomplete recovery, you can perform time-based recovery using the UNTIL TIME clause of the RECOVER command to recover the database up to a particular time, or you can perform changed-based recovery using the UNTIL CHANGE clause to recover the database up to a specified SCN. You can also perform cancel-based recovery. With cancel-based recovery, you are prompted for each redo log file to apply the redo or to cancel the recovery. After performing incomplete recovery, you should open the database with the RESETLOGS options. When you open the database with the RESETLOGS option, the datafiles are synchronized with the control files and redo logs.

The option stating to restore the lost datafiles from the most recent backup, recover the database, and open the database with the RESETLOGS option is incorrect because you must restore all the datafiles from the most recent backup before performing an incomplete recovery.

After performing an incomplete recovery, you cannot open the database using the NORESETLOGS option. You must open the database using the RESETLOGS option after performing an incomplete recovery. Therefore, the option stating that you must restore all the datafiles from the backup and open the database using the NORESETLOGS option after performing an incomplete recovery is incorrect. Similarly, you cannot recover a database after restoring only the lost datafiles from the backup and then opening the database with the NORESETLOGS option. After performing an incomplete recovery, should open the database using the RESETLOGS option, not the NORESETLOGS option. Starting the database with the RESETLOGS option synchronizes the data files with the control files and redo logs.

## **QUESTION 164**

In which scenario will you perform a user-managed incomplete recovery?

- A. when a table is dropped and purged from the Recycle Bin
- B. when you are required to recover an existing table to its previous state
- C. when you are required to view all the versions of a row of an existing table during a specific time period
- D. when a table is dropped and stored in the Recycle Bin

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You will perform a user-managed incomplete recovery when a table is dropped and purged from the Recycle Bin. When you drop a table, it is not dropped from the database. The dropped table is stored in the Recycle Bin. If the table exists in the Recycle Bin, then you can recover the dropped table using the Flashback Drop feature. If you are recovering a dropped table that has been purged from the Recycle Bin, you must restore all the datafiles from the last backup and perform an incomplete recovery.

The option stating that you will perform a user-managed incomplete recovery when a table is dropped and stored in the Recycle Bin is incorrect. When a table is dropped and stored in the Recycle Bin, you need not perform an incomplete recovery. You can use the Flashback Drop feature to recover the dropped table.

The option stating that you will perform a user-managed incomplete recovery to recover an existing table to its previous state is incorrect. To recover an existing table to its previous state, you can use the Flashback Table feature. The Flashback Table feature allows you to recover one or more tables to a specific point in time without performing time-consuming recovery operations, such as point-in-time recovery, which may affect the availability of the rest of the database. The Flashback Table feature recovers the table by rolling back only the changes made to the tables or to their dependent objects such as indexes.

The option stating that you will perform a user-managed incomplete recovery to view all the versions of a row of an existing table during a specific time period is incorrect. If you are required to view all the versions of a row of an existing table within a specific time period, you will use the Flashback Version Query feature. The Flashback Version Query feature is used to retrieve all the versions of the rows that exist or existed between the times the query was executed to a determined point in time in the past. The Flashback Version Query returns all the committed occurrences of the rows for an object without displaying the uncommitted versions of the rows.

## **QUESTION 165**

You need to shrink the EMP table to release the unused space below the High Water Mark (HWM). You executed the ALTER TABLE emp ENABLE ROW MOVEMENT; statement before shrinking the EMP table. Which two statements are true about executing this statement? (Choose two.)

- A. This statement would return an error on execution.
- B. This statement enables row movement activity within the EMP table.
- C. To shrink the EMP table, the execution of this statement is a prerequisite.
- D. The ENABLE ROW MOVEMENT clause can be specified only during creation of the EMP table.

Correct Answer: BC Section: (none) Explanation

### Explanation/Reference:

Explanation:

When you execute the ALTER TABLE emp ENABLE ROW MOVEMENT; statement, row movement activity within the EMP table is enabled. This statement is a prerequisite before you shrink the table with the ALTER TABLE emp SHRINK SPACE; statement. If you do not execute the ALTER TABLE emp ENABLE ROW MOVEMENT; statement before shrinking the EMP table, an error will be generated. Shrinking of the table involves movement of rows within the segment causing the row identifiers (ROWIDs) of the table to change. Therefore, the ALTER TABLE emp ENABLE ROW MOVEMENT; statement must be executed before shrinking to enable movement of rows within the segment.

This statement would not give an error on execution. The ALTER TABLE emp ENABLE ROW MOVEMENT; statement would execute successfully and would enable row movement activity within the EMP table. The ENABLE ROW MOVEMENT clause can be specified during creation of the EMP table and after creation of the table by using the ALTER TABLE statement.

### **QUESTION 166**

You need to configure the cross-platform transportable tablespace feature. Which three statements are true? (Choose three.)

- A. Both databases must use same character set.
- B. Both the source and target database can have different values for the COMPATIBLE initialization parameter.
- C. Databases on platforms with different endian formats cannot be transported using the cross-platform transportable tablespace feature.
- D. Tablespaces that are read-only must be made read/write at least once before they can use the cross platform transportable feature.

Correct Answer: ABD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The following three statements are true about using the cross-platform transportable tablespace feature: Both databases must use same character set.

Both the source and target database can have different values for the COMPATIBLE initialization parameter. Tablespaces that are read-only must be made read/write at least once before they can use the cross platform transportable feature.

You should note that although the COMPATIBLE initialization parameter values for the source and target database can be different, to transport a tablespace across platforms, both the source and target must have a COMPATIBLE initialization parameter value of 10.0.0 or higher.

The option that states databases on platforms with different endian formats cannot be transported using the cross-platform transportable tablespace feature is incorrect. You can transport them, but you must use the RMAN CONVERT command to convert the datafiles.

#### **QUESTION 167**

You are planning to transport the TBS1 tablespace from one database to another. The TBS1 tablespace is a read/write tablespace, and it is currently online.

You issue the following query on both the source and target databases:

SELECT d.platform\_name, t.endian\_format

FROM v\$database d, v\$transportable\_platform t WHERE d.platform\_id=t.platform\_id;

In reviewing the results, you determine that the target database has a different platform than the source database, but both platforms have the same endian format.

Which step would NOT be necessary for you to successfully transport the TBS1 tablespace to the target database?

- A. extracting metadata from the source database using Data Pump Export
- B. making the TBS1 tablespace read-only on the source database
- C. importing metadata into the target database using Data Pump Import
- D. converting the datafiles using the RMAN CONVERT command
- E. moving the datafiles and dump file to the target database

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

The step converting the datafiles using the RMAN CONVERT command would not be necessary to successfully transport the TBS1 tablespace to the target database. In this scenario, even though you are transporting a tablespace to a different platform, both the target and source use the same endian format. Therefore, you do not have to convert the datafiles using the RMAN CONVERT command. You only need to use the RMAN CONVERT command when the source and target databases have a different endian format. All of the other options are incorrect because these steps would be necessary to transport the TBS1 tablespace to the target. First, you would make the TBS1 tablespace read-only on the source database and extract its metadata using Data Pump Export. Then, you would move the dump file and datafiles from the source database to the target database. After moving the files to the target database, you would import the metadata into the target database using Data Pump Import. After doing so, you would change the new tablespace on the target from read-only to read/write.

### **QUESTION 168**

You created the DEPT table using the following statement: CREATE TABLE scott.dept (deptno NUMBER(3), dname VARCHAR2(15), loc VARCHAR2(15)

STORAGE (INITIAL 100K NEXT 50K MAXEXTENTS 10 PCTINCREASE 5 FREELIST GROUPS 6

## FREELISTS 4);

You are required to shrink the DEPT table. During the shrink operation, you want to ensure that the recovered space is returned to the tablespace in which the DEPT table is stored. You do not want to shrink the indexes created on the DEPT table.

What will you do to shrink the SCOTT.DEPT table?

- A. Issue the ALTER TABLE scott.dept SHRINK SPACE COMPACT; statement.
- B. Issue the ALTER TABLE scott.dept SHRINK SPACE; statement.
- C. Issue the ALTER TABLE scott.dept SHRINK SPACE CASCADE; statement.
- D. You cannot shrink the SCOTT.DEPT table.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

In this scenario, you cannot shrink the SCOTT.DEPT table because a table managed using freelists cannot be shrunk. To be able to perform the shrink operation, the tablespace that contains the segment must be defined with automatic segment space management.

You should not issue the ALTER TABLE scott.dept SHRINK SPACE COMPACT; statement because the SCOTT.DEPT table is managed using freelists. The segments managed using freelists cannot be shrunk by a shrink operation. A shrink operation of an automatic segment space managed table can be split into commands by using the following COMPACT clause to compress the rows without moving the high water mark:

ALTER TABLE table\_name SHRINK SPACE COMPACT;

Later, when the fewer users are accessing the database, you can complete the rest of the operation by omitting the COMPACT clause as follows:

ALTER TABLE table name SHRINK SPACE:

You should not issue the ALTER TABLE scott.dept SHRINK SPACE; statement because the SCOTT.DEPT table is managed using freelists. The segments managed using freelists cannot be shrunk by a shrink operation. The ALTER TABLE table\_name SHRINK SPACE; statement can be used only with tables on which automatic segment space management is used.

You should not issue the ALTER TABLE scott.dept SHRINK SPACE CASCADE; statement because the SCOTT.DEPT table is managed using freelists. The segments managed using freelists cannot be shrunk by a shrink operation. The ALTER TABLE table\_name SHRINK SPACE CASCADE; statement can only be used with tables on which automatic segment space management is used. The CASCADE clause in the ALTER TABLE table\_name SHRINK SPACE CASCADE; statement specifies that the dependent objects of the table will also be automatically shrunk while performing the shrink operation on the table.

# **QUESTION 169**

You want to transport a tablespace from one platform to another. You need to determine if the source and target databases use the same endian format.

Which two views would you use to determine your database platform name and the supported endian format? (Choose two.)

- A. V\$DATABASE V\$INSTANCE
- B. V\$CONTROLFILE
- C. V\$TRANSPORTABLE PLATFORM
- D. V\$DATABASE

Correct Answer: CD Section: (none) Explanation

# Explanation/Reference:

Explanation:

You can determine your database platform name by querying the V\$DATABASE view. The V\$TRANSPORTABLE\_PLATFORM view displays all platforms that support transporting tablespaces across platforms and the endian format for each platform. You can use the V\$DATABASE in conjunction with the V\$TRANSPORTABLE\_PLATFORM view to determine your database platform name and the supported endian format. You use the following query to determine your current platform name and the supported endian format:

SELECT d.platform\_name, t.endian\_format

FROM v\$database d, v\$transportable\_platform t WHERE d.platform\_id=t.platform\_id;

You should note that when transporting a tablespace to a target platform that has a different endian format than the source database, you must use the RMAN CONVERT command to convert the datafiles. If the endian format is the same for the source and target, this step is not required.

The V\$INSTANCE view can be used to determine the state of the database instance. It cannot be used to determine the platform name or the endian format.

The V\$CONTROLFILE view is used to display the names of the control files.

#### **QUESTION 170**

The SCOTT.EMP table is stored in the DATA1 tablespace that has the following properties:

DATA1 is a read/write tablespace.

DATA1 is not autoextensible to an unlimited size.

DATA1 is online.

Segment space management for the DATA1 tablespace is manual.

You issued the ALTER TABLE SCOTT.EMP SHRINK SPACE; statement, and it generated the following error: ORA-10635: Invalid segment or tablespace type

What could be the reason for the failure of the statement?

- A. The DATA1 tablespace is not read-only.
- B. The DATA1 tablespace is not autoextensible.
- C. The DATA1 tablespace is not offline.
- D. The segment space management for the DATA1 tablespace is manual.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You have received the ORA-10635: Invalid segment or tablespace type error because the segment space management of the DATA1 tablespace is manual. For the shrink operation, the segment must be stored in an automatic, segment space-managed tablespace. It cannot be stored in a segment that uses freelists. You can specify automatic segment space management in a tablespace that is permanent and locally managed. Automatic segment space management is an efficient way to manage the space within a segment. The option stating that the reason for the command failure is that the DATA1 tablespace is not read-only is incorrect because it is not necessary to make the tablespace read-only at the location where you store the segment. The purpose of making the tablespaces read-only is to eliminate the need to perform the backup and recovery of large sections of the database. Oracle never updates the datafiles of read-only tablespaces. The option stating that the reason for the command failure is that the DATA1 tablespace is not autoextensible is incorrect. It is not necessary to make the tablespace autoextensible at the location where the segment is stored. If you make a datafile autoextensible during tablespace creation, then the database increases the size of the datafile automatically as space is needed.

The option stating that the reason for the command failure is that the DATA1 tablespace is not offline is incorrect. It is not necessary to make the tablespace offline at the location where the segment is stored. Shrink operations are performed online.

## **QUESTION 171**

You are shrinking the SCOTT.EMP table by executing the ALTER TABLE scott.emp SHRINK SPACE CASCADE; statement.

What is a prerequisite for shrinking the SCOTT.EMP table?

- A. You must enable the block change tracking feature.
- B. You must have enabled the Flashback Database feature.
- C. You must use OMF in your database.
- D. You must define the tablespace of the SCOTT.EMP table for automatic segment space management.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You must define the tablespace of the SCOTT.EMP table for automatic segment space management. Segment shrink operations have one major restriction. Segments managed using freelists cannot be shrunk. As a result, the tablespace that contains the segment must be defined with automatic segment space management.

The option stating that you must enable the block change tracking feature for a shrinking operation is incorrect. The block change tracking feature records the blocks modified since the last backup and stores them in a block change tracking file. RMAN uses this file to determine the blocks to be backed up in an incremental backup. This improves the performance because RMAN does not have to scan the entire datafile during the backup.

The option stating that you must have enabled the Flashback Database feature incorrect. Flashback Database is not used when shrinking segments; it is used to recover the database to a point in the past. The option stating that you must use OMF in your database to perform a shrinking operation is incorrect. OMF is used to specify the default locations of the datafiles, control files, and online redo log files. If OMF is configured in your database and you do not specify the names and sizes of the datafiles during tablespace creation, then Oracle automatically assigns names and sizes to the datafiles associated with that tablespace and stores them in the location specified by the DB\_CREATE\_FILE\_DEST parameter. The DB\_CREATE\_ONLINE\_LOG\_DEST\_n parameter is used to specify the default locations of the online redo log files and the control files.

#### **QUESTION 172**

You need to shrink the EMP table and its dependent segments to release the unused space below and above the High Water Mark (HWM). The EMP table and its dependent segments are located in the USERS tablespace.

Which statement should you use?

- A. ALTER TABLE emp COALESCE;
- B. ALTER TABLE emp SHRINK SPACE;
- C. ALTER TABLE emp SHRINK SPACE CASCADE;
- D. ALTER TABLE emp SHRINK SPACE INCLUDING CONTENTS;

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should use the ALTER TABLE emp SHRINK SPACE CASCADE; statement. The CASCADE clause with the SHRINK SPACE clause of the ALTER TABLE statement shrinks all the dependent segments of the EMP table. For example, if an index is associated with the EMP table, the ALTER TABLE emp SHRINK SPACE CASCADE; statement would shrink the EMP table and its index and release the unused space below and above the segment's High Water Mark (HWM).

The ALTER TABLE emp COALESCE; statement is incorrect and would generate an error on execution. The ALTER TABLE emp SHRINK SPACE; statement releases the unused space below and above the HWM of the EMP table only and not for its dependent segments.

The ALTER TABLE emp SHRINK SPACE INCLUDING CONTENTS; statement is incorrect and would

generate an error on execution.

# **QUESTION 173**

You are performing the shrink operation on the SCOTT.EMP table. You want to perform the same operation on all dependent objects of the SCOTT.EMP table.

What is NOT a prerequisite for the operation?

- A. You must enable row movement on the SCOTT.EMP table.
- B. You must define the tablespace of the SCOTT.EMP table for automatic segment space management.
- C. You must use the CASCADE clause in the ALTER TABLE...SHRINK SPACE statement.
- D. You must use the COMPACT clause in the ALTER TABLE...SHRINK SPACE statement.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

If you want to perform the shrink operation on the dependent objects of the SCOTT.EMP table, it is not necessary to use the COMPACT clause in the ALTER TABLE...SHRINK SPACE statement for the shrinking operation. If the COMPACT clause is not specified, the segment space is made compact. At the end of the compaction phase, the HWM is adjusted and the unused space is released. If you specify the COMPACT clause, the HWM is not adjusted.

You must enable row movement on the SCOTT.EMP table for the shrink operation. The shrink operation may cause ROWIDs to change in heap-organized tables. You must enable row movement on the corresponding segment before executing the shrink operation. To enable row movement on the SCOTT.EMP table, issue the ALTER TABLE...ENABLE ROW MOVEMENT; statement.

You must use the CASCADE clause in the ALTER TABLE SHRINK SPACE statement. If you want to perform the same operation on all the dependent objects of the SCOTT.EMP table, then you must issue the ALTER TABLE scott.emp SHRINK SPACE CASCADE; statement. If the CASCADE keyword is specified, the shrink behavior is cascaded to all the dependent segments that support a shrink operation, except materialized views, LOB indexes, IOT mapping tables, and overflow tables.

You must define the tablespace of the SCOTT.EMP table for automatic segment space management. Segment shrink operations have one major restriction. Segments managed using freelists cannot be shrunk. As a result, the tablespace that contains the segments must be defined with automatic segment space management.

# **QUESTION 174**

You have enabled resumable space allocation in your database by setting the RESUMABLE\_TIMEOUT parameter to a nonzero value.

Which three statements about resumable space allocation are true? (Choose three.)

- A. Even with resumable space allocation enabled for your database, you can disable resumable space allocation for a single session.
- B. A resumable statement is suspended only if an out of space error occurs.
- C. When a resumable statement is suspended, the transaction that contains the statement is also suspended.
- D. A resumable statement can only be suspended and resumed once during the execution of the statement.
- E. You can query the V\$SESSION\_WAIT dynamic performance view to identify the statements that are suspended for a session.

Correct Answer: ABE Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The following three statements are true about resumable space allocation:

Even with resumable space allocation enabled for your database, you can disable resumable space allocation for a single session.

When a resumable statement is suspended, the transaction that contains the statement is also suspended. You can query the V\$SESSION\_WAIT dynamic performance view to identify the statements that are suspended for a session.

Resumable space allocation is an Oracle feature that allows certain statements to be suspended if space errors, such as out of space errors, space quota exceeded errors, or maximum extents reached errors, occur. Resumable statements include SELECT statements, DML statements, SQL\*Loader imports and exports, and some DDL statements. You enable resumable space allocation by setting the RESUMABLE\_TIMEOUT parameter to a value greater than zero. The parameter represents the amount of time, in seconds, that a resumable statement will be suspended before it is terminated and an error is generated. You can also set this value for a session using the ALTER SESSION ENABLE RESUMABLE TIMEOUT n; statement. Or, you can disable resumable space allocation for a session using the ALTER SESSION

DISABLE RESUMABLE; statement. If you have enabled resumable space allocation and a resumable statement experiences a space error, the statement is suspended. If the statement is contained within a transaction, the transaction is also suspended. This gives you the opportunity to correct the space issue. After the space issue is corrected, the suspended statement automatically resumes execution. You can query the V\$SESSION\_WAIT dynamic performance view to identify the statements that are suspended for a session. The event column of the V\$SESSION\_WAIT view will display statement suspended, wait error to be cleared for a statement that is suspended. The sid column identifies the session id that executed the suspended statement, and the seconds\_in\_wait column displays the number of seconds the statement has been suspended.

The option that states a resumable statement is suspended only if an out of space error occurs is incorrect. A resumable statement is also suspended if a space quota is exceeded or a maximum extents reached error occurs.

The option that states a resumable statement can only be suspended and resumed once during the execution of the statement is incorrect. A statement can be suspended and resumed multiple times during its execution.

### **QUESTION 175**

You want to enable resumable space allocation at the instance level.

Which two actions would enable resumable space allocation at the instance level? (Choose two.)

- A. issuing the ALTER SYSTEM ENABLE RESUMABLE; statement
- B. issuing the ALTER SESSION ENABLE RESUMABLE; statement
- C. modifying the RESUMABLE\_TIMEOUT initialization parameter to a nonzero value
- D. issuing the ALTER SYSTEM SET RESUMABLE\_TIMEOUT=<nonzero value>; statement

Correct Answer: CD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You can enable resumable space allocation at the instance level by modifying the RESUMABLE\_TIMEOUT initialization parameter to a nonzero value, or you can change the value of the RESUMABLE\_TIMEOUT parameter dynamically by issuing the following statement:

ALTER SYSTEM SET RESUMABLE\_TIMEOUT=<nonzero\_value>;

Issuing the ALTER SYSTEM ENABLE RESUMABLE; statement is incorrect. This statement would generate an error on execution because the syntax is incorrect.

Issuing the ALTER SESSION ENABLE RESUMABLE; statement is incorrect. You issue the ALTER SESSION ENABLE RESUMABLE; statement to enable resumable space allocation at the session level, not to enable resumable space allocation at the instance level.

# **QUESTION 176**

You want to disable resumable space allocation for all sessions.

Which value should be assigned to the RESUMABLE\_TIMEOUT parameter to disable resumable space allocation for all sessions?

- A. 0
- B. 10
- C. 100
- D. NULL

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You can disable resumable space allocation for all sessions by assigning a value of 0 to the RESUMABLE\_TIMEOUT parameter. The RESUMABLE\_TIMEOUT parameter indicates the maximum time that a resumable statement is suspended. A resumable statement can be a data definition language (DDL) command that is being suspended due to non-availability of space allocated for the object to be created in the database. After the space is allocated, the suspended statement can be resumed for execution. You can also disable resumable space allocation for a single session using the ALTER SESSION DISABLE RESUMABLE; statement within the session.

The values 10 and 100 can be assigned to the RESUMABLE\_TIMEOUT parameter, but these values cannot be used to disable resumable space allocation for all sessions. A value of 10 indicates 10 seconds, and a value of 100 indicates 100 seconds.

The NULL value is an invalid value to be assigned to the RESUMABLE\_TIMEOUT parameter.

#### **QUESTION 177**

You have enabled resumable space allocation in your database. You are creating an AFTER SUSPEND trigger on your database to record the details of any suspended statements in the custom audit table named AUDIT SUSPEND.

You write trigger code that uses the DBMS\_RESUMABLE.SPACE\_ERROR\_INFO function to gather information about the suspended statement, and then inserts some of the information into the AUDIT\_SUSPEND table.

Which statement about this trigger is true?

- A. The trigger fires only the first time that a statement is suspended for a session.
- B. All of the statements within the trigger are considered nonresumable.
- C. The trigger fires when a space error is corrected and a suspended statement is resumed.
- D. The trigger will not be created because you cannot call the SPACE\_ERROR\_INFO function within an AFTER SUSPEND trigger.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

All of the statements within the trigger are considered nonresumable. When a statement is suspended due to a space error, an AFTER SUSPEND system event is generated. A trigger created with the AFTER SUSPEND clause can be used to execute code when a statement suspension occurs. However, none of the statements within the trigger code are considered resumable. If a statement inside the trigger code, such as an INSERT statement in this scenario, generates a space error, the INSERT statement within the trigger is not suspended, and an error is immediately generated. The following syntax is used for creating an AFTER SUSPEND trigger at the database level:

CREATE OR REPLACE TRIGGER trigger\_name AFTER SUSPEND ON DATABASE

**BEGIN** 

•••

END:

The option that states the trigger fires only the first time that a statement is suspended for a session is

incorrect. An AFTER SUSPEND trigger defined at the database level fires each time a statement is suspended in the database.

The option that states the trigger fires when a space error is corrected and a suspended statement is resumed is incorrect. The trigger fires when the statement is suspended, not when it is resumed.

The option that states the trigger will not be created because you cannot call the SPACE\_ERROR\_INFO function within an AFTER SUSPEND trigger is incorrect. You can call the

DBMS\_RESUMABLE.SPACE\_ERROR\_INFO function within the trigger code. This function returns more detail information about the space error that caused the suspension. From within the trigger code, you can also call the DBMS\_RESUMABLE.ABORT procedure to immediately abort a suspended statement and generate an error.

**Using Flashback Technology** 

#### **QUESTION 178**

Which Flashback technologies do NOT depend on the availability of undo data? (Choose all that apply.)

- A. Flashback Drop
- B. Flashback Table
- C. Flashback Database
- D. Flashback Query
- E. Flashback Version Query

Correct Answer: AC Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The following Flashback technologies do not depend on the availability of undo data:

Flashback Drop Flashback Database

The Flashback Drop feature uses the Recycle Bin, and the Flashback Database feature uses flashback logs. You can use the Flashback Drop feature to recover a database object that was erroneously dropped. When a database object is dropped, the dropped object is temporarily stored in the Recycle Bin of the database. It can be recovered from the Recycle Bin using the Flashback Drop feature. This Recycle Bin is part of the data dictionary, and does not rely on available undo data. This technology helps to recover a dropped database object, keeping the rest of the database intact. To use the Flashback Drop feature, you should issue the FLASHBACK TABLE...TO BEFORE DROP; statement. The Flashback Database feature is used to recover a database as of a particular time or SCN. You can use Flashback Database to reverse the effects of erroneous updates or the effect of a TRUNCATE TABLE statement. To use the Flashback Database feature, you must configure a flash recovery area, set the DB\_FLASHBACK\_RETENTION\_TARGET parameter, and enable Flashback Database using the ALTER DATABASE FLASHBACK ON; statement. After enabling Flashback Database, you can use the FLASHBACK DATABASE statement to revert the database to a point in time in the past or an SCN.

All of the other options are incorrect. Flashback Table, Flashback Query, Flashback Version Query, and Flashback Transaction Query use undo data. When you use these features, you should ensure that automatic undo management is enabled. You can do so by ensuring that the UNDO\_MANAGEMENT initialization parameter is set to AUTO. You should also ensure that you have set the UNDO\_RETENTION initialization parameter to a value large enough to accommodate the operations you might need to perform. The Flashback Table feature is used to restore a single table to a particular time in the past or an SCN without

affecting other database objects. You can use the Flashback Table feature by specifying the FLASHBACK TABLE statement with the TO SCN or TO TIMESTAMP clause. The Flashback Query feature is used to query data as it existed at some point in time in the past. This can be helpful if you need to compare current data with data that existed at a previous time. To use Flashback Query, you specify the AS OF TIMESTAMP or AS OF SCN clause in a SELECT statement.

#### **QUESTION 179**

The code that executes several transactions is shown in the exhibit. (Click the Exhibit(s) button.) You want to back out all three transactions.

Which backout option should you specify when calling the TRANSACTION\_BACKOUT procedure?

- A. CASCADE
- B. NOCASCADE
- C. NOCASCADE FORCE
- D. NONCONFLICT\_ONLY

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should specify the CASCADE option. This will back out the specified transactions and any dependent transactions in the opposite order that they were committed.

You should not specify the NOCASCADE option because this would generate an error. The NOCASCADE option is used when no transaction dependencies exist.

You should not specify the NOCASCADE\_FORCE option. The NOCASCADE\_FORCE option is used when you want to back out a specific transaction, but not its dependent transactions. For example, in this scenario, you could use the NOCASCADE\_FORCE option to back out the second transaction, but leave the third transaction intact.

You should not specify the NONCONFLICT\_ONLY option. The NONCONFLICT\_ONLY option is used to back out only changes to non-conflicting rows for a specified transaction.

#### **QUESTION 180**

You want to use the Flashback Query feature to query data as of a specified point in time using the AS OF clause in a SELECT statement.

What is a prerequisite for using this feature?

- A. You must use automatic undo management in the database.
- B. You must configure OMF in your database.
- C. You must configure ASM for storing the datafiles.
- D. You must multiplex the online redo log file.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

To use the Flashback Query feature, you must use automatic undo management in your database. The Flashback Query feature, which is based on undo data, utilizes undo data to query data as of a specified point in time or as of a specific SCN. Therefore, to use this feature, you should first ensure that the UNDO MANAGEMENT initialization parameter is set to AUTO and configure your UNDO RETENTION initialization parameter to a desired value. The UNDO RETENTION initialization parameter determines the amount of time for which committed undo data is retained in the database. The UNDO RETENTION initialization parameter, which is specified in seconds, determines the amount of committed undo data that should be kept in the database. If transactions require additional undo space and there is no more space in the undo tablespace, then Oracle will start reusing the undo space. The RETENTION GUARANTEE option, which can be set on the undo tablespace, protects undo data from being overwritten. To use the Flashback Query feature, you specify the AS OF clause in a SELECT statement. You can specify AS OF TIMESTAMP to query data as of a specific point in time or AS OF SCN to query data as existed as of a specific SCN. The option stating that you must configure OMF in your database is incorrect. It is not necessary to configure OMF in the database to use the Flashback Query feature. The Oracle Managed Files (OMF) feature is configured for the control file, the names, and the datafiles. If OMF is configured in your database and you do not specify the names and sizes of the datafiles during tablespace creation, then Oracle automatically assigns names and sizes to the datafiles associated with that tablespace.

The option stating that you must configure ASM for storing the datafiles is incorrect. It is not necessary to configure ASM to use the Flashback Query feature. ASM is used to enhance the performance because ASM automatically spreads database objects over multiple devices. ASM increases the availability by allowing new disk devices to be added to the database without shutting down the database.

The option stating that you must multiplex the online redo log file is incorrect. Multiplexing of the redo log files is used to ensure the safety of online redo log files. If redo log files are multiplexed, then the LGWR process writes the same information to the multiple, identical redo log files.

#### **QUESTION 181**

You are working as a Database Administrator. You erroneously dropped an important table named WAREHOUSE\_DETAILS. The table resides in a non-SYSTEM tablespace, KIT1.

The following dependent objects have been defined on the dropped table:

Printing of graphics has been disabled.

Due to limited space in the KIT1 tablespace, Oracle performed automatic space reclamation, and some of the indexes and triggers for the WAREHOUSE\_DETAILS table were removed from the Recycle Bin. You decide to recover the table using Flashback Drop. You execute the following statement:

SQL>FLASHBACK TABLE warehouse\_details TO BEFORE DROP;

What will be the implication of executing this statement?

- A. he WAREHOUSE\_DETAILS table is recovered along with the NOT NULL constraints, primary key constraint, and the referential integrity constraints.
- B. The WAREHOUSE\_DETAILS table is recovered along with all the dependent objects, except the indexes and triggers previously removed from the Recycle Bin.
- C. The WAREHOUSE\_DETAILS table is recovered along with all the dependent objects, except the referential integrity constraints and the indexes and triggers previously removed from the Recycle Bin.
- D. Only the WAREHOUSE\_DETAILS table is recovered, and none of the dependent objects are recovered.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

In the given scenario, the WAREHOUSE\_DETAILS table is recovered along with all the dependent objects, except the referential integrity constraints and the indexes and triggers previously removed from the Recycle Bin. When a table is dropped, the table and all its dependent objects, such as indexes, triggers, and constraints, are stored in the Recycle Bin. The referential integrity constraints are not protected by the Recycle Bin. Therefore, when the table is recovered using Flashback Drop, all its dependent objects are recovered except the referential integrity constraints. The dropped objects are kept in the Recycle Bin until the tablespace to which the dependent objects belong is able to allocate new extents. When space pressure arises, such as when the user quota reaches its maximum limit, the space utilized by the dropped objects in the Recycle Bin is automatically reclaimed by Oracle. In this scenario, the dropped objects are purged from the Recycle Bin on a First In First Out (FIFO) basis. Objects that are purged from the Recycle Bin due to space pressure cannot be recovered. As a result, if the dependent objects are removed from the Recycle Bin due to space pressure, they cannot be recovered when you try to recover the dropped table using Flashback Drop.

The option stating that only the WAREHOUSE\_DETAILS table is recovered is incorrect because some dependent objects are recovered along with the WAREHOUSE\_DETAILS table.

The option specifying that the WAREHOUSE\_DETAILS table is recovered along with the NOT NULL constraints, primary key constraint, and the referential integrity constraints is incorrect because referential integrity constraints are not recovered using Flashback Drop.

The option that states that the WAREHOUSE\_DETAILS table is recovered along with all the dependent objects, except the indexes and triggers previously removed from the Recycle Bin, is incorrect because referential integrity constraints are not protected by the Recycle Bin.

# **QUESTION 182**

After executing a SELECT statement on the EMP table, you observe that rows corresponding to the

DEPARTMENT\_ID 30 have been deleted from the table. You must determine the transaction in which the rows were deleted. You decide to use Flashback Version Query to determine the transaction in which the rows were deleted. The current SCN is 30203345.

You execute the following SELECT statement on the EMP table:

SELECT versions xid AS XID, versions startscn AS STARTSCN, versions endscn AS ENDSCN,

versions operation AS O, emp id AS ID FROM EMP

VERSIONS BETWEEN 30203315 AND 30203328 WHERE department\_id=30;

Which row in the output represents the row that corresponds to the transaction in which the delete operation was performed?

A. XID

STARTSCN **ENDSCN** O ID 8c0050205A000000 30203315 I 30 B. XID STARTSCN **ENDSCN** O ID 8c0050405A000000 30203319 Ι 30 C. XID **STARTSCN ENDSCN** O ID 30203322 8c0051505A000000 30203328 30 D. XID **ENDSCN** O ID STARTSCN 8c0050675A000000 D 30 30203328

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The following row in the output corresponds to the transaction that performed the delete operation in this scenario:

XID STARTSCN ENDSCN O ID 8c0050675A000000 30203328 D 30

The Flashback Version Query features allow you to determine the transaction ID of the transaction that deleted the rows. When you include the VERSIONS BETWEEN clause in a SELECT statement, different pseudocolumns are available that can be included in the select list or in the WHERE clause of the SELECT statement. The following pseudocolumns are available:

VERSIONS XID: The transaction ID of the transaction that created a particular version of a row.

VERSIONS STARTSCN: The SCN at which a particular version of a row was created.

VERSIONS\_STARTTIME: The timestamp at which a particular version of a row was created.

VERSIONS\_ENDSCN: The SCN at which a particular version of a row expired. The value in this pseudocolumn will be NULL when the version of a row is still alive and when the row version is the deleted version of the row.

VERSIONS\_ENDTIME: The timestamp at which a particular version of a row expired.

VERSIONS OPERATION: The type of operation that was performed by this transaction.

In the following output, the value in the ENDSCN column is NULL, the value in the ID column is 30, and the operation performed is a delete operation indicated by the value D:

XID STARTSCN ENDSCN O ID 8c0050675A000000 30203328 D 30

Therefore, the delete operation in which the rows corresponding to DEPARTMENT\_ID 30 were deleted was performed by transaction ID 8c0050675A000000. The NULL value for the ENDSCN column indicates that the row did not exist at query time because it was deleted. You can also use VERSIONS BETWEEN MINVALUE AND MAXVALUE. MINVALUE represents the SCN of the oldest data that is available, and MAXVALUE represents the SCN of the most recent data available.

The outputs that display a value of I for the VERSIONS\_OPERATION column and a NULL value for the ENDSCN column are incorrect because these rows correspond to insert operations indicated by the value I in the VERSIONS\_OPERATION column. The value in the ENDSCN column is NULL because these versions of rows existed at query time.

The output that displays a value of I for the VERSIONS\_OPERATION column and a value of 30203328 for the ENDSCN column is incorrect because the row corresponds to an insert operation indicated by the value I in

the VERSIONS\_OPERATION column. The values in the STARTSCN and ENDSCN columns represent the SCN at which this particular row version was created and expired, respectively.

# **QUESTION 183**

You performed the following series of actions:

**CREATE TABLE employee** 

(emp\_no NUMBER PRIMARY KEY,

emp name VARCHAR2(16),

salary NUMBER);

INSERT INTO emp VALUES (101, 'JAMES', 800); COMMIT;

**CREATE TABLE department** 

(dept no NUMBER,

dept\_name VARCHAR2(32));

INSERT INTO dept VALUES (5, 'FINANCE'); COMMIT;

At 11:00 A.M., a user issues the following erroneous statements that delete the row for employee 101 from the EMPLOYEE table:

DELETE FROM employee WHERE emp\_no = 101: COMMIT:

At 11:05 A.M., another user issues the following statement that inserts new values for employee:

INSERT INTO employee VALUES(101, 'SMITH', 700); COMMIT;

At this point in time, you use the Flashback Version Query feature.

What will be the result of using the Flashback Version Query feature?

- A. The EMPLOYEE table is retrieved in the state it was at 11:00 A.M.
- B. The database is in the state it was at 11:00 A.M.
- C. All versions of the row for employee 101 are displayed.
- D. Undo SQL statements are provided to undo the changes made to the EMPLOYEE table over the last five minutes.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The Flashback Version Query returns all the versions of the row for employee 101. The Flashback Version Query feature is used to retrieve all the versions of the rows that exist or existed between the times the query was executed to a specific point in time in the past. Flashback Version Query returns only the committed occurrences of the rows for an object; it does not display the uncommitted versions of the rows. The Flashback Version Query works by retrieving data from the undo tablespace. Therefore, to use Flashback Version Query, you should ensure that the UNDO\_MANAGEMENT initialization parameter is set to AUTO and configure your UNDO\_RETENTION initialization parameter to a desired value. The UNDO\_RETENTION initialization parameter, which is specified in seconds, determines how much committed undo data should be kept in the database. If the transactions require additional undo space and there is no additional space in the undo tablespace, then Oracle will start reusing the undo space. The RETENTION GUARANTEE option, which can be set on the undo tablespace, will protect the unexpired undo data in this scenario.

The option stating that the table is retrieved in the state it was at 11:00 A.M. is incorrect because flashing back the tables to their previous states is the function of the Flashback Table feature. The Flashback Table feature allows you to recover one or more tables to a specific point in time without being required to perform more time-consuming recovery operations, such as point-in-time recovery, which may also affect the availability of the rest of the database. The Flashback Table feature recovers the table by rolling back only the changes made to the tables or to their dependent objects, such as indexes.

The option stating that the database is in the state it was at 11:00 A.M. is incorrect because flashing back the database to its previous state is the function of the Flashback Database feature. Flashback Database allows you to quickly restore the entire database to its previous state.

The option stating that you will be provided the SQL statements to undo the changes made to the EMPLOYEE table over the last five minutes is incorrect. This is the function of the Flashback Transaction Query feature. The Flashback Transaction Query feature is designed to function as a diagnostic tool to identify changes made to the database at the transactional level. Using the Flashback Transaction Query feature, you can

identify all changes made within a specific time period and perform the transactional recovery of tables. The Flashback Transaction Query feature is based on undo data and utilizes the UNDO\_RETENTION initialization parameter to determine the duration for which the committed undo data will be retained in the database. The FLASHBACK\_TRANSACTION\_QUERY view can be used to identify the operations that are performed on a table.

# **QUESTION 184**

In which scenario would you use the Flashback Version Query feature?

- A. when you want to restore a table that has been dropped from the Recycle Bin
- B. when you want to identify the transaction ID of the transaction that deleted some important records from a table
- C. when you want to recover the schema of a dropped user
- D. when you want to restore a dropped tablespace

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You would use the Flashback Version Query feature when you want to identify the transaction ID of a transaction that deleted some important records from a table. The Flashback Version Query feature provides a history of the changes made to a row along with the corresponding identifiers of the transactions that made the changes. You should use the transaction identifier provided by the Flashback Version Query feature in the Flashback Transaction Query to identify the user who made the changes in the database by running the specific transaction. The Flashback Transaction Query feature provides Undo SQL statements to undo the changes made by a specific transaction.

The option stating that you would use the Flashback Version Query feature when you want to restore a table that has been dropped from the Recycle Bin is incorrect. Flashback Drop, not Flashback Version Query, is used to restore a dropped table from the Recycle Bin.

The option stating that you would use the Flashback Version Query feature when you want to recover the schema of a dropped user is incorrect. Flashback Database, not Flashback Version Query, is used to recover a dropped user's schema.

The option stating that you would use the Flashback Version Query feature when you want to restore a dropped tablespace is incorrect. To restore a dropped tablespace, you would use the Flashback Database feature.

# **QUESTION 185**

You are maintaining an OLTP database. You are performing the Flashback Transaction Query to find the undo SQL statements that can be used to undo the changes made to the database in a specific time period. Which pseudocolumn will you use to perform the Flashback Transaction Query?

- A. VERSIONS STARTSCN
- B. VERSIONS\_STARTTIME
- C. VERSIONS\_XID
- D. VERSIONS OPERATION

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You will use the VERSIONS\_XID pseudocolumn to perform a Flashback Transaction Query to find the undo SQL statements that can be used to undo the changes made to the database in a specific time period. Oracle Flashback Version Query and Oracle Flashback Transaction Query are referred to as complementary

features. The Oracle Flashback Version Query feature provides a history of the changes made to a row along with the corresponding identifiers of the transactions that made the changes. The VERSIONS\_XID pseudocolumn displays the transaction identifiers of the transactions that made the changes within the specific time period. The transaction identifiers provided by the Flashback Version Query feature are used in the Flashback Transaction Query.

The option stating that you will use the VERSIONS\_STARTSCN pseudocolumn to perform a Flashback Transaction Query to find the undo SQL statements that can be used to undo the changes made to the database in a specific time period is incorrect. The VERSIONS\_STARTSCN pseudocolumn is used to display the SCN number at which the version of a row was created.

The option stating that you will use the VERSIONS\_STARTTIME pseudocolumn to perform a Flashback Transaction Query to find the undo SQL statements that can be used to undo the changes made to the database in a specific time period is incorrect. The VERSIONS\_STARTTIME pseudocolumn is used to display the timestamp at which the version of a row was created.

The option stating that you will use the VERSIONS\_OPERATIONS pseudocolumn to perform the Flashback Transaction Query to find the undo SQL statements that can be used to undo the changes made to the database in a specific time period is incorrect. The VERSIONS\_OPERATION pseudocolumn is used to display the operation performed by the transaction. In this pseudocolumn, I indicates an insertion, D indicates a deletion, and U indicates an update.

#### **QUESTION 186**

You issue INSERT statements to insert rows into the SHIPPING table. Immediately after performing the inserts, you drop a column in the table using the following statement:

ALTER TABLE shipping DROP COLUMN ship\_to\_alt;

You subsequently, make modifications to the SHIPPING table, including inserts, updates, and deletes. After making these modifications and committing the changes, you issue the following statement: SELECT versions\_xid AS XID, versions\_startscn AS STARTSCN, versions\_endscn AS ENDSCN,

versions\_operation AS O, ord\_id AS ID

FROM shipping

VERSIONS BETWEEN SCN MINVALUE AND MAXVALUE;

Which statement is true about the result of executing this statement?

- A. Flashback Version Query returns only the versions of rows you modified or deleted after the ALTER TABLE statement, not the rows inserted.
- B. Flashback Version Query returns only the versions of rows you inserted, modified, and deleted after the ALTER TABLE statement.
- C. Flashback Version Query returns the versions of rows for all of the DML statements you issued.
- D. Flashback Version Query returns only the versions of rows you inserted before the ALTER TABLE statement.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Flashback Version Query returns only the versions of rows you inserted, modified, and deleted after the ALTER TABLE statement. In this scenario, you included the VERSIONS BETWEEN SCN clause in your SELECT statement, and you use MINVALUE and MAXVALUE. MINVALUE represents the SCN of the oldest data that is available, and MAXVALUE represents the SCN of the most recent data available. However, after performing the initial inserts, you modified the structure of the table using an ALTER TABLE statement. When you modify the structure of a table using a DDL statement, Flashback Version Query can no longer generate row versions that occurred before the table structure was altered. Therefore, in this scenario, Flashback Version Query only returns the versions of rows you inserted, modified, and deleted after the table structure was changed.

The option that states Flashback Version Query returns only the versions of rows you modified or deleted after the ALTER TABLE statement, not the rows inserted is incorrect. Flashback Version Query would also return the versions of rows inserted after the ALTER TABLE statement.

The option that states Flashback Version Query returns the versions of rows for all of the DML statements you

issued is incorrect. Flashback Version Query cannot span DDL statements and would not return row versions for any DML you issued before the ALTER TABLE statement.

The option that states Flashback Version Query returns only the versions of rows you inserted before the ALTER TABLE statement is incorrect. Flashback Version Query returns only the rows affected by DML you issued after the ALTER TABLE statement.

# **QUESTION 187**

You are using the VERSIONS clause of the Flashback Version Query feature in your database. Which statement is true of the VERSIONS clause?

- A. The VERSIONS clause cannot be used to query index-organized tables (IOTs).
- B. The VERSIONS clause can be used to query fixed tables and views.
- C. The VERSIONS clause can generate versions of rows for a table even if the structure of the table has changed.
- D. The VERSIONS clause does not apply to the segment shrink operations on the table.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The option stating that the VERSIONS clause does not apply to the segment shrink operations on the table is correct. The segment shrink operation only moves the rows from one block to another and does not change the data in the rows. Therefore, the VERSIONS clause does not apply to the segment shrink operation. The VERSIONS clause is used to identify multiple versions of rows in a table. The different pseudocolumns of a versions query can be used to determine detailed information regarding the different versions of the rows returned as a result of using the VERSIONS clause in a SELECT statement.

The option stating that the VERSIONS clause cannot be used to query index-organized tables (IOTs) is incorrect. The VERSIONS clause can be used to query IOTs.

The option stating that the VERSIONS clause can be used to query fixed tables and views is incorrect. The VERSIONS clause cannot be used to query fixed tables and views. In addition, the VERSIONS clause cannot be used to query external tables, temporary tables, and tables that are part of a cluster.

The option stating that the VERSIONS clause can generate versions of rows for a table even if the structure of the table has changed is incorrect. The VERSIONS clause cannot go beyond the DDL statement that changes the structure of the table. After the structure of a table is altered using a DDL statement, the VERSIONS clause cannot generate row versions from before the table structure was changed.

# **QUESTION 188**

You are working as a DBA at NetFx Corporation. A user, SCOTT, is maintaining the records of all employees in the EMPLOYEE table. Initially, the salary of the employee with employee number E0025, was \$1800. On May 1, 2007, the salary of the employee was increased by \$200.

SCOTT issued the following statements to modify the record of the employee:

SQL>UPDATE EMPLOYEE SET SALARY = 2000

WHERE EMPNO = 'E0025'; SQL>COMMIT;

On December 1, 2007, the salary of the employee was increased by \$400. SCOTT issued the following statements to modify the record of the employee:

SQL>UPDATE EMPLOYEE SET SALARY = 2400

WHERE EMPNO = 'E0025'; SQL>COMMIT;

On July 1, 2008, the salary of the employee was increased by \$500. SCOTT issued the following statements to modify the record of the employee:

SQL>UPDATE EMPLOYEE SET SALARY = 2900

WHERE EMPNO = 'E0025'; SQL>COMMIT;

On July 5, 2008, the HR manager asked you to generate an incremental report of the employee's salary for the period between May 1, 2007 and July 1, 2008.

Which Flashback feature should you use to generate the incremental report?

### A. Flashback Table

- B. Flashback Database
- C. Flashback Version Query
- D. Flashback Drop

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should use the Flashback Version Query feature to generate the incremental report. The Flashback Version Query feature is used to retrieve all the versions of the rows that exist or existed between the times the query was executed to a specified point-in-time in the past. The Flashback Version Query feature returns only the committed occurrences of the rows for an object; it does not display the uncommitted row versions. The Flashback Version Query feature retrieves data from the undo tablespace. Therefore, to use Flashback Version Query, you should ensure that the UNDO\_MANAGEMENT initialization parameter is set to AUTO and configure your UNDO\_RETENTION initialization parameter to a desired value. The UNDO\_RETENTION initialization parameter, which is specified in seconds, determines how much committed undo data must be stored in the database. If the transactions require additional undo space and there is no space in the undo tablespace, Oracle will reuse the undo space. The RETENTION GUARANTEE option, which can be set on the undo tablespace, prevents unexpired undo data from being overwritten.

The Flashback Drop option is incorrect because this feature is used to restore dropped objects. When a database object is dropped, a copy of the object and its dependent objects are saved in the Recycle Bin to ensure that the object can be recovered if required. The dropped database object is not removed from the database until the Recycle Bin is emptied or until Oracle automatically reclaims space in the Recycle Bin. In this scenario, the EMPLOYEE table was not dropped.

The Flashback Table option is incorrect because this feature allows you to recover a table to a specific point in time without performing an incomplete recovery. All dependent objects are also recovered when you use the Flashback Table feature. In this scenario, you want to view only the versions of the row that maintain the record of the employee with employee number E0025. You do not want to flash back the entire table one and one-half years.

The Flashback Database option is incorrect because this feature allows you to flash the entire database back to a specific point in time. This feature enables you to recover from errors such as truncating a large table, an incomplete batch job, or a dropped user.

### **QUESTION 189**

Which statement about space reclamation and the Recycle Bin is true?

- A. The only way to reclaim space in the Recycle Bin is to manually purge tables, indexes, or tablespaces.
- B. Oracle can automatically reclaim space in the Recycle Bin when additional space is needed.
- C. Oracle automatically reclaims space in the Recycle Bin at start up.
- D. Dropped objects are kept in the Recycle Bin indefinitely until a PURGE statement is issued.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Oracle can automatically reclaim space in the Recycle Bin when additional space is needed. Dropped objects are kept in the Recycle Bin until the tablespace to which the dependent objects belong is unable to allocate new extents. When space pressure arises, such as when the user quota reaches its maximum limit, the space utilized by the dropped objects in the Recycle Bin is automatically reclaimed by Oracle. If this occurs, the dropped objects are purged from the Recycle Bin on a First In First Out (FIFO) basis. Objects that are purged from the Recycle Bin due to space pressure cannot be recovered. As a result, if dependent objects are removed from the Recycle Bin due to space pressure, they cannot be recovered when you try to recover the dropped table using Flashback Drop.

The option that states the only way to reclaim space in the Recycle Bin is to manually purge tables, indexes, or tablespaces is incorrect. Oracle can perform automatic space reclamation.

The option that states dropped objects are kept in the Recycle Bin indefinitely until a PURGE statement is issued is incorrect. Dropped objects are kept until the tablespace to which the objects belong is unable to allocate new extents or until the objects are manually purged from the Recycle Bin.

The option that states Oracle automatically reclaims space in the Recycle Bin at start up is incorrect. Oracle automatically reclaims space in the Recycle Bin when space pressure arises, not at start up.

#### **QUESTION 190**

You are running an Oracle Database 11g in the NOARCHIVELOG mode. You are informed that a user has erroneously dropped a table that resides in the USERS tablespace. You decide to recover the dropped table using Flashback Drop. However, you discover that Flashback Database is not enabled in the database. Which of the following options about the Flashback Drop feature is true?

- A. Flashback Drop can be used to recover the dropped table, but some transactions may be lost.
- B. Flashback Drop can be used to recover the dropped table without losing a single transaction.
- C. Flashback Drop cannot be used to recover the dropped table because the database does not archive online redo log files.
- D. Flashback Drop cannot be used to recover the dropped table because Flashback Database is not enabled in the database.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

In this scenario, Flashback Drop can be used to recover the dropped table without losing a single transaction. Flashback Database uses flashback logs to recover data, whereas other flashback technologies, including Flashback Query, Flashback Version Query, Flashback Transaction Query, and Flashback Table, use undo data. Flashback Drop does not use undo data, but rather uses the Recycle Bin. Flashback Drop is used to undo the effects of the DROP TABLE statement. When a database object is dropped, the dropped object is temporarily stored in the Recycle Bin of the database. It can be recovered from the Recycle Bin using the Flashback Drop feature. The Recycle Bin is part of the data dictionary. This technology helps to recover the table, keeping the rest of the database intact. You will not lose any other transactions in the database. For example, suppose a user drops the EMP table around 2:00 P.M., and other users insert rows in another table around 2:30 P.M. When you undo the result of the DROP TABLE statement using a FLASHBACK TABLE emp TO BEFORE DROP; statement, you recover only the dropped EMP table. The rows inserted into the other table around 2:30 P.M. will not be rolled back, as is the case with traditional incomplete recoveries. To disable Flashback Drop, you can set the RECYCLEBIN initialization parameter to OFF.

The option that states that Flashback Drop can be used, but some transactions may be lost is incorrect. Flashback Drop can be used to recover a dropped table without losing any transactional activity in the database.

Because redo data is not required for Flashback Drop, it can be used even if the database is running in NOARCHIVELOG mode.

Because Flashback Drop is based on the Recycle Bin and Flashback Database on flashback logs, you can recover a dropped table even if Flashback Database is not enabled.

# **QUESTION 191**

You want to allow the KIT1 user to use Flashback Transaction to back out specific transactions as needed. Which three actions should you take? (Choose three.)

- A. Ensure that your database is running in ARCHIVELOG mode.
- B. Enable supplemental logging and primary key supplemental logging for your database.
- C. Explicitly set the undo retention guarantee for your database.
- D. Grant the KIT1 user execute privileges on the DBMS\_FLASHBACK package, and SELECT, FLASHBACK, and DML privileges on specific tables.

Correct Answer: ABD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should ensure that your database is running in ARCHIVELOG mode, enable supplemental logging and primary key supplemental logging for your database, and grant the KIT1 user execute privileges on the DBMS\_FLASHBACK package, and SELECT, FLASHBACK, and DML privileges on specific tables. Oracle 11g introduces an extension to Flashback Transaction Query named Flashback Transaction. You can use Flashback Transaction to back out transactions, and dependent transactions, which occurred for a table. Undo, redo, and supplemental logging are used to back out transactions. To use this feature, your database must be running in ARCHIVELOG mode and supplemental logging and primary key supplemental logging must be enabled. In addition, any user who will perform transaction backouts must have execute privileges on the DBMS\_FLASHBACK package and the correct privileges to underlying tables for which they will be backing out transactions.

The option that states you should explicitly set the undo retention guarantee for your database is incorrect because doing so is not a prerequisite for using Flashback Transaction.

# **QUESTION 192**

You query the Recycle Bin and notice that there are multiple table objects named ORD\_DETAIL in the Recycle Bin. You want to recover the ORD\_DETAIL table that was dropped most recently. You decide to use Flashback Drop to accomplish this.

Which statement is true?

- A. If you issue a FLASHBACK TABLE statement that includes the TO BEFORE DROP clause, the statement will fail.
- B. If you issue a FLASHBACK TABLE statement that specifies the table name and the TO BEFORE DROP clause, the most recently dropped version will be restored from the Recycle Bin.
- C. To successfully recover the ORD\_DETAIL table, you must specify the unique Recycle Bin name in the FLASHBACK TABLE statement.
- D. To successfully recover the ORD\_DETAIL table, you must manually purge the older versions before issuing the FLASHBACK TABLE statement.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

If you issue a FLASHBACK TABLE statement specifying the table name and the TO BEFORE DROP clause, the most recently dropped version will be restored from the Recycle Bin. If an object has been re-created and dropped multiple times or if different users drop objects with the same name, it is possible for the Recycle Bin to contain multiple objects with the same name. If you issue a FLASHBACK TABLE statement that specifies the table's name and more than one object with the same name exists, Oracle will restore the latest copy of the object. The table that was moved to the Recycle Bin most recently is recovered using a Last In First Out (LIFO) approach.

The option that states if you issue a FLASHBACK TABLE statement that includes the TO BEFORE DROP clause, the statement will fail is incorrect. The statement will execute successfully, and the most recently dropped version of the table will be recovered from the Recycle Bin.

The option that states to successfully recover the ORD\_DETAIL table, you must specify the unique Recycle Bin name in the FLASHBACK TABLE statement is incorrect. You can specify a unique Recycle Bin name when flashing back a table, and the table with the specified Recycle Bin name will be retrieved from the Recycle Bin. However, you can also specify the table's name, and Oracle will use a LIFO approach, recovering the most recently dropped version of the table.

The option that states to successfully recover the ORD\_DETAIL table, you must manually purge the older versions before issuing the FLASHBACK TABLE statement is incorrect. There is no need to manually purge

the older versions. You can specify the table name, and Oracle will recover the most recently dropped version. You can use the PURGE statement to manually purge objects from the Recycle Bin. You should note that Oracle uses a First In First Out (FIFO) approach when performing purges. You should also note that if space pressure arises, such as a tablespace being unable to allocate extents, Oracle may automatically reclaim space in the Recycle Bin.

# **QUESTION 193**

You discover that your Recycle Bin contains two tables with the same name, MY\_TABLE. You also have a table named MY\_TABLE in your schema.

You execute the following statement:

FLASHBACK TABLE my table TO BEFORE DROP RENAME TO my table2:

What will be the result of executing this statement?

- A. One of the tables is recovered from the Recycle Bin using a First In First Out (FIFO) approach.
- B. One of the tables is recovered from the Recycle Bin using a Last In First Out (LIFO) approach.
- C. Both the tables are recovered from the Recycle Bin with one table renamed to MY\_TABLE2 and the other to a system-generated name.
- D. None of the tables are recovered from the Recycle Bin, and the statement returns an error.

Correct Answer: B Section: (none) Explanation

#### **Explanation/Reference:**

**Explanation:** 

One of the tables is recovered from the Recycle Bin using a Last In First Out (LIFO) approach. If you use the FLASHBACK TABLE my\_table TO BEFORE DROP RENAME TO my\_table2; statement to recover a table in a scenario where your Recycle Bin has multiple copies of the MY\_TABLE table, then only the latest copy of the table will be recovered. The table that is moved to the Recycle Bin most recently is recovered first using a LIFO algorithm. In this scenario, you also included a RENAME TO clause in your FLASHBACK TABLE statement. Therefore, the restored table will be given the new name MY\_TABLE2.

The option that states one of the tables is recovered from the Recycle Bin using a First In First Out (FIFO) approach is incorrect because the last table moved to the Recycle Bin is flashed back. The FIFO approach is used when you purge a table from the Recycle Bin using the PURGE TABLE statement. The oldest table moved to the Recycle Bin is purged first.

The option that states both the tables are recovered is incorrect. Using the FLASHBACK TABLE my\_table TO BEFORE DROP RENAME TO my\_table2; statement, you cannot recover both tables. Only the latest table will be recovered.

The option that states none of the tables are recovered from the Recycle Bin is incorrect because the latest copy of the table will be recovered from the Recycle Bin without returning any error.

# **QUESTION 194**

A user drops the DEPARTMENT table from your database. You attempt to flash back the table by issuing the following statement:

FLASHBACK TABLE department TO BEFORE DROP;

Which two statements are true of the result of issuing this FLASHBACK TABLE statement? (Choose two.)

- A. You must have the FLASHBACK ANY TABLE privilege to execute the statement.
- B. The DEPARTMENT table will be recovered only if it has not been purged from the Recycle Bin.
- C. The database will recover all the triggers defined on the DEPARTMENT table that remain in the Recycle
- D. The database will recover all the referential integrity constraints defined on the DEPARTMENT table.
- E. The database will recover all the indexes defined on the DEPARTMENT table.

Correct Answer: BC Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

When you flash back a dropped table using the TO BEFORE DROP clause in the FLASHBACK TABLE statement, the table will be flashed back only if it has not been purged from the Recycle Bin and will recover all the triggers defined on the table. To flash back a table that has been dropped from the database, the dropped table must exist in the Recycle Bin. If the table has been purged from the Recycle Bin, it cannot be flashed back. When you flash back a dropped table, the following dependent objects will be recovered: All the triggers created on the table that are in the Recycle Bin.

All the indexes created on the table except the bitmap join indexes. To retrieve the indexes on a dropped table, the indexes must also exist in the Recycle Bin. If the indexes are purged from the Recycle Bin, they cannot be retrieved.

All the constraints defined on the table except the referential integrity constraints that reference other database tables.

It is not necessary to have the FLASHBACK ANY TABLE privilege to execute the statement. The privilege allows you to execute the statement, but you can also execute the statement if you possess either the SELECT ANY DICTIONARY privilege or if you are a member of the SELECT\_CATALOG\_ROLE role. The database will not recover all the referential integrity constraints defined on the DEPARTMENT table. The referential integrity constraints that reference other database tables will not be recovered.

The database will not recover all the indexes defined on the DEPARTMENT table. The bitmap join indexes on the tables will not be recovered. The indexes defined on the table will be recovered only if they exist in the Recycle Bin. If the indexes have been purged from the Recycle Bin, they cannot be recovered.

#### **QUESTION 195**

You issued the following commands: SQL> DROP TABLE MYTABLE2; SQL> SHOW RECYCLEBIN The following output is returned:

ORIGINAL NAMÉ OBJECT TYPE DROP TIME DROPSCN MYTABLE TABLE 2008-01-13:20:11:31 6342716 MYTABLE2 TABLE 2008-01-15:22:10:06 6343112 MYTABLE2 TABLE 2008-03-14:18:03:06 6346100

You want to remove the oldest MYTABLE2 table from the Recycle Bin. Which statement should you issue to accomplish the desired task?

- A. DROP TABLE MYTABLE2 PURGE;
- B. PURGE RECYCLEBIN;
- C. PURGE TABLE MYTABLE2;
- D. PURGE TABLE 6343112;

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should issue the PURGE TABLE MYTABLE2; statement to remove the table from the Recycle Bin. When you drop a table using the DROP TABLE statement, the table is not removed completely from the database. The dropped table is stored in the Recycle Bin. After dropping a table, you can view the table and its dependent objects in the Recycle Bin. If the table is dropped by mistake, then you can restore the dropped table from the Recycle Bin using the Flashback Drop feature. You can manually remove a table or other database object from the Recycle Bin using the PURGE statement. In this scenario, the Recycle Bin contains more than one MYTABLE2 object. When you issue the PURGE statement, the oldest object (the object with the oldest DROPSCN value) with the specified name will be removed from the Recycle Bin. Objects stored in the Recycle Bin have a unique naming convention to support objects of the same name dropped by different users. The system-generated names consist of a globalUID that is a unique, 24-character long identifier, and a version number. When you issue a PURGE statement, you can specify either the object name, as in this scenario, or the unique Recycle Bin name. If you specify the unique Recycle Bin name in a PURGE statement, then the object with the specified Recycle Bin name is removed from the Recycle Bin.

The option stating that you can issue the DROP TABLE MYTABLE2 PURGE; statement to remove the oldest MYTABLE2 table from the Recycle Bin is incorrect. The DROP TABLE MYTABLE2 PURGE; statement is issued to drop the table completely from the database without storing the table in the Recycle Bin. In this scenario, the table is already dropped and stored in the Recycle Bin; therefore, this statement cannot be used. The option stating that you can issue the PURGE RECYCLEBIN; statement to remove the oldest MYTABLE2 table from the Recycle Bin is incorrect. The PURGE RECYCLEBIN; statement is issued to clear the entire Recycle Bin of a user's schema. This statement will not remove a specific table from the Recycle Bin. The option stating that you can issue the PURGE TABLE 6343112; statement to remove the oldest MYTABLE2 table from the Recycle Bin is incorrect because the statement has invalid syntax. When you issue a PURGE TABLE statement, you can specify the table name or the table's unique Recycle Bin name. However, you cannot specify the DROPSCN value.

#### **QUESTION 196**

You are currently using transparent encryption for your RMAN backups. You want to start an RMAN session and use password encryption to password-protect the backup you create within that session. The possible steps you should take are as follows:

- 1.Set up an Oracle encryption wallet.
- 2. Enable backup encryption using the CONFIGURE ENCRYPTION FOR DATABASE ON; command.
- 3.Issue a SET ENCRYPTION IDENTIFIED BY command that specifies a password.
- 4. Start an RMAN session.
- 5.Issue an RMAN CONFIGURE command that specifies the ENCRYPTION IDENTIFIED BY clause.
- 6.Disable backup encryption.

Which option represents the correct steps and sequence of steps you should take?

- A. 1, 4, 2, 3
- B. 1, 4, 3
- C. 4.3
- D. 6, 4, 3

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The correct steps and sequence of steps you should take is 4, 3. In this scenario, you are already using the default transparent encryption. To use password encryption, you only need to start an RMAN session and issue a SET ENCRYPTION IDENTIFIED BY command that specifies the password. You can then perform the backup, and it will be encrypted using password encryption. With password encryption, you do not have to configure an Oracle encryption wallet. You cannot use the CONFIGURE command to configure RMAN to use password encryption. You can only instruct RMAN to perform password encryption at the session level using the SET ENCRYPTION IDENTIFIED BY command.

All of the other options are incorrect because they do not represent the correct steps or sequence of steps.

### **QUESTION 197**

You want to use RMAN to create compressed backups.

Which statement is true about the compression algorithms that RMAN can use?

- A. The BZIP2 compression algorithm consumes more CPU resources than the ZLIB compression algorithm.
- B. The ZLIB compression algorithm consumes more CPU resources than the BZIP2 compression algorithm.
- C. The ZLIB compression algorithm provides maximum compression and produces smaller backups than the BZIP2 compression algorithm.
- D. Only the BZIP2 compression algorithm can be used to make compressed backups to disk.

Correct Answer: A

Section: (none) Explanation

#### Explanation/Reference:

**Explanation:** 

The BZIP2 compression algorithm consumes more CPU resources than the ZLIB compression algorithm. The BZIP2 compression algorithm provides for optimum compression, but tends to use more CPU resources than the ZLIB compression algorithm. The ZLIB compression algorithm is optimized for performance and uses less CPU resources. You should note that the COMPATIBLE initialization parameter must be set to 11.0.0 or higher to use the ZLIB compression algorithm.

The option that states the ZLIB compression algorithm consumes more CPU resources than the BZIP2 compression algorithm is incorrect. The BZIP2 compression algorithm consumes more CPU resources. The option that states the ZLIB compression algorithm provides maximum compression and produces smaller backups than the BZIP2 compression algorithm is incorrect. The BZIP2 compression algorithm provides maximum compression and produces smaller backups than the ZLIB compression algorithm. The option that states only the BZIP2 compression algorithm can be used to make compressed backups to disk is incorrect. The ZLIB compression algorithm can also be used to make compressed backups to disk.

# **QUESTION 198**

You have an Oracle 11g database. You are using RMAN to back up the TBS1 tablespace to tape. The TBS1 tablespace contains one datafile that is 1.2 GB. You want to back up the datafile in sections. Which action should you take?

- A. Configure multiple SBT channels.
- B. Set parallelism for the SBT device to a value greater than 1.
- C. Specify the MAXPIECESIZE parameter when you are configuring the SBT channel.
- D. Specify the SECTION SIZE clause in your BACKUP command.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should specify the SECTION SIZE clause in your BACKUP command. With Oracle 11g, you can use multisection backups to back up large files in sections that contain contiguous blocks, instead of backing up the entire file. To do so, you specify the SECTION SIZE clause of the RMAN BACKUP command. RMAN will generate a multipiece backup set with one backup piece of the specified size for each file section. You can do this using a single channel or multiple channels. You can also perform multisection backups in parallel by configuring the desired SBT channels and setting the parallelism for the SBT device to the desired value. You should not configure multiple SBT channels. You can configure and use multiple SBT channels for backups. This action alone would not back up your tablespace in multiple sections.

You should not set parallelism for the SBT device to a value greater than 1. You can perform multisection backups in parallel, but this action alone would not back up your tablespace in multiple sections. You should not specify the MAXPIECESIZE parameter when you are configuring the SBT channel. MAXPIECESIZE specifies the largest size for a backup piece. You should note that you cannot specify MAXPIECESIZE for multisection backups.

### **QUESTION 199**

Your database is running in ARCHIVELOG mode, and the database is open. You execute an RMAN backup and specify the KEEP clause.

Which components are backed up when this option is specified?

- A. only the control file, the current SPFILE, and data files
- B. only the current SPFILE and data files if autobackup is disabled
- C. only the data files and the archived redo logs
- D. the control file, current SPFILE file, data files, and archived redo logs

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

When the KEEP clause is specified, RMAN backs up all necessary components to ensure that the database can be restored. This includes the control file, the current SPFILE, data files, and the archived redo logs if the database is open when the backup is performed. You should note that when you use the KEEP clause, the KEEP clause takes precedence over other configured settings, such as any configured retention policy. Also, the control file is backed up even if autobackup has been disabled.

All of the other options are incorrect because the control file, current SPFILE, data files, and archived redo logs are backed up when you specify the KEEP clause.

#### **QUESTION 200**

You are required to view the list of files that have not been backed up for the last twelve days. Which RMAN command should you use?

- A. the REPORT command
- B. the SHOW command
- C. the LIST command
- D. the CROSSCHECK command.

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

Explanation:

You should use the REPORT command at the RMAN prompt to display a list of files that have not been backed up for the last twelve days. You should issue the following command: REPORT NEED BACKUP DAYS 12;

You should not use the LIST command. The LIST command is used to query the RMAN repository. You can use the LIST command to list all stored scripts in the recovery catalog or list backups and copies that are not marked with a status of AVAILABLE.

You should not use the CROSSCHECK command. The CROSSCHECK command determines whether the files managed by RMAN, such as archived logs, datafile copies, and backup pieces, exist on the disk or tape. You should not use the SHOW command. The SHOW command is used to display RMAN configuration settings set with the CONFIGURE command. You can issue the SHOW ALL command at the RMAN prompt to display

all current configurations.

### **QUESTION 201**

```
You execute the following RMAN RUN block: RUN {
    ALLOCATE CHANNEL c1 DEVICE TYPE sbt
    PARMS 'ENV=(OB_MEDIA_FAMILY=arch_backup)';
    BACKUP DATABASE
    TAG backup2007
    KEEP UNTIL TIME 'SYSDATE+365'
    RESTORE POINT EOY2007;
}
Which statement is true?
```

A. The backup is kept for a minimum of 365 days regardless of the configured retention policy.

- B. After 365 days, the backup is automatically deleted.
- C. If restore point EOY2007 already exists, it will be replaced.
- D. This command fails if you are not using a recovery catalog.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The backup is kept for a minimum of 365 days regardless of the configured retention policy. In this scenario, you issue a BACKUP command with the KEEP UNTIL TIME clause and the RESTORE POINT clause. The KEEP UNTIL TIME clause allows you to indicate that the backup should be kept for a specific time period. You can also use KEEP FOREVER if you want to keep the backup until a DBA explicitly deletes it. The RESTORE POINT clause allows you to specify a restore point that identifies the SCN at which the database is consistent. When you specify the KEEP clause with the BACKUP command, RMAN also backs up the archived redo logs, but only if the database is open when you perform the backup.

The option that states after 365 days the backup is automatically deleted is incorrect. After 365 days, the backup becomes obsolete and is eligible for deletion. After the specified time has passed, any backup retention policy settings are ignored.

The option that states if restore point EOY2007 already exists, it will be replaced is incorrect. You cannot specify a restore point that already exists.

The option that states the command fails if you are not using a recovery catalog is incorrect. However, a recovery catalog is required if you specify KEEP FOREVER.

#### **QUESTION 202**

You have an Oracle 11g database. You are using RMAN to back up the TBS1 tablespace to tape. The TBS1 tablespace contains one datafile that is 1 GB. You have two SBT channels configured, and the parallelism setting for the SBT device set to 2. You execute the following RMAN command: BACKUP SECTION SIZE 500M TABLESPACE tbs1; What is the result?

- A. The backup creates a multipiece backup set with two backup pieces of 500 MB using a single SBT channel.
- B. The backup creates a multipiece backup set with two backup pieces of 500 MB using the two configured SBT channels.
- C. The backup fails if the COMPATIBLE initialization parameter is set to 11.0.
- D. The backup fails because the command syntax is invalid.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The backup creates a multipiece backup set with two backup pieces of 500 MB using the two configured SBT channels. With Oracle 11g, you can use multisection backups to back up large files in sections that contain contiguous blocks, instead of backing up the entire file. To do so, you specify the SECTION SIZE clause of the RMAN BACKUP command. RMAN will generate a multipiece backup set with one backup piece of the specified size for each file section. You can do this using a single channel or multiple channels. In this scenario, you configured two SBT channels with parallelism. RMAN will back up one file section using the first channel and the other file section using the second channel. If you have only one SBT channel configured, RMAN will perform the backup using only one channel.

The option that states the backup creates a multiplece backup set with two backup pieces of 500 MB using a single SBT channel is incorrect. In this scenario, two SBT channels have been configured and parallelism has been set to 2. This causes RMAN to use both channels to perform the backup in parallel. Using multisection backups often improves performance when you are backing up large datafiles.

The option that states the backup fails if the COMPATIBLE initialization parameter is set to 11.0 is incorrect.

To use multisection backups with RMAN, you must have the COMPATIBLE initialization parameter set to 11.0. The option that states the backup fails because the command syntax is invalid is incorrect because the command syntax is valid.

### **QUESTION 203**

You perform a backup using the following BACKUP command: RMAN> BACKUP AS COMPRESSED BACKUPSET DATABASE; Which statement is true of this command?

- A. A different procedure is required to restore a database from compressed backups.
- B. The AS COMPRESSED clause of the BACKUP command provided by RMAN is used to create compressed backup sets and image copies.
- C. Using this command to create backups minimizes the bandwidth consumed.
- D. Using this command to create backups improves the performance of the backup process.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Using this command to create backups minimizes the bandwidth consumed. In this scenario, you include the AS COMPRESSED clause in your BACKUP command to create a compressed backup. Using a compressed backup will reduce the size of the database backup and will eventually reduce the network bandwidth consumed during the backup. You can only perform compression on backup sets, but not on image copies. Compressed backups can also be useful when you have limited space on the backup media.

The option stating that a different procedure is required to restore a database from compressed backups is incorrect. A different procedure is not required while restoring a database from compressed backups. Compressed backups can be restored using the same procedure that is used to restore other database backups.

The option stating that the AS COMPRESSED clause of the BACKUP command provided by RMAN is used to create compressed backup sets and image copies is incorrect. The compression of backups is applicable only to backup sets and not to image copies. You cannot create compressed image copies.

The option stating that using this command to create backups improves the performance of the backup process is incorrect. Creating compressed backups might slow down the process of the backup. Compression of backups incurs some overhead on the CPU and should be used if saving space is more important than the speed of the backup and recovery process.

# **QUESTION 204**

You are performing a backup of your database across the network.

While taking the backup, you want to save space on the storage media and reduce the network bandwidth. Which command will you issue to configure the required type of backup?

- A. CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO BACKUPSET:
- B. CONFIGURE DEVICE TYPE TO disk BACKUP TYPE TO COPY;
- C. CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO COMPRESSED BACKUPSET;
- D. CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO COMPRESSED COPY;

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

In this scenario, you want to save space on the storage media and reduce the network bandwidth. Therefore, you should issue the CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO COMPRESSED BACKUPSET; command to configure a compressed backup set. In earlier versions of Oracle, only used blocks were backed

up and the unused blocks were skipped to reduce the sizes of the backups. This method reduced the backup sizes of only those datafiles that had substantial free space. You can compress the backups regardless of the contents of the datafiles. You can perform compressed backup on databases, tablespaces, and datafiles. Compressed backup sets save storage space and reduce the network bandwidth if you are performing backups across a network. However, compressed backups work only with backup sets and not with image copies.

The option stating that you will issue the CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO BACKUPSET; command to configure the required backup type is incorrect. The CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO BACKUPSET; command is used to configure the backup type as a backup set. The backup set created by this command neither saves storage space nor reduces network bandwidth. The required backup type is compressed backup set.

The option stating that you will issue the CONFIGURE DEVICE TYPE TO disk BACKUP TYPE TO COPY; command to configure the required backup type is incorrect. The CONFIGURE DEVICE TYPE TO disk BACKUP TYPE TO COPY; command is used to configure the backup type as an image copy. The image copy cannot be used to save storage space or to reduce network bandwidth. The image copy is a copy of the datafile or control files. The required backup type is compressed backup set.

The option stating that you will issue the CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO COMPRESSED COPY; command to configure the required backup type is incorrect. The CONFIGURE DEVICE TYPE TO sbt BACKUP TYPE TO COMPRESSED COPY; command is an invalid command. The compressed backup works only with backup sets, not with image copies.

#### **QUESTION 205**

You enable block change tracking. You issue the following command: BACKUP INCREMENTAL LEVEL 0 DATABASE; The next day, you issue the following command: BACKUP INCREMENTAL LEVEL 1 CUMULATIVE DATABASE; Which statement about the use of the change tracking file is true?

- A. RMAN reads the block change tracking file only when it performs the incremental level 0 backup.
- B. RMAN reads the block change tracking file when it performs both incremental backups.
- C. RMAN reads the block change tracking file only when it performs the incremental level 1 backup.
- D. RMAN does not read the block change tracking file when it performs either incremental backup.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

RMAN reads the block change tracking file only when it performs the incremental level 1 backup. After you enable block change tracking, you perform a level 0 incremental backup. For this backup, RMAN has to scan the entire datafile because the change tracking file does not contain information about the changed blocks. Next, you perform an incremental level 1 backup. For this backup, RMAN uses the block change tracking file to determine the blocks that have changed since the incremental level 0 backup.

The option that states RMAN reads the block change tracking file only when it performs the incremental level 0 backup is incorrect. For the first incremental level 0 backup, the change tracking file does not contain information about the changed blocks, and RMAN has to scan the entire datafiles to determine the blocks that have changed.

The option that states RMAN reads the block change tracking file when it performs both incremental backups is incorrect. RMAN only uses the block change tracking file for the incremental level 1 backup.

The option that states RMAN does not read the block change tracking file when it performs either incremental backup is incorrect. RMAN uses the block change tracking file for the incremental level 1 backup, but not for the incremental level 0 backup.

# **QUESTION 206**

You are using RMAN to perform backup and recovery on your database. The backup of one of the files was lost because it was located on failed media.

Which option correctly describes the information about the backup present in the RMAN repository?

- A. The status of the backup will be AVAILABLE in the RMAN repository.
- B. All the information of the backup will be removed from the RMAN repository.
- C. The status of the backup will be updated to EXPIRED in the RMAN repository.
- D. The status of the backup will be updated to DELETED in the RMAN repository.
- E. The status of the backup will be updated to OBSOLETE in the RMAN repository.

Correct Answer: A Section: (none) Explanation

# Explanation/Reference:

**Explanation:** 

In this scenario, the status of the backup will be AVAILABLE in the RMAN repository. If a backup is removed without using RMAN commands, RMAN is not aware of the deleted status of the backup. Therefore, the status of the backup will be AVAILABLE until you use the CROSSCHECK BACKUP command to verify the status of the backup. When you run the CROSSCHECK BACKUP command, the status of the backup will be set to EXPIRED in the recovery catalog if the operating system file cannot be located.

The option stating that all the information of the backup will be removed from the RMAN repository is incorrect because the backup will still be marked as AVAILABLE in the RMAN repository. The information will be removed from the RMAN repository when you delete the backup using the DELETE command at the RMAN prompt. When you issue the DELETE command, the backup will also be deleted from the OS.

The option stating that the status of the backup will be updated to EXPIRED in the RMAN repository is incorrect because the backup will still be marked as AVAILABLE in the RMAN repository. The status will be updated to EXPIRED if you use the CROSSCHECK command to verify the existence of the backup. The option stating that the status of the backup will be updated to DELETED in the RMAN repository is incorrect because the status will still be marked as AVAILABLE in the RMAN repository. This is because RMAN is unaware of the deleted status of the backup.

The option stating that the status of the backup will be updated to OBSOLETE in the RMAN repository is incorrect because the status will still be marked as AVAILABLE in the RMAN repository. The status will be changed to OBSOLETE when the backup becomes older than the retention policy specified for the database.

# **QUESTION 207**

In which scenario would you issue the following command? RMAN> REPORT NEED BACKUP DAYS 7;

- A. to configure RMAN to maintain backup information in the RMAN repository for seven days
- B. to configure RMAN to maintain backup information in the control file for at least seven days
- C. to display the list of files that have not been backed up for the last seven days
- D. to display the list of files that must be backed up within seven days

Correct Answer: C Section: (none) Explanation

#### Explanation/Reference:

**Explanation:** 

You would issue the REPORT NEED BACKUP DAYS 7; command at the RMAN prompt to display the list of files that have not been backed up for the last seven days. The REPORT NEED BACKUP command is used to query the RMAN repository and obtain data regarding files that require a backup. You can also use the REPORT NEED BACKUP command to list files that need to be backed up according to a redundancy-based or recovery-window retention policy using the following commands:

REPORT NEED BACKUP RECOVERY WINDOW OF n DAYS; REPORT NEED BACKUP REDUNDANCY n; You would not issue the command to configure RMAN to maintain backup information in the RMAN repository for seven days. To configure RMAN to maintain the backup information in the RMAN repository for seven days, you would issue the following command:

CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF 7 DAYS;

You would not issue the command to configure RMAN to maintain backup information in the control file for at least seven days. To configure RMAN to maintain backup information in the control file for at least seven days, you would set the value of the CONTROLFILE\_RECORD\_KEEP\_TIME initialization parameter to seven days. You would not issue the command to display the list of files that must be backed up within seven days. You cannot list the files that must be backed up within a specified number of days.

# **QUESTION 208**

Which statement about duplexing RMAN backups is NOT true?

- A. Duplexing can only be used with backup sets, not image copies.
- B. You can duplex backups to disk or the flash recovery area.
- C. Backups can be duplexed to disk or tape.
- D. With duplexing, you can create up to four duplicate backups.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You cannot duplex backups to disk or the flash recovery area. You can duplex backups to disk or tape, but not to the flash recovery area. However, you should note that you cannot perform duplex backups to disk and tape with the same BACKUP command. Duplexed backups can only be used with backup sets, not image copies. With duplexed backup sets, RMAN makes up to four redundant backup copies with each BACKUP command. You can specify the number of copies by including the BACKUP COPIES clause in your RMAN CONFIGURE command. For example, the following command configures RMAN to backup three copies of datafiles each time a backup is performed, each to a different tape:

CONFIGURE DATAFILE BACKUP COPIES FOR DEVICE TYPE sbt to 3;

You can also specify the number of duplexed backups by including the COPIES clause in your BACKUP command.

All of the other options are incorrect because they are true of duplexing backups with RMAN.

# **QUESTION 209**

You want to back up your 100-GB database on a remote tape device. You are required to ensure that minimum network bandwidth is consumed while transferring the backups to the tape device. The current consumption of your CPU is approximately 40 percent. Which type of backup should you perform?

- A. standard backup set
- B. image copy
- C. compressed backup
- D. user-managed backup

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

In this scenario, you should use a compressed backup. The size of the database in this scenario is large, and you are required to reduce the network bandwidth consumed while the backups are being transferred to a remote tape device. A compressed backup will reduce the size of the database backup and will eventually reduce the network bandwidth consumed to place the backup on a remote tape device. The CPU usage in this scenario is low. Therefore, the CPU can tolerate some overhead that will be generated while compressing backups. You can only perform compression on backup sets, but not on image copies. Other situations in which compressed backups can be beneficial are as follows:

When there is a space constraint on the backup disk

When writing backups either to a CD or a DVD

When you want to limit the expense of backup media

You should not use a standard backup set in this scenario because a standard backup set is larger and will consume more network bandwidth when it is being placed on a remote tape device. A standard backup set should be used if CPU performance is more important than the benefits provided by a compressed backup. A compressed backup incurs some CPU overhead and should not be used if CPU performance cannot be compromised.

You cannot use an image copy in this scenario. You cannot create an image copy on tape devices. An image copy can be created only on disk. An image copy is an identical copy of a datafile in the database and is created using RMAN commands. An image copy is larger than a backup set because the unused data blocks are also copied in an image copy. Image copies should be used when you want to simplify the recovery process.

You should not use user-managed backup in this scenario. The user-managed backup will be larger than a compressed backup. A user-managed backup creates an exact copy of a datafile using operating system commands, and copies all the used and unused blocks in the datafile. This increases the size of the backups. In this scenario, you are required to reduce the network bandwidth consumed. Therefore, you should choose a backup method that reduces the size of the backups.

# **QUESTION 210**

You issue the following statement to enable block change tracking: ALTER DATABASE ENABLE BLOCK CHANGE TRACKING USING FILE '/dir1/track\_file' REUSE; Which statement about the result is true?

- A. Oracle automatically creates the block change tracking file.
- B. Oracle clears the current block change tracking file.
- C. The statement fails if the file /dir1/track\_file already exists.
- D. The statement fails if the database is running in NOARCHIVELOG mode.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

Oracle automatically creates the block change tracking file, and overwrites it if it already exists. You enable block change tracking by including the ENABLE BLOCK CHANGE TRACKING clause in an ALTER DATABASE statement. With block change tracking enabled, information about the blocks that have changed since the last backup is written in the change tracking file. The CTWR background process records the blocks since the last backup and stores the information in the block change tracking file. RMAN uses this file to determine the blocks to be backed up in an incremental backup. This improves the performance because RMAN does not have to scan the entire datafiles during an incremental backup. RMAN backs up only the changed blocks and skips the unchanged blocks. You can later disable block change tracking by issuing the ALTER DATABASE DISABLE BLOCK CHANGE TRACKING; statement, and the change tracking file is deleted.

The option that states Oracle clears the current block change tracking file is incorrect. The block change tracking file is cleared after a whole database restore or recovery is performed.

The option that states the statement fails if the file /dir1/track\_file already exists is incorrect. In this scenario, you include the REUSE clause, which causes Oracle to overwrite the file if it already exists.

The option that states the statement fails if the database is running in NOARCHIVELOG mode is incorrect. You can enable or disable change tracking regardless of the database archive logging mode.

# **QUESTION 211**

Which two statements about block change tracking are true? (Choose two.)

- A. The block change tracking feature is enabled by default.
- B. Block change tracking improves the performance of incremental backups.
- C. The size of the block change tracking file is proportional to the size of the redo log files in the database.

D. The CTWR background process writes to the block change tracking file.

Correct Answer: BD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The options stating that block change tracking improves the performance of incremental backups and the CTWR background process writes to the block change tracking file are correct. An advantage of the block change tracking feature is that it speeds up the process of incremental backups. When the block change tracking feature is enabled, the changed blocks in each datafile are tracked. These changed blocks are written into a separate file referred to as the block change tracking file. This block change tracking file is used by RMAN to determine the blocks that should be read to perform an incremental backup. This reduces the time required to perform an incremental backup because RMAN does not have to read the complete datafiles. The block change tracking file is maintained automatically. The writes to the block change tracking file are performed by the Change Tracking Writer (CTWR) background process.

The option stating that the block change tracking feature is enabled by default is incorrect. The block change tracking file feature is disabled by default. You can enable the block change tracking feature by issuing the following statement:

# ALTER DATABASE ENABLE BLOCK CHANGE TRACKING;

The option stating that the size of the block change tracking file is proportional to the size of the redo log files in the database is incorrect. The size of the block change tracking file is not related to the size of the redo log files in the database. The size of the block change tracking file is proportional to the size of the entire database, which is calculated in bytes, the number of threads that are enabled in a Real Application Clusters (RAC) environment, and the number of old backups that the block change tracking file maintains.

# **QUESTION 212**

You issued the following statement:

ALTER DATABASE ENABLE BLOCK CHANGE TRACKING; What will be the result of issuing this statement?

- A. The block change tracking feature is enabled, and the information about the system change number is written in the change tracking file.
- B. The block change tracking feature is enabled, and the information about the log sequence number is written in the change tracking file.
- C. The block change tracking feature is enabled, and the information about the blocks that are changed since the last backup is written in the change tracking file.
- D. The block change tracking feature is enabled, and the information about the locations of the datafiles and the online redo log files are written in the change tracking file.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The result of issuing the ALTER DATABASE ENABLE BLOCK CHANGE TRACKING; statement is that the block change tracking feature is enabled, and the information about the blocks that have changed since the last backup is written in the change tracking file. The CTWR background process records the blocks since the last backup and stores the information in the block change tracking file. RMAN uses this file to determine the blocks to be backed up in an incremental backup. This improves the performance because RMAN does not have to scan the entire datafiles during backup. RMAN backs up only the changed blocks and skips the unchanged blocks.

The option stating that the block change tracking feature is enabled, and the system change number is written in the change tracking file is incorrect because the change tracking file does not contain the system change number. The system change number is written in the control file.

The option stating that the block change tracking feature is enabled, and the information about the log sequence number is written in the change tracking file is incorrect because the change tracking file does not

contain the log sequence number. The log sequence number is written in the control file.

The option stating that the locations of the redo log files are written in the change tracking file is incorrect because the change tracking file does not contain the information about the locations of the redo log files. The control file contains the information about the locations of the redo log files.

#### **QUESTION 213**

Which three statements about image copy backups are true? (Choose three.)

- A. Image copy backups made with RMAN can be made to tape or disk.
- B. Image copy backups made with RMAN can be made only to disk.
- C. Image copy backups can only be made using operating system commands.
- D. When creating an image copy, all blocks are copied even if they are unused.
- E. An image copy can be restored using RMAN.

Correct Answer: BDE Section: (none) Explanation

### **Explanation/Reference:**

**Explanation:** 

The following statements are true about image copy backups:

Image copy backups made with RMAN can be made only to disk.

When creating an image copy, all blocks are copied even if they are unused. • An image copy can be restored using RMAN.

An image copy is the same as an operating system copy. Image copies are actual copies of database files, archived logs, or control files. Image copies can be stored only on disk. An image copy is larger than a backup set because both used and unused data blocks are copied. An image copy can be restored using RMAN or using operating system commands. In addition, image copy backups can be made online without shutting down the database instance.

The option that states image copy backups made with RMAN can be made to tape or disk is incorrect. You can only use RMAN to make image copy backups to disk.

The option that states image copy backups can only be made using operating system commands is incorrect. Although you can use operating system commands to create image copies, you can also use RMAN. An image copy in RMAN is equivalent to an operating system copy. However, when RMAN performs an image copy backup, validation is performed and information about the backup is recorded in the RMAN repository. To make an image copy backup using RMAN, you use the BACKUP AS COPY command. For example, the following RMAN command backs up a datafile as an image copy:

BACKUP AS COPY DATAFILE '/oradata/db1.dbf';

In addition, you can configure RMAN to make image copy backups by default by issuing the CONFIGURE DEVICE TYPE DISK BACKUP TYPE TO COPY; command.

### **QUESTION 214**

You have issued the following RMAN CONFIGURE commands:

CONFIGURE RETENTION POLICY TO REDUNDANCY 2; CONFIGURE DEFAULT DEVICE TYPE TO DISK; CONFIGURE DEVICE TYPE DISK BACKUP TYPE TO COPY; CONFIGURE CONTROLFILE AUTOBACKUP ON:

You want to perform a full online database backup, including all used and unused blocks in datafiles and all archived log files. In addition, you want backed up archived log files to be permanently removed after they are backed up.

Which RMAN command should you use?

- A. BACKUP DATABASE PLUS ARCHIVELOG;
- B. BACKUP ARCHIVELOG ALL DELETE INPUT;
- C. BACKUP DATABASE PLUS ARCHIVELOG AS BACKUPSET;
- D. BACKUP DATABASE PLUS ARCHIVELOG DELETE INPUT;

Correct Answer: D

Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should use the BACKUP DATABASE PLUS ARCHIVELOG DELETE INPUT; command. When you issue this command, RMAN first performs a log switch. Then, RMAN backs up all existing archived redo logs and database files. With your configuration settings, you have specified that image copies will be created by default. Therefore, all used and unused blocks in the datafiles will be backed up. In this scenario, you also included the DELETE INPUT clause, which indicates that RMAN should delete archived log files after they are backed up.

You should not use the BACKUP DATABASE PLUS ARCHIVELOG; command. Although this command performs a full back up of all datafiles, the current control file, the server parameter file, and archived redo log files, it will not delete the files after they are backed up.

You should not use the BACKUP ARCHIVELOG ALL DELETE INPUT; command. This command backs up only the archived redo logs, not the entire database.

You should not use the BACKUP DATABASE PLUS ARCHIVELOG AS BACKUPSET; command. With backup sets, only used blocks in datafiles are backed up. In this scenario, you wanted all used and unused blocks in datafiles to be backed up. Therefore, you must use an image copy, rather than a backup set.

#### **QUESTION 215**

You have not configured Oracle Managed Files (OMF) in your database. You do not want to scan the entire datafile every time an incremental backup is performed. You decide to enable the block change tracking feature.

Which statement should you use to enable the block change tracking feature?

- A. ALTER DATABASE ENABLE BLOCK CHANGE TRACKING;
- B. ALTER SYSTEM ENABLE BLOCK CHANGE TRACKING USING FILE <path>;
- C. ALTER DATABASE ENABLE BLOCK CHANGE TRACKING USING FILE <path>;
- D. ALTER SYSTEM ENABLE BLOCK CHANGE TRACKING:

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should use the ALTER DATABASE ENABLE BLOCK CHANGE TRACKING USING FILE <path>; statement. If OMF is configured in your database, then you need not specify the name of the block change tracking file in the ALTER DATABASE statement. The file is automatically located in the directory specified by the DB\_CREATE\_FILE\_DEST parameter. In this scenario, OMF is not configured. Therefore, you must specify the location of the block change tracking file in the statement. After you enable block change tracking, RMAN uses the block change tracking file to determine the blocks the blocks that have changed and should be backed up in an incremental backup. This improves the performance because RMAN does not have to scan the entire datafiles during backup. RMAN backs up only the changed blocks and skips the unchanged blocks.

The options stating that you should issue the ALTER SYSTEM ENABLE BLOCK CHANGE TRACKING; or the ALTER SYSTEM ENABLE BLOCK CHANGE TRACKING USING FILE cpath>; statement are incorrect. Each of these statements will generate an error because the block change tracking feature is enabled at the database level, not at the system level.

The option stating that you should issue the ALTER DATABASE ENABLE BLOCK CHANGE TRACKING; statement is incorrect because OMF is not configured in the database. If OMF is not configured, then you must specify the location of the block change tracking file in the ALTER DATABASE ENABLE BLOCK CHANGE TRACKING statement.

### **QUESTION 216**

You issue the following RMAN command to perform a full backup: BACKUP AS BACKUPSET DEVICE TYPE SBT

### DATABASE:

Which statement about the result is true?

- A. Both used and unused blocks in datafiles are backed up.
- B. Only used blocks in datafiles are backed up.
- C. The backup can be restored using either RMAN or operating system commands.
- D. The command fails because you can only create backup sets on disk.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Only used blocks in datafiles are backed up because the backup is created as a backup set. In this scenario, you include the AS BACKUPSET clause in your BACKUP command. This creates the backup as a backup set. Backup sets can be used for disk or tape backups, and they include only used blocks in datafiles.

The option that states both used and unused blocks in datafiles are backed up is incorrect. Unused blocks in datafiles are not backed up with backup sets. To back up unused blocks, you should use an image copy backup.

The option that states the backup can be restored using either RMAN or operating system commands is incorrect. Backup sets can only be created and restored using RMAN.

The option that states the command fails because you can only create backup sets on disk is incorrect because you can create backup sets on tape or disk.

#### **QUESTION 217**

You issue the following command on the RMAN prompt. REPORT NEED BACKUP DAYS 5; Which statement is true about executing this command?

- A. It will display a list of files that need incremental backup.
- B. It will display a list of files that need backup after five days.
- C. It will display a list of files that were backed up in the last five days.
- D. It will display a list of files that have not been backed up in the last five days.
- E. It will apply the current retention policy to determine the files that need to be backed up.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The REPORT NEED BACKUP DAYS command is used to display a list of files that have not been backed up since the specified number of days. In this scenario, the command displays all the database files that have not been backed up in the last five days.

The option that states that the command will display the list of files that need incremental backup is incorrect because the command will list the files that have not been backed up in the last five days. The command does not display files that need an incremental backup. You can use the REPORT NEED BACKUP INCREMENTAL command to list all files that would require more than a specified number of incremental backups for recovery. For example, the following command lists all files that would require you to apply more than three incremental backups to recover:

#### **REPORT NEED BACKUP INCREMENTAL 3:**

The option that states that the command will display a list of files that need a backup after five days is incorrect because the command will list the files that have not been backed up in the last five days.

The option that states that the command will display a list of files that were backed up in the last five days is incorrect because the command will list the files that have not been backed up in the last five days.

The option that states that the command will apply the current retention policy to determine the files that need backup is incorrect. When you include the DAYS clause with the REPORT command, the current retention

policy is overridden. If you want to use the retention policy to list the files needing to be backed up, you should omit the DAYS clause and use only the REPORT NEED BACKUP command. This will use the retention policy to determine which files need to be backed up.

#### **QUESTION 218**

You issue an RMAN CHANGE command for a backup and specify the NOKEEP clause. Which of the following statements are true? (Choose all that apply.)

- A. The specified backup is deleted.
- B. Any previously specified KEEP attributes are removed from the specified backup, and the existing retention policy settings are used to determine whether the backup is OBSOLETE and eligible for deletion.
- C. The statement fails if you specify the RESTORE POINT clause.
- D. The statement fails because you cannot specify the NOKEEP clause with the CHANGE command.

Correct Answer: BC Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

It is true that any previously specified KEEP attributes are removed from the backup, and the existing retention policy settings are used to determine if the backup is OBSOLETE and eligible for deletion. It is also true that the statement fails if you specify the RESTORE POINT clause. When you specify the NOKEEP clause with the CHANGE command, you remove all attributes that were specified for the backup or backup set using KEEP clauses. Afterwards, the retention policy for the backup or backup set will take effect and will be used to determine if the backup is eligible for deletion. For example, if you issue the following RMAN command to keep a backup, the backup would be kept indefinitely and any existing retention policy for the backup would be ignored:

CHANGE BACKUP TAG 'long term bkup' DATABASE KEEP FOREVER:

However, if you issue the following command, the KEEP attributes would be discarded, and the existing retention policy would be used to determine if the backup was eligible for deletion:

CHANGE BACKUP TAG 'long\_term\_bkup' NOKEEP;

You can also use the CHANGE command to specify that an existing backup or backup set should be kept. For example, you could use the following command to specify that the previously backed up backup set with the backup set key of 611 should be kept indefinitely:

CHANGE BACKUPSET 611 KEEP FOREVER:

You should note that the RESTORE POINT clause can be specified with the BACKUP command. However, the RESTORE POINT clause cannot be specified with the CHANGE RMAN command. If you specify the RESTORE POINT clause with a CHANGE RMAN command, an error is generated.

The option that states the specified backup is deleted is incorrect. Specifying the NOKEEP clause only removes any previously set KEEP attributes, but does not automatically delete the backup.

The option that states the statement fails because you cannot specify the NOKEEP clause with the CHANGE command is incorrect. You can specify the NOKEEP clause with the CHANGE command to discard any attributes that were specified for the backup or backup set using KEEP clauses. If you do so, the existing retention policies for the backup or backup set will be in effect.

### **QUESTION 219**

You enabled the ALTER DATABASE ENABLE BLOCK CHANGE TRACKING; statement to enable the block change tracking feature.

What information will be written in the change tracking file?

- A. the locations of the redo log files
- B. the locations of the datafiles
- C. the physical location of all the database changes
- D. the system change number

**Correct Answer:** C

Section: (none) Explanation

#### Explanation/Reference:

**Explanation:** 

The physical location of all database changes will be written to the change tracking file. The CTWR background process records the blocks changed since the last backup and stores the information in the block change tracking file. RMAN uses this file to determine the blocks to be backed up in an incremental backup. During an incremental backup, RMAN queries the block change tracking file to determine the changed blocks. RMAN backs up only the changed blocks, and skips the unchanged blocks. This prevents RMAN from having to read the entire datafiles during an incremental backup.

The option stating that the information about the system change number is written in the change tracking file is incorrect. The information about the system change number is written in the control file. The system change number is used during database recovery.

The options stating that the locations of the redo log files and datafiles are written in the change tracking file are incorrect. The location of the online redo log files and datafiles are written in the control file and the SPFILE. The control file and the SPFILE contains information, such as database name, locations of the datafiles and the online redo log files, the SCN number, the log sequence number, and the date and time of database creation.

#### **QUESTION 220**

Which three statements about encrypted backups are true? (Choose three.)

- A. To successfully perform encrypted backups, you must specify an encryption method using either the CONFIGURE ENCRYPTION or SET ENCRYPTION command.
- B. Backups that use transparent encryption are more secure than those that use password encryption.
- C. By default, RMAN uses transparent encryption for encrypted backups.
- D. The type of encryption used for backups can only be set at the RMAN session level.
- E. Backups created using different encryption methods can be restored in a single restore operation.

Correct Answer: BCE Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The following statements about encrypting backups are true:

Backups that use transparent encryption are more secure than those that use password encryption. By default, RMAN uses transparent encryption for encrypted backups.

Backups created that use different encryption methods can be restored in a single restore operation. To create encrypted backups with RMAN, you can use transparent, password, or dual mode encryption. RMAN uses transparent encryption by default when you issue a CONFIGURE ENCRYPTION FOR DATABASE ON; command. To use transparent encryption, you must first configure an Oracle wallet. You can override the default encryption method at the session level and use password or dual mode encryption by using the SET ENCRYPTION IDENTIFIED BY command. With password encryption, you also specify the ONLY keyword in the command, and the specified password is used when encrypting and subsequently decrypting backups. If you omit the ONLY keyword, dual mode encryption is used. Dual mode encryption can use an Oracle wallet or password.

The options that state to successfully perform encrypted backups, you must specify an encryption method using either the CONFIGURE ENCRYPTION or SET ENCRYPTION command and the type of encryption used for backups can only be set at the RMAN session level are incorrect. If you enable backup encryption using the CONFIGURE ENCRYPTION FOR DATABASE ON; command, Oracle uses transparent encryption by default for all backups.

# **QUESTION 221**

Which type of backup contains only the blocks that have changed since the last level 0 incremental backup?

- A. a cumulative level 1 backup
- B. a differential level 1 backup
- C. a full backup
- D. a whole backup

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

A cumulative level 1 backup contains only the blocks that have changed since the last level 0 incremental backup.

A full backup contains all used data blocks.

A whole backup contains all used and unused data blocks.

A differential level 1 backup contains only the data blocks that have changed since the last level 1 or level 0 incremental backup.

# **QUESTION 222**

Which statement about RMAN complete database backups is true?

- A. RMAN complete database backups can only be made to tape.
- B. To perform an online complete database backup using RMAN, the database must be running in ARCHIVELOG mode.
- C. A complete backup can only be performed when the database instance is shut down.
- D. A complete backup contains only a copy of all datafiles.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

To perform an online complete database backup using RMAN, the database must be running in ARCHIVELOG mode. Using this approach allows you to back up a database without shutting it down. This is required in situations in which the database must be available 24x7. To perform an online complete backup, you can use the following RMAN command:

BACKUP DATABASE PLUS ARCHIVELOG:

The option that states RMAN complete database backups can only be made to tape is incorrect. A complete backup can be made to disk or tape.

The option that states a complete backup can only be performed when the database instance is shut down is incorrect. If your database is running in ARCHIVELOG mode, then a complete backup can be made online without shutting down.

The option that states a complete backup contains only a copy of all datafiles is incorrect. A complete backup contains copies of all datafiles, the control file, the server parameter file, as well as all archived redo logs. Using RMAN to Duplicate a Database

### **QUESTION 223**

You want to duplicate an existing database. Your database contains two tablespaces, namely STAT1 and STAT2, which are read-only. You execute the following RMAN RUN block to perform the duplication: RMAN> RUN

```
{
ALLOCATE AUXILIARY CHANNEL c1 DEVICE TYPE DISK;
DUPLICATE TARGET DATABASE TO dup1;
}
Which statement is true about the result?
```

- A. All datafiles in the database are duplicated.
- B. All datafiles in the database are duplicated except those in the STAT1 and STAT2 tablespaces.
- C. The datafiles in the STAT1 and STAT2 tablespaces are bypassed during duplication, but the duplicate database contains the STAT1 and STAT2 tablespaces.
- D. The duplication fails because the DUPLICATE command contains invalid syntax.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

All datafiles in the database are duplicated. In this scenario, you specify the following command to duplicate the database:

DUPLICATE TARGET DATABASE TO dup1;

The DUPLICATE command is used to create a copy of a database. The new duplicate database has a new DBID that is different from the DBID of the source database. The TO clause specifies the name of the duplicate database. In this scenario, you did not specify any other options in your DUPLICATE command. Therefore, all datafiles in the database are duplicated. You can prevent files from being duplicated by including either the SKIP READONLY or SKIP TABLESPACE clause in your DUPLICATE command. If you include the SKIP READONLY clause, RMAN will not duplicate the datafiles in read-only tablespaces. If you include the SKIP TABLESPACE clause in your DUPLICATE command, the duplicated database will not contain the tablespaces you specified in the SKIP TABLESPACE clause. For example, in this scenario, the following command would duplicate the database and would skip any datafiles in the STAT1 and STAT2 tablespaces, but the STAT1 and STAT2 tablespaces would exist in the DUP1 database:

DUPLICATE TARGET DATABASE TO dup1 SKIP READONLY;

The following command would duplicate the database, but would exclude the TBS4 tablespace from the duplicated database:

DUPLICATE TARGET DATABASE TO dup1 SKIP TABLESPACE tbs4:

The option that states all datafiles in the database are duplicated except those in the STAT1 and STAT2 tablespaces is incorrect because you did not specify the SKIP READONLY or SKIP TABLESPACE clause in your DUPLICATE command.

The option that states the datafiles in the STAT1 and STAT2 tablespaces are bypassed during duplication, but the duplicate database contains the STAT1 and STAT2 tablespaces, is incorrect because you did not specify the SKIP READONLY clause in your DUPLICATE command.

The option that states the duplication fails because the DUPLICATE command contains invalid syntax. The DUPLICATE command in this scenario has valid syntax.

#### **QUESTION 224**

Which statement about database duplication is true?

- A. Database duplication can only be performed when the database being duplicated is closed.
- B. When you duplicate a database, RMAN always creates the duplicate database with the same file structure as the source database.
- C. When you duplicate a database, RMAN always copies the control files from the source database.
- D. You can duplicate a database to the same host or to a different host.

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You can duplicate a database to the same host or to a different host. However, you should be aware that naming conflicts may occur when duplicating a database to the same host, and you should take precautions to prevent such conflicts. The RMAN DUPLICATE command has a DB\_FILE\_NAME\_CONVERT parameter that allows you to specify alternate names for the duplicated datafiles. The LOGFILE clause allows you to specify

alternate names for the online redo logs that RMAN creates during duplication.

The option that states database duplication can only be performed when the database being duplicated is closed is incorrect. You can duplicate a database while the database remains open or while the database is mounted

The option that states when you duplicate a database, RMAN always creates the duplicate database with the same file structure as the source database is incorrect. You can instruct RMAN to use different file names than the source database. It is important that you do so when you duplicate a database to the same host as the source to prevent files from being overwritten.

The option that states when you duplicate a database, RMAN always copies the control files from the source database is incorrect. RMAN does not use control files from the source, but instead creates the control files. You should note that RMAN does copy control files from the source when you use the FOR STANDBY clause with the DUPLICATE command to create a standby database.

#### **QUESTION 225**

Using the DUPLICATE command, you create a duplicate of your PROD database on a different host. For which purpose would you NOT perform this task?

- A. to create a copy of your database to perform a test upgrade before upgrading the production database
- B. to create a database to use for failover if a primary database instance is not available
- C. to create a copy of your production database to test your backup and recovery procedures
- D. to create a copy of your database that contains only selected tablespaces to export and reimport into the production database

Correct Answer: B Section: (none) Explanation

### **Explanation/Reference:**

**Explanation:** 

You would not perform this task to create a database to use for failover if a primary database instance is not available. In such a scenario, you would not create a duplicate of your database; rather, you would create a standby database. You would include the FOR STANDBY clause in your DUPLICATE command. All of the other options are incorrect because they represent situations in which you might choose to create a duplicate database. You can use a duplicate database to perform test upgrades and test your backup and recovery procedures. You can also duplicate a database to create a copy of your database that contains only selected tablespaces, and then use the duplicate database to export selected objects to re-import back into the production database.

# **QUESTION 226**

Using Enterprise Manager, you CANNOT clone a database using which of the following?

- A. a running database instance
- B. an existing RMAN backup
- C. a backup stored in a staging area
- D. an operating system copy

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Using Enterprise Manager, you cannot clone a database using an operating system copy. When you clone a database using Enterprise Manager, you have the options of using a running database instance, a staging area, or an existing backup. If you choose to clone the database from a backup, the backup must be an existing RMAN backup or a special backup created during a previous clone operation.

All of the other options are incorrect. You can use Enterprise Manager to clone a database from a running

database instance, an existing RMAN backup, or a backup stored in a staging area. When you use a staging area, disk areas are specified on both the source and destination hosts. The duplication process stores a backup on the disk area on the source, puts it in the staging area on the destination host, and then uses the backup in the destination host staging area to clone the database.

#### **QUESTION 227**

You plan to use the RMAN DUPLICATE command to duplicate a database. Which statement about the duplicate database will be true?

- A. The duplicate database will always be an exact copy of the source database.
- B. The duplicate database can be used for failover purposes.
- C. You can catalog the duplicate database in the same recovery catalog as the source database because it has a unique DBID.
- D. The duplicate database will always contain all tablespaces contained in the source database.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

When you use the RMAN DUPLICATE command to duplicate a database, you can catalog the duplicate database in the same recovery catalog as the source database because it has a unique DBID. When you use the RMAN DUPLICATE command to duplicate a database, the duplicate database is assigned a new unique DBID. The DUPLICATE command creates a separate duplicate database that contains data in the source database. It can contain all of the data or only a subset of the original database's data. A duplicate database functions totally separate from the original database. A duplicate database can be created on the same host or on a different host. When RMAN performs duplication, RMAN creates a control file for the duplicate database and restores all datafiles from available backups to the duplicate database. After all datafiles have been restored, RMAN recovers the datafiles if necessary by using the archived redo log files and incremental backups. After RMAN performs this incomplete recovery, it restarts the auxiliary instance using the new control file and opens the duplicate database using the RESETLOGS option. RMAN re-creates tempfiles and the online redo log files.

The option that states the duplicate database will always be an exact copy of the source database is incorrect. The duplicate database will have a unique DBID. In addition, you can specify clauses with the RMAN DUPLICATE command to exclude or include specific tablespaces. Therefore, the duplicate database may be a subset of the source database, instead of an exact copy.

The option that states the duplicate database can be used for failover purposes is incorrect. You would create a standby database if you wanted to use it for failover purposes. To create a standby database instead of a duplicate database, you include the FOR STANDBY clause with your RMAN DUPLICATE command. The option that states the duplicate database will always contain all tablespaces contained in the source database is incorrect. You can specify several clauses with the DUPLICATE command to instruct RMAN to include or exclude specific tablespaces when performing the duplication. Some of the clauses you can use are

SKIP READONLY - Skips datafiles in any read-only database when performing the duplication, but defines the read-only tablespaces on the duplicate database.

SKIP TABLESPACE - Excludes the specified tablespaces from the duplicate database.

TABLESPACE - Specifies one or more tablespaces that should be included in the duplicate database, and all other tablespaces are excluded from the duplicate database.

You should note that certain required tablespaces, such as the SYSTEM and SYSAUX tablespaces and tablespaces with undo segments, cannot be excluded from the duplicate database.

#### **QUESTION 228**

You issue an RMAN DUPLICATE command to duplicate a database without including the FOR STANDBY or FROM ACTIVE DATABASE clause.

Which statement is true about the result of executing this command?

A. RMAN uses only the existing backups to create the duplicate database.

- B. RMAN does not create the control file for the duplicate database.
- C. The online redo logs are copied to the new duplicate database.
- D. The duplicate database is assigned a new unique DBID.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

When you use the RMAN DUPLICATE command to duplicate a database, the duplicate database is assigned a new unique DBID. The DUPLICATE command creates a separate duplicate database that contains data in the source database. It can contain all of the data or only a subset of the original database's data. A duplicate database has its own unique DBID and functions totally separate from the original database. A duplicate database can be created on the same host or on a different host. When you are duplicating a database, the files that are duplicated depend on whether the duplication is an active duplication or a backup-based duplication. With active database duplication, the duplication occurs directly from the source database. You use the FROM ACTIVE DATABASE clause to specify that RMAN should perform active database duplication. In this scenario, you did not include the FROM ACTIVE DATABASE clause. Therefore, RMAN performs a backup-based duplication. When RMAN performs a backup-based duplication, RMAN creates a control file for the duplicate database and restores all datafiles from available backups to the duplicate database. After all datafiles have been restored, RMAN recovers the datafiles if necessary by using the archived redo log files and incremental backups. After RMAN performs this incomplete recovery, it restarts the auxiliary instance using the new control file and opens the duplicate database using the RESETLOGS option. RMAN re-creates tempfiles and the online redo log files.

The option that states RMAN uses only the existing backups to create the duplicate database is incorrect. RMAN does use the existing backups, but also performs incomplete recovery using the archived redo log files and any incremental backups.

The option that states RMAN does not create the control file for the duplicate database is incorrect. RMAN does create the control file for the duplicate database. When you create a standby database by including the FOR STANDBY clause in your DUPLICATE command, RMAN does not create the control files, but rather restores them from backup.

The option that states the online redo logs are copied to the new duplicate database is incorrect because RMAN does not copy the online redo log files to the duplicate database. Instead, RMAN re-creates online redo log files in the duplicated database, regardless of whether you are using active or backup-based duplication.

#### **QUESTION 229**

You have configured RMAN to use a recovery catalog. You are using RMAN to back up your database, which is located on the host named PHOST1. You want to prepare a testing environment for developers to test newly developed applications. You decide use a previous RMAN backup to create a copy of your database on another host named THOST1.

Which statement about this recovery scenario is true?

- A. When performing recovery, you should connect to the new host in NOCATALOG mode.
- B. After copying the backup to THOST1, you only need to restore the datafiles.
- C. After performing recovery, the database that resides on THOST1 should be opened using the NORESETLOGS option.
- D. You cannot accomplish this, but instead should use the RMAN DUPLICATE command.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

When performing recovery, you should connect to the new host in NOCATALOG mode. In this scenario, you want to create a copy of your database that will be used for testing. Therefore, when performing recovery and

restores, you do not want information recorded in the original recovery catalog. To accomplish this, you must connect to the new host in NOCATALOG mode. In this scenario, you would first copy all needed files, including a copy of the source initialization parameter file, the control file autobackup, and source backups, to THOST1. Then, to restore the database to THOST1, you would perform the following tasks:

Set the ORACLE\_SID environment variable on THOST1 to the value currently used by PHOST1.

Start RMAN and connect to THOST1 in NOCATALOG mode.

Set the DBID to the same value used by PHOST1.

Start the instance in NOMOUNT mode.

Restore the SPFILE.

Shut down the database using the SHUTDOWN IMMEDIATE; command.

Edit the SPFILE you restored, making any needed parameter changes.

Start the instance in NOMOUNT mode.

Execute an RMAN RUN block that restores the control file and mounts the database.

Restore and recover the database using an RMAN script that includes necessary SET NEWNAME commands, a SET UNTIL clause, and a SWITCH command.

Open the new database with the RESETLOGS option.

The option that states after copying the backup to THOST1, you only need to restore the datafiles is incorrect. In this scenario, you would also restore the parameter file and control file.

The option that states after performing recovery, the database that resides on THOST1 should be opened using the NORESETLOGS option is incorrect. After performing this recovery, you should open the newly created database using the RESETLOGS option.

The option that states you cannot accomplish this, but instead should use the RMAN DUPLICATE command is incorrect. You can use previous RMAN backups from one host to restore and recover the database to a different host. This is useful when you want to test your backup and recovery strategies or when you want to move a database to another host. You can create a duplicate of a database using the RMAN DUPLICATE command if you want the new database to be assigned a new DBID.

#### **QUESTION 230**

You are running your database in ARCHIVELOG mode. You are using RMAN for backups and using a recovery catalog. You have configured RMAN to perform backups of the control file in the default format each time a backup is taken. You have lost the SPFILE and want to restore it using the control file autobackup. Which RMAN command would you NOT use in this scenario?

- A. RESTORE SPFILE FROM AUTOBACKUP;
- B. RECOVER DATABASE:
- C. STARTUP FORCE NOMOUNT;
- D. SET DBID n:

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You would not use the RECOVER DATABASE; command. In this scenario, you want to recover a lost SPFILE from the control file autobackup. You first issue the STARTUP FORCE NOMOUNT; command to shut down and restart the database without mounting it. Next, you use the SET DBID command to set the DBID for your database. Then, you issue the RESTORE SPFILE FROM AUTOBACKUP; command to restore the SPFILE in its default format to its original location. You should note that if your autobackups were not in the default format, you would use the SET CONTROLFILE AUTOBACKUP FORMAT command before issuing the RESTORE command to specify the format in which your autobackups were taken.

All of the other options are incorrect because these statements would be used to restore the SPFILE from the control file autobackup.

## **QUESTION 231**

Your database is running in ARCHIVELOG mode. You have created an image copy backup of the datafiles in your database. You decide to implement incrementally updated backups. You run the following RMAN commands nightly:

RECOVER COPY OF DATABASE WITH TAG 'tag1';

BACKUP INCREMENTAL LEVEL 1 FOR RECOVER OF COPY WITH TAG 'tag1' DATABASE;

On Monday morning, you experience a media failure that causes datafile 3 to be lost. All other datafiles and the current control file were not affected by the media failure. You want to recover datafile 3 to a new location, disk4/oradata/prod/sales2.dbf, using the image copy while the database remains open.

You create an RMAN RUN block to perform the restore and recovery. Which statement or statements should you include within the RUN block?

- A. only the RMAN RESTORE and RECOVER commands
- B. only the RMAN RESTORE, SWITCH, and RECOVER commands
- C. only the RMAN SET NEWNAME, RESTORE, and RECOVER commands
- D. the RMAN SET NEWNAME, RESTORE, SWITCH, and RECOVER commands

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You should include the RMAN SET NEWNAME, RESTORE, SWITCH, and RECOVER commands within the RUN block. In this scenario, you want to restore a lost datafile while the database remains open and restore it to an alternate location. To accomplish this, you should take the datafile to be recovered offline, restore the datafile to an alternate location, apply any archive logs needed to recover the datafile to its present state, and then place the datafile back online. You could accomplish this using the following RMAN RUN block: RUN

{

SQL 'ALTER DATABASE DATAFILE 3 OFFLINE'; # Take datafile offline

SET NEWNAME FOR DATAFILE 3

TO 'disk4/oradata/prod/sales2.dbf'; # Specify new location for the datafile RESTORE DATAFILE 3; # Restore the datafile to the new location

SWITCH DATAFILE ALL; # Switch the control file to point to the file in the new location RECOVER DATAFILE 3;

SQL 'ALTER DATABASE DATAFILE 3 ONLINE'; # Place datafile back online

}

All of the other options are incorrect because you should include the SET NEW NAME, RESTORE, SWITCH, and RECOVER statements in your RUN block in this scenario.

# **QUESTION 232**

In which scenario would you choose to use the RMAN DUPLICATE command to make a copy of a database on a new host?

- A. if you wanted the new copy of the database to have the same DBID as the original database
- B. if you wanted the new copy of the database to always use a different recovery catalog than the original database
- C. if the disk on which the original database was located became unusable and you wanted to use the newly copied database going forward
- D. if you want to make an identical copy of the original database on the new host

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You would use the RMAN DUPLICATE command to make a copy of a database on a new host if the disk on which the original database was located became unusable and you wanted to use the newly copied database going forward. The DUPLICATE command creates a separate duplicate database that contains data in the

source database. It can contain all of the data or only a subset of the original database's data. A duplicate database has its own unique DBID and functions totally separate from the original database. Because it has a unique DBID, it can be registered in the recovery catalog along with the original database.

You would not use the RMAN DUPLICATE command if you wanted the copy of the database to have the same DBID as the original database or wanted the new database to be an identical copy of the original database. When you use the DUPLICATE command to duplicate a database, the new copy of the database is given a new unique DBID.

You would not use the RMAN DUPLICATE command if you wanted the new copy of the database to always use a different recovery catalog than the original database. When you use the DUPLICATE command, the new copy of the database is given a new unique DBID. Therefore, it could be registered in the same recovery catalog as the original database.

#### **QUESTION 233**

A disk that contains datafiles for the USER\_04 tablespace has failed. Due to time constraints, you must restore the backup datafiles to another location.

Which RMAN command should you execute to ensure that all of the datafiles for which the SET NEWNAME command was used are added to the control file?

- A. the RESTORE DATAFILE command
- B. the SWITCH DATAFILE ALL command
- C. the RESTORE TABLESPACE command
- D. the SWITCH TABLESPACE ALL command
- E. the ALTER DATABASE RENAME FILE command

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should execute the SWITCH DATAFILE ALL command. The SET NEWNAME command provides a new location when restoring a datafile. In this scenario, a new location for the datafiles for the USER\_04 tablespace is needed to allow immediate access by users. The tablespace can now be restored. After the tablespace is restored, the control file must be updated with this new location information. The SWITCH DATAFILE ALL command ensures that all of the datafiles for which the SET NEWNAME command was used are added to the control file. This command is similar to the ALTER DATABASE RENAME FILE statement. You should not execute the RESTORE DATAFILE command because, in this scenario, a tablespace, not a datafile, is being restored. A tablespace recovery may involve many datafiles.

You should not execute the RESTORE TABLESPACE command. The RESTORE TABLESPACE command restores all of the datafiles in the specified tablespace. The RESTORE command must be used before the SWITCH DATAFILE ALL command. The control file cannot be updated with the datafile's new location if the file has not yet been restored to this location.

You should not execute the SWITCH TABLESPACE ALL command because this is not a valid RMAN command. TABLESPACE is not a valid SWITCH command option.

You should not execute the ALTER DATABASE RENAME FILE command. ALTER DATABASE is not an RMAN command. The RENAME FILE clause of the ALTER DATABASE statement renames datafiles, tempfiles, or online redo log files. This statement updates the control file with the file's new name and location.

# **QUESTION 234**

You use RMAN with a recovery catalog and take regular consistent incremental backups. You issue the following commands to perform RMAN recovery using your incremental backups: RESTORE DATABASE; RECOVER DATABASE NOREDO;

Which statement is true in this scenario?

- A. For the commands to have executed successfully, the database must have been running in ARCHIVELOG mode when the backup was taken.
- B. The database will be recovered even if online redo log files are not available.

- C. RMAN restores the database and attempts to apply the redo, but fails if the redo is not available.
- D. The commands fail if the database is running in NOARCHIVELOG mode.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

The database will be recovered even if online redo log files are not available. In this scenario, you included the NOREDO option in your RMAN RECOVER DATABASE command. The NOREDO option is used in situations where online redo log files are missing or the redo cannot be applied to the restored backups. RMAN does not attempt to apply any redo during the recovery process.

The option that states for the commands to have executed successfully, the database must have been running in ARCHIVELOG mode when the backup was taken is incorrect. The database could have been running in NOARCHIVELOG mode, and the commands would have executed successfully. However, you should note that if your database runs in NOARCHIVELOG mode, you must specify the NOREDO option when performing recovery or RMAN will generate an error.

The option that states RMAN restores the database and attempts to apply the redo, but fails if the redo is not available. When you specify the NOREDO option with the RECOVER DATABASE command, RMAN does not attempt to apply the redo.

The option that states the commands fail if the database is running in NOARCHIVELOG mode is incorrect. You can perform limited recovery using incremental backups, even if your database is running in NOARCHIVELOG mode. RMAN will use the incremental backups to restore and recover the database. However, you must specify the NOREDO option in your RECOVER DATABASE command, so RMAN will not attempt to apply redo to the incremental backups during the recovery process.

#### **QUESTION 235**

You use RMAN for backup and recovery. You are using a recovery catalog for your RMAN repository. You issue the following command to make an image copy backup of all of the datafiles in your database: BACKUP AS COPY DATABASE;

You want to minimize the time it takes to restore after a media recovery. You decide to use incrementally updated backups.

Which two commands must you use to implement this strategy? (Choose two.)

- A. the RECOVER COPY OF DATABASE command
- B. the SWITCH command
- C. the SET NEWNAME command
- D. the BACKUP...FOR RECOVER OF COPY command
- E. the RESTORE command

Correct Answer: AD Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You must use the RECOVER COPY OF DATABASE command and the BACKUP...FOR RECOVER OF COPY command. In this scenario, you created an image copy backup of all the datafiles in your database. You can update this image copy backup using incremental RMAN backups. This method allows you to apply the changes in the incremental backup to the existing image copy backup, and it reduces the time required to back up the database. This is also known as "rolling forward" the image copy backup. You use the RECOVER COPY OF DATABASE command to roll forward a previously created image copy backup by applying the changes from the incremental backup. You use the BACKUP...FOR RECOVER OF COPY command to create each incremental backup to be used to roll forward the image copy. You should also note that using tags is preferred because they can be used to uniquely identify the incremental backup that is used to roll forward an image copy. If you do not specify tags in the RECOVER and BACKUP commands, RMAN uses the most

recent incremental backup to roll forward the image copy. For example, the following RMAN command could be used to create an incremental level 1 backup:

**BACKUP** 

**INCREMENTAL LEVEL 1** 

FOR RECOVER OF COPY WITH TAG 'image\_copy' DATABASE;

Then, the following RMAN command could be used to apply the changes from the backup to an image copy: RECOVER

**COPY OF DATABASE** 

WITH TAG 'image\_copy';

You do not need to use the SWITCH command. You use the SWITCH command to instruct RMAN to update file names in the RMAN repository.

You do not need to use the SET NEWNAME command. You use the SET NEWNAME command is used to specify a new file location.

You do not need to use the RESTORE command. You use the RESTORE command to retrieve files from a backup.

#### **QUESTION 236**

Consider the following configuration and backup strategy:

Your database is running in NOARCHIVELOG mode.

You use RMAN as your backup and recovery strategy.

You take consistent incremental backups of your database at regular intervals, with the last one being taken on Friday.

On Saturday, you experience a failure that results in the loss of one of your datafiles. However, the online redo logs contain all changes since Friday's backup.

Which two actions should you take to recover your database? (Choose two. Each correct answer represents part of the solution.)

- A. Issue the RESTORE DATABASE; command.
- B. Issue the RECOVER DATABASE NOREDO; command.
- C. Issue the RECOVER DATABASE; command.
- D. Shut down the database.
- E. Issue an RMAN VALIDATE command.

Correct Answer: AC Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

In this scenario, you should issue the RESTORE DATABASE; command and issue the RECOVER DATABASE; command. In this scenario, your database is running in NOARCHIVELOG mode, and you use RMAN to take consistent incremental backups. Because your database is running in NOARCHIVELOG mode, no archived redo is available. However, your online redo logs contain all changes that have been made since your last incremental backup. You can issue the RESTORE DATABASE; command to restore the datafiles from the last incremental backup. Then, you can use the RECOVER DATABASE; command to apply the changes recorded in the online redo log.

You should not issue the RECOVER DATABASE NOREDO; command. Including the NOREDO option with the RECOVER DATABASE command causes RMAN not to attempt to apply redo during the recovery process. You would use this in situations where the online redo was lost or not available to be applied to the restored files.

You do not need to shut down the database. You can issue the RESTORE and RECOVER RMAN commands while the database is mounted.

You should not issue an RMAN VALIDATE command. The RMAN VALIDATE command is used to check for block corruptions and other situations that might affect whether or not a backup set can be used to perform a restore.

# **QUESTION 237**

Consider the following scenario:

You are using RMAN with a recovery catalog.

You perform regular backups of your database nightly to tape.

Nightly, you copy archived redo log files to tape.

You store nightly backup tapes off-site on a rotating schedule.

You are creating a disaster recovery plan that will be implemented to recover the database in case of a natural disaster rendering the entire server unusable.

Which step(s) would NOT be included as basic steps in your disaster recovery plan? (Choose all that apply.)

- A. restoring datafiles from a backup
- B. opening the database using the RESETLOGS option
- C. restoring the control file from autobackup
- D. opening the database in RESTRICTED mode
- E. issuing an RMAN DUPLICATE command

Correct Answer: DE Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The following commands would not be included as basic steps in your disaster recovery plan:

Opening the database in RESTRICTED mode

Issuing an RMAN DUPLICATE command

Disaster recovery involves steps required to recover if the entire database, including the recovery catalog and all database files, is lost. Such a loss might occur in the case of a fire or natural disaster. If such a loss occurs, you would need the DBID of the original database, a backup of datafiles, a backup or all archived redo logs since the latest backup, and an autobackup of the control file. The basic steps in disaster recovery include the following:

Restoring the SPFILE from an autobackup

Starting the database in the NOMOUNT state

Restoring the control file from autobackup

Mounting the database

Restoring and recovering all datafiles from backup

Opening the database using the RESETLOGS option

All of the other options are incorrect because they represent steps that should be included in your disaster recovery plan.

# **QUESTION 238**

You perform a full user-managed backup every Sunday at 8:00 P.M. Your database is running in ARCHIVELOG mode. On Monday, at 9:00 A.M., a tablespace is dropped. You decide to perform user managed incomplete recovery to recover the dropped tablespace.

From the SQL prompt, which two clauses can you use with the RECOVER command? (Choose two.)

- A. UNTIL SEQUENCE
- B. UNTIL SCN
- C. UNTIL CHANGE
- D. UNTIL CANCEL

Correct Answer: CD Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You can use either the UNTIL CHANGE or the UNTIL CANCEL clause with the RECOVER statement at the SQL prompt to perform a user-managed recovery. The UNTIL CANCEL clause specifies that Oracle will stop the recovery process when the administrator performing the recovery issues the CANCEL command. The

UNTIL CHANGE clause specifies an SCN number immediately after the last SCN number you want to recover. For example, if you want to restore up to SCN 12, you would include the UNTIL CHANGE 13 clause in your RECOVER command.

The option stating that you can use the UNTIL SEQUENCE clause with the RECOVER command at the SQL prompt to perform a user-managed recovery is incorrect. The UNTIL SEQUENCE clause works with only the RMAN utility. The UNTIL SEQUENCE clause specifies that RMAN will stop the recovery operation at the sequence number immediately preceding the specified sequence number.

The option stating that you can use the UNTIL SCN clause with the RECOVER command at the SQL prompt to perform the user-managed recovery is incorrect. The UNTIL SCN clause works with only the RMAN utility. The UNTIL SCN clause specifies that RMAN will stop the recovery operation at the SCN immediately preceding the specified SCN.

## **QUESTION 239**

Examine this RMAN script:

RUN

SQL 'ALTER TABLESPACE tools OFFLINE IMMEDIATE': SET NEWNAME FOR DATAFILE '/disk1/data/tool1.dbf' TO '/disk2/data/tool1.dbf' '/disk1/data/tool2.dbf' TO '/disk2/data/tool2.dbf' '/disk1/data/ tool3.dbf' TO '/disk2/data/tool3.dbf'; RESTORE TABLESPACE tools; SWITCH DATAFILE ALL;

**RECOVER TABLESPACE tools:** 

SQL 'ALTER TABLESPACE tools ONLINE';

Which command's results are similar to the results provided by the ALTER DATABASE RENAME FILE SQL statement?

- A. the SWITCH DATAFILE ALL command
- B. the RESTORE TABLESPACE command
- C. the RECOVER TABLESPACE command
- D. the SET NEWNAME FOR DATAFILE command

**Correct Answer:** A Section: (none) **Explanation** 

# **Explanation/Reference:**

**Explanation:** 

The SWITCH DATAFILE ALL command's results are similar to the results provided by the ALTER DATABASE RENAME FILE SQL statement. After a datafile is restored to a new location, the control file must be updated with this new location information. The SWITCH DATAFILE ALL command ensures that all of the datafiles for which the SET NEWNAME command was used are added to the control file. This command is similar to the SQL ALTER DATABASE RENAME FILE statement.

The purpose of the RESTORE command is to restore files from backups or image copies. The RESTORE TABLESPACE command must be executed prior to the SWITCH DATAFILE ALL command, or RMAN will restore the datafile to the default (disk1) location.

The RECOVER command is used to recover a datafile. This command applies the archives, incremental backups, cumulative backups, and online redo logs to the datafile which results in a synchronized database. The SET NEWNAME command specifies one or more new locations for the restored files. After the location is updated, all subsequent RESTORE or SWITCH commands within the RUN block will use the new location. This command does not update the control file.

# **QUESTION 240**

Your production database PROD is running in ARCHIVELOG mode. Your control file becomes corrupt, and you issue the following RMAN commands to restore it:

STARTUP NOMOUNT;

RESTORE CONTROLFILE FROM AUTOBACKUP:

Which three additional RMAN commands should you issue to complete the recovery? (Choose three.)

- A. SHUTDOWN IMMEDIATE:
- B. RECOVER DATABASE NOREDO;
- C. ALTER DATABASE MOUNT:
- D. RECOVER DATABASE;
- E. ALTER DATABASE OPEN RESETLOGS:
- F. STARTUP;

Correct Answer: CDE Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should issue the following three RMAN commands:

ALTER DATABASE MOUNT;

RECOVER DATABASE:

ALTER DATABASE OPEN RESETLOGS;

In this scenario, you are restoring a database using a backup control file. You first opened the database in NOMOUNT mode because the database cannot be mounted without a control file. Next, you restored the control file from the previous backup using the RESTORE CONTROLFILE FROM AUTOBACKUP; command. The restored control file will contain information about the database as it existed when the control file was backed up. After the control file is restored, you should mount the database and then perform recovery using the RECOVER DATABASE; command. After performing the recovery, you should open the database with the RESETLOGS option.

All of the other options are incorrect because they would not be required to complete recovery. There is no need to shut down and restart the database. In addition, specifying the NOREDO option in the RECOVER command would cause RMAN not to apply redo during recovery.

#### **QUESTION 241**

Your database is running in NOARCHIVELOG mode. You use RMAN with a recovery catalog. You take consistent incremental RMAN backups of the database at regular intervals. As a result of media failure, you lose one of your datafiles and the online redo logs.

Which statement about recovery in this scenario is true?

- A. You can perform limited recovery using your consistent incremental backups.
- B. You cannot perform recovery because the online redo log files are not available.
- C. You can perform limited recovery but only when the database is in the NOMOUNT state.
- D. You cannot recover the database because redo is not available.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You can perform limited recovery using your consistent incremental backups. In this scenario, you are taking regular consistent incremental backups using RMAN. These backups can be used to perform a limited recovery, even if your database is running in NOARCHIVELOG mode. To do so, you must specify the NOREDO option in your RECOVER DATABASE command to instruct RMAN not to attempt to apply redo to the restored backups. For example, in this scenario, you could perform limited recovery using the following RMAN commands:

RESTORE DATABASE; # Restore datafiles from a consistent backup

RECOVER DATABASE NOREDO; # Recover but not apply redo because online redo logs lost You should note that because this is an incomplete recovery, after you perform the recovery you must open the database using the RESETLOGS options. You should also note that if redo is not available, such as in this scenario, and the NOREDO option is not specified, RMAN will generate an error.

The option that states you cannot perform recovery because the online redo log files are not available is incorrect. In situations where online redo logs are not available, you can still perform limited recovery using the NOREDO option in a RECOVER DATABASE command.

The option that states you can perform limited recovery but only when the database is in the NOMOUNT state is incorrect. The database must be mounted when you perform the RMAN restore and recover.

The option that states you cannot recover the database because redo is not available is incorrect. You can perform limited recovery without redo being available. You can do so by specifying the NOREDO option in your RMAN RECOVER command, and RMAN will not attempt to apply redo during the recovery process.

#### **QUESTION 242**

To what does the term disaster recovery refer?

- A. recovery after the loss of only all control files for a database
- B. recovery after the loss of all control files and datafiles of a database
- C. recovery after the loss of only the datafiles for a database
- D. recovery after the loss of an entire database, including all datafiles, all current control files, online redo log files, and parameter files

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Disaster recovery refers to recovery after the loss of an entire database, including all datafiles, all current control files, online redo log files, and parameter files. Such a loss might occur in the case of a fire or natural disaster. If such a loss occurs, you would need the DBID of the original database, a backup of datafiles, a backup or all archived redo logs since the latest backup, and an autobackup of the control file. The basic steps in disaster recovery include the following:

Restoring the SPFILE from an autobackup

Starting the database in the NOMOUNT state

Restoring the control file from autobackup

Mounting the database

Restoring and recovering all datafiles from backup

Opening the database using the RESETLOGS option

All of the other options are incorrect because disaster recover refers to recovery after a total database loss, including all datafiles, current control files, online redo logs files, parameter files, and RMAN recovery catalog.

# **QUESTION 243**

Consider the following scenario:

You use RMAN for your backup and recovery strategy.

You have taken an image copy backup of all of the datafiles in your database.

You use incrementally updated backups to roll forward the image copy of your database each night. You experience a disk failure. You realize that the USER03 tablespace, including all its datafiles, is not accessible. You want to recover the tablespace using the image copy. You decide to use the RMAN SWITCH TO command to switch to the image copies and then perform the recovery.

Which statement about recovering in this scenario is true?

- A. When performing the recovery, the USER03 tablespace should be offline.
- B. You can only recover if the database is closed.
- C. You can only recover when the database is in the MOUNT state.
- D. You cannot recover.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

When performing the recovery, the USER03 tablespace should be offline. You should first take the USER03 tablespace offline. Then, you should use the SWITCH TO...COPY command to instruct RMAN to use the image copy for recovery. Finally, you can recover the USER03 tablespace using the RMAN RECOVER command. For example, in this scenario, you could issue the following commands at the RMAN prompt to accomplish this:

SQL "ALTER TABLESPACE user03 OFFLINE IMMEDIATE"; SWITCH TABLESPACE user03 TO COPY; RECOVER TABLESPACE user03:

SQL "ALTER TABLESPACE user03 ONLINE":

The options that state you can only recover if the database is closed or in the MOUNT state are incorrect. You can perform recovery in this scenario with the database open.

The option that states you cannot recover is incorrect. In this scenario, you have been taking regular backups and rolling forward an image copy backup. This image copy backup can be used to recover if you use the RMAN SWITCH TO...COPY command to point to it before performing the recovery.

#### **QUESTION 244**

You must make a corrupt tablespace available as quickly as possible while you investigate the cause of a media failure. Recovery Manager is used for backup and recovery. You checked the location and sizes of the datafiles associated with this tablespace. You then created an RMAN script to perform the recovery of the USER02 tablespace. In this script, you allocated two channels, set the tablespace offline, and then used the SET NEWNAME FOR DATAFILE command specifying a new datafile location. Which commands, in sequence, should you use next?

- A. RESTORE TABLESPACE user02; RECOVER TABLESPACE user02; SQL "ALTER TABLESPACE user02 ONLINE"; SWITCH DATAFILE ALL;
- B. RESTORE TABLESPACE user02; RECOVER TABLESPACE user02; SQL "ALTER TABLESPACE user02 ONLINE";
- C. RESTORE TABLESPACE user02; SWITCH DATAFILE ALL; RECOVER TABLESPACE user02; SQL "ALTER TABLESPACE user02 ONLINE";
- D. RESTORE TABLESPACE user02; SQL "ALTER DATABASE RENAME DATAFILE"; RECOVER TABLESPACE user02; SQL "ALTER TABLESPACE ONLINE";

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

The last four commands needed to complete the recovery of the USER02 tablespace appear in this sequence: RUN

{

```
RESTORE TABLESPACE user02; SWITCH DATAFILE ALL; RECOVER TABLESPACE user02; SQL "ALTER TABLESPACE user02 ONLINE"; }
```

The SET NEWNAME command provides a new location when restoring a datafile. In this scenario, a new location for the USER02 tablespace is needed to allow immediate access by users. The tablespace can then be restored. The RESTORE command restores all of the datafiles in the specified tablespace. Datafiles will be copied from backups or image copies. The SWITCH DATAFILE ALL command ensures that all of the datafiles for which the SET NEWNAME command was used are added to the control file. Then, the last ALTER TABLESPACE statement brings the tablespace back online.

All of the other options are incorrect because they do not specify the correct commands and sequence of commands that should be included to complete the task in this scenario.

# **QUESTION 245**

You want to perform incomplete database recovery using RMAN. To perform an incomplete recovery, you

mount the database and allocate multiple channels to enable parallelization. You restore all of the datafiles to their original locations as they existed at a specific time in the past.

Which three additional steps are required? (Choose three.)

- A. Back up the entire database.
- B. Open the database with the RESETLOGS option.
- C. Recover the database by using UNTIL SCN.
- D. Recover the database by using UNTIL TIME.
- E. Synchronize the control file by issuing the SWITCH command.
- F. Recover all datafiles by issuing the RECOVER TABLESPACE command.

Correct Answer: ABD Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

An incomplete recovery is a database recovery that does not apply all the changes generated after the backup was created. The following steps are required to perform an incomplete recovery:

Mount the database.

Allocate multiple channels to enable parallelization.

Specify the type of recovery using UNTIL TIME, UNTIL SEQUENCE, or UNTIL SCN.

Restore all of the datafiles using the RESTORE DATABASE command.

Recover the database using the RECOVER DATABASE command.

Open the database using the RESETLOGS option.

Perform a whole database backup.

In this scenario, because the exact time of the error is known, the data can be restored using the UNTIL TIME method. The UNTIL TIME method of recovery allows recovery of the database up to the point of the failure. This requires all datafiles from a backup prior to the failure and uses the SET UNTIL TIME command to perform the recovery. After the data is recovered, the database must be opened using the RESETLOGS option. The ALTER DATABASE OPEN RESETLOGS; statement opens the database and resets the online redo log files. When the online redo log files are reset, all datafiles are assigned a new system change number (SCN) and timestamp. This creates a new incarnation of the database. A whole database backup should be performed immediately after a successful recovery because it may be needed if a recovery is necessary before the next scheduled backup occurs.

You would not recover the database using UNTIL SCN. The UNTIL SCN method of recovery is used when a change-based incomplete recovery must be performed. The SCN number is specified for recovery termination. An SCN is a timestamp assigned to every committed transaction. SCNs define a committed version of a database at a point-in-time.

You would not use the SWITCH command because the datafiles were not restored to a new location. You would not use the RECOVER TABLESPACE command because this command is used to recover a single tablespace, not to restore the database.

# **QUESTION 246**

You are using RMAN for backup and recovery. In which scenario, is a Database Administrator (DBA) NOT required to perform an incomplete recovery?

- A. when all the online redo log groups are multiplexed and one of the members of a group is missing
- B. when all the online redo log groups are not multiplexed and one log group is missing
- C. when all the control files are missing
- D. when some important tables are deleted from the database and purged from the Recycle Bin

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

If all the online redo log groups are multiplexed and one member of a redo log group is missing, then the DBA need not perform an incomplete recovery. The DBA can restore the missing redo log file from a multiplexed copy. Mirrored or multiplexed redo logs include more than one redo log file in an online redo log group. Each file in a group is called a redo log member. Re-creating a redo log member is a fairly straightforward process. The ALTER DATABASE ADD LOGFILE MEMBER statement creates a log file member if a redo log member is lost or deleted.

The option stating that the DBA should not perform an incomplete recovery if the online redo log files are not multiplexed and one redo log file is missing is incorrect. If the online redo log groups are not multiplexed and a redo log file is missing, then incomplete recovery is required. You should first determine the amount of data you can recover. To do this, start the database in the MOUNT stage and query the V\$LOG view to find the system change number (SCN) to which you can recover. The value in the FIRST\_CHANGE# column is the first SCN stamped in the missing log. This is the highest SCN to which you can recover. To perform the recovery, the DBA must first restore all the datafiles to this SCN, and then perform a recovery up to this SCN. This is an incomplete recovery; therefore, after recovery the DBA must open the database with the RESETLOGS option.

The option stating that the DBA should not perform an incomplete recovery if all the control files are missing is incorrect. If one or all the control files are missing, then the database will not be started. To resolve this problem, the DBA must perform an incomplete recovery. To perform the recovery, all log files, including the archived and current online log files, should be available since the last backup. The logs are required because all the datafiles must also be restored from the backup. The database will then have to be recovered up to the time of failure.

The option stating that the DBA should not perform an incomplete recovery if some of the important tables are dropped from the database and purged from the Recycle Bin is incorrect. If one or more important tables are dropped from the database and purged from the Recycle Bin, then you must perform an incomplete recovery. You can perform an incomplete recovery using the UNTIL TIME or UNTIL SEQUENCE clause, as shown in the following example:

```
RMAN>RUN
{
SET UNTIL TIME '16-DEC-2007 15:30:00';
RESTORE DATABASE; RECOVER DATABASE; }
or
RMAN>RUN
{
SET UNTIL SEQUENCE 3 THREAD 1;
RESTORE DATABASE; }
```

Which statement is true about the result?

## **QUESTION 247**

You are performing incomplete recovery using RMAN. You execute the following RUN block: RUN {
SET UNTIL SCN 1107600;
RESTORE DATABASE; RECOVER DATABASE; }

- A. RMAN restores all datafiles from the most recent backup available since the failure and applies the redo logs necessary to recover the database to SCN 1107600.
- B. RMAN restores all datafiles needed to restore the database through SCN 1107599 and applies the redo logs necessary to recover the database through SCN 1107599.
- C. RMAN restores all datafiles and control files from the most recent backup.
- D. The RUN block fails because you did not specify an UNTIL clause in your RECOVER DATABASE command.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

RMAN restores all datafiles needed to restore the database through SCN 1107599 and applies the redo logs necessary to recover the database to SCN 1107599. In this scenario, you included a SET UNTIL SCN command in a RUN block. When you include a SET UNTIL SCN, SET UNTIL TIME, or SET UNTIL SEQUENCE command in an RMAN RUN block, the value specified in the SET command is used in the subsequent RESTORE and RECOVER commands within the RUN block. In this scenario, the RESTORE command will restore all the datafiles needed to restore the database up through SCN 1107599. Then, the RECOVER command will apply the redo logs necessary to recover the database through SCN 1107599. You could also use the following RUN block to restore the database up to but not including the specified time: RMAN>RUN

ί,

SET UNTIL TIME '16-DEC-2007 15:30:00';

RESTORE DATABASE; RECOVER DATABASE; }

The option that states RMAN restores all datafiles from the most recent backup available since the failure and applies the redo logs necessary to recover the database to SCN 1107600 is incorrect. In this scenario, the RECOVER command restores the database and recovers the database up to but not including SCN 1107600. The option that states RMAN restores all datafiles and control files from the most recent backup is incorrect. In this scenario, you specified a SET UNTIL SEQUENCE command. This specifies that the RESTORE and RECOVER commands included after the SET command will use the specified sequence number. In this scenario, Oracle restores the datafiles from the last available backup before the specified sequence number. In addition, the RESTORE DATABASE command does not automatically restore control files or the SPFILE. If you need to restore either of these, you should use additional RESTORE commands.

The option that states the RUN block fails because you did not specify an UNTIL clause in your RECOVER DATABASE command is incorrect. In this scenario, you included a SET command before the RESTORE DATABASE and RECOVER DATABASE commands, and this setting will remain in effect for other commands within this RUN block. As an alternative, you could have omitted the SET command and specified an UNTIL clause in the RESTORE DATABASE and RECOVER DATABASE commands.

#### **QUESTION 248**

Consider the following scenario:

Your database is running in ARCHIVELOG mode.

You are using RMAN to perform your database backups.

You are using a recovery catalog for your RMAN repository.

You perform backups on a daily basis.

An error occurs that causes your database instance to automatically shut down, and you are unable to reopen the database because a datafile in the SYSTEM tablespace was accidentally deleted.

Which statement about recovery in this scenario is true?

- A. The database must be open to recover the datafile.
- B. To recover the datafile, you must first take the SYSTEM tablespace offline.
- C. To recover the datafile, you should restore the datafile, mount the database, recover the missing datafile, and re-open the database.
- D. Recovery up to the last commit is not possible.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

To recover the datafile, you should restore the datafile, mount the database, recover the missing datafile, and re-open the database. In this scenario, you lost a system-critical datafile. When a system-critical datafile, such as a datafile belonging to the SYSTEM or UNDO tablespace, is lost and your database is running in ARCHIVELOG mode, you can perform complete recovery. However, you should note that the database must be in the MOUNT state, rather than being open, when performing the recovery.

The option that states the database must be open to recover the datafile is incorrect. To recover the datafile, the database must be mounted, not open.

The option that states to recover the datafile, you must first take the SYSTEM tablespace offline is incorrect. You cannot take the SYSTEM tablespace offline.

The option that states recovery up to the last commit is not possible is incorrect. Recovery up to the last commit is possible because your database is running in ARCHIVELOG mode.

#### **QUESTION 249**

You are performing an incomplete recovery using RMAN because an important table, EMPLOYEE, has been dropped and purged from the Recycle Bin.

Which statement is NOT true regarding an incomplete recovery?

- A. The target database must be in the MOUNT mode to ensure restoration of the datafiles.
- B. You can restore the datafiles from the backup using the RMAN utility only if the backups were taken using the RMAN utility.
- C. The control file must be re-created.
- D. The database must be opened with the RESETLOGS option.

Correct Answer: C Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

If an important table is dropped, then it is not necessary to re-create the control file to perform an incomplete recovery. The control file contains the physical map of an Oracle database. In other words, the control file contains all the locations of the physical files, including the datafiles and redo logs.

To perform the incomplete recovery, the database must be in MOUNT mode. If the database is open, you should shut down the database and issue the STARTUP MOUNT command to mount the database. Then, you can perform incomplete recovery using the RECOVER and RESTORE commands. The RECOVER command retrieves datafiles from the backup, and the RESTORE command applies the redo logs. You can run these RMAN commands individually, or you can include them within a single RUN block. The incomplete recovery results in a loss of data because the database is restored and recovered to a point in time before the failure. You can restore the datafiles from the backup using the RMAN utility only if the backups were taken using the RMAN utility.

After performing the incomplete recovery, the database must be started with the RESETLOGS option. This option gives the online redo logs a new time stamp and SCN. You cannot recover certain datafiles to a time before and other files to a different time after. You must recover all the datafiles to the same SCN. The only exception is the offline datafiles, which can be brought online after the RESETLOGS because no transactional changes for these files are stored in the redo logs.

#### **QUESTION 250**

Your database is running in ARCHIVELOG mode, and you are using RMAN to perform regular database backups.

With your configuration, which statement about complete recovery is true?

- A. You cannot perform complete recovery if you lose a datafile in the SYSTEM tablespace.
- B. After performing complete recovery, you must open the database using the RESETLOGS option.
- C. You can perform complete recovery if you lose a datafile in the SYSTEM tablespace or a non-SYSTEM tablespace.
- D. To perform a complete recovery of a datafile in the SYSTEM or UNDO tablespace, the database must be open.

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

You can perform complete recovery if you lose a datafile in the SYSTEM tablespace or a non-SYSTEM tablespace. In this scenario, your database is running in ARCHIVELOG mode. When a database is running in ARCHIVELOG mode, you can perform complete recovery if a datafile in the SYSTEM tablespace is lost or if a datafile in a non-SYSTEM tablespace is lost. To recover a lost or corrupt datafile in the SYSTEM tablespace, first shut down the database using SHUTDOWN ABORT if it is not already shut down. Then, restore the lost or corrupt datafile from a backup. After restoring the datafile, start the database in the MOUNT mode, recover the datafile, and open the database. If the lost or corrupt datafile is in a non-SYSTEM tablespace, the recovery can be performed while the database is open. The datafile should be offline. For example, if the database will not open because of a lost or corrupt datafile in a non-SYSTEM tablespace, you can take the datafile offline, open the database, restore and recover the datafile, and then bring the datafile back online. No data will be lost.

The option that states you cannot perform complete recovery if you lose a datafile in the SYSTEM tablespace is incorrect. When a datafile in SYSTEM tablespace is lost or corrupt and the database is running in ARCHIVELOG mode, the database must be in the MOUNT state to perform the recovery.

The option that states after performing complete recovery, you must open the database using the RESETLOGS

option is incorrect. You open the database using the RESETLOGS option after performing incomplete recovery.

The option that states to perform a complete recovery of a datafile in the SYSTEM or UNDO tablespace, the database must be open is incorrect. To perform such a recovery, the database must be in the MOUNT state, not open.

# **QUESTION 251**

Consider the following scenario:

Your database is running in ARCHIVELOG mode.

You are using RMAN to perform your database backups.

You are using a recovery catalog for your RMAN repository.

You perform backups on a daily basis.

You have two tablespaces that contain user data, namely HR and SALES.

With your current configuration, which statement about recovering a lost or corrupt datafile is true?

- A. If the datafile belongs to the HR or SALES tablespace, you can recover the datafile only when the database is in the MOUNT state.
- B. If the datafile belongs to the SYSTEM tablespace, the datafile cannot be recovered if the database is open.
- C. If the datafile belongs to the SYSTEM tablespace, you must take the SYSTEM tablespace offline before recovering the datafile.
- D. If the datafile belongs to the HR or SALES tablespace, you cannot perform complete recovery.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

If the datafile belongs to the SYSTEM tablespace, the datafile cannot be recovered if the database is open. In this scenario, your database is running in ARCHIVELOG mode. When a datafile in SYSTEM tablespace is lost or corrupt and the database is running in ARCHIVELOG mode, the database must be in the MOUNT state to perform the recovery. To recover the datafile, you should first shut down the database instance if it is not already shut down. Next, you should restore the datafile from a backup. After restoring the datafile, you should mount the database, recover the missing datafile, and then open the database.

The option that states if the datafile belongs to the HR or SALES tablespace, you can recover the datafile only when the database is in the MOUNT state is incorrect. Datafiles belonging tablespaces other than the SYSTEM and UNDO tablespaces can be recovered while the database is open. However, if the lost or corrupt datafile belongs to the SYSTEM or UNDO tablespace, it cannot be recovered while the database is open. The database must be in the MOUNT state.

The option that states if the datafile belongs to the SYSTEM tablespace, you must take the SYSTEM tablespace offline before recovering the datafile is incorrect. You cannot take the SYSTEM tablespace offline. The option that states if the datafile belongs to the HR or SALES tablespace, you cannot perform complete

recovery is incorrect. You can perform complete recovery. For example, if the database will not open because a datafile in the HR tablespace is lost or corrupt, you can take the datafile offline, open the database, restore and recover the datafile, and then bring the datafile back online. No data will be lost.

#### **QUESTION 252**

You are performing an incomplete recovery because some important tables have been dropped and purged from the Recycle Bin.

Which clause CANNOT be used to perform an incomplete recovery using the RMAN utility?

- A. UNTIL CANCEL
- B. UNTIL SCN
- C. UNTIL SEQUENCE
- D. UNTIL TIME

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You cannot use the UNTIL CANCEL clause to perform an incomplete recovery using the RMAN utility. An RMAN-based incomplete recovery does not have a cancel-based option. The UNTIL CANCEL clause is used while performing a user-managed incomplete recovery. When performing user-managed cancel-based recovery, Oracle stops performing recovery when the administrator who is performing the recovery issues the CANCEL command.

You can use the UNTIL SCN clause to perform an incomplete recovery using the RMAN utility. The UNTIL SCN clause specifies that RMAN will stop the recovery operation immediately before the specified SCN. You can use the UNTIL SEQUENCE clause to perform an incomplete recovery using the RMAN utility. The UNTIL SEQUENCE clause specifies that RMAN will stop the recovery operation immediately before the specified log sequence number.

You can use the UNTIL TIME clause to perform the incomplete recovery using the RMAN utility. The UNTIL TIME clause specifies that RMAN will stop performing recovery immediately before the specified time. You can also use the RMAN SET command to specify a time, SCN, or log sequence within a RUN block, and this specified value will be used for subsequent RESTORE and RECOVER commands within the RUN block. For example, you could use the following RUN block to restore the files needed from backup and recover the database up through SCN 1107599:

```
RUN
```

SET UNTIL SCN 1107600;

RESTORE DATABASE;

RECOVER DATABASE; # Uses SCN value specified in the SET UNTIL command

You could use the following RUN block to restore the files needed from backup and recover the database up to, but not including, the specified time:

RMAN>RUN

{

SET UNTIL TIME '16-DEC-2007 15:30:00';

RESTORE DATABASE:

RECOVER DATABASE; # Uses time specified in the SET UNTIL command

### **QUESTION 253**

You are using an RMAN recovery catalog as your RMAN repository to store backup information. You want to protect the recovery catalog as much as possible. You have configured your recovery catalog database to run in ARCHIVELOG mode.

Which additional action should you take to offer additional protection?

- A. Use the default RMAN retention policy.
- B. Back up the recovery catalog database frequently to only disk.

- C. Use another recovery catalog as the RMAN repository for your recovery catalog database.
- D. Issue a CONFIGURE CONTROLFILE AUTOBACKUP ON; command.

Correct Answer: D Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You should issue a CONFIGURE CONTROLFILE AUTOBACKUP ON; command. Oracle recommends that you configure controlfile autobackup to ON for your recovery catalog so that each time a backup is taken, the control file is also backed up.

You should not use the default RMAN retention policy. Oracle recommends that you set the RMAN retention policy using a redundancy-based approach and set the REDUNDANCY value to a value greater than one. You should not back up the recovery catalog frequently to only disk. Oracle recommends that you back up the recovery catalog database to both disk and tape. You should back it up frequently, especially immediately after you back up a target database.

You should not use another recovery catalog as the RMAN repository for your recovery catalog database. Oracle recommends that you use a control-file based RMAN repository rather than another recovery catalog.

#### **QUESTION 254**

You issue the RMAN commands shown in the exhibit. (Click the Exhibit(s) button.)
You then create an RMAN stored script using the following CREATE SCRIPT RMAN command.
CREATE SCRIPT mybkup

{
BACKUP DATABASE PLUS ARCHIVELOG;
DELETE OBSOLETE:

You want the mybkup script to execute on a different channel than the ones you previously configured, but you do not want other stored RMAN scripts to use this different channel. Which action should you take?

- A. Issue another CONFIGURE RMAN command to allocate a new channel.
- B. In the RUN block that executes the script, include an ALLOCATE CHANNEL command before executing the script.
- C. You cannot successfully execute the script because more than one channel is allocated.
- D. You cannot run the script on a different channel because the RMAN persistent channel settings will remain in effect.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

In the RUN block that executes the script, you should include an ALLOCATE CHANNEL command before executing the script. The ALLOCATE CHANNEL command will be applicable only within the RUN block in which it resides. Therefore, the stored RMAN script, mybkup, will run on that channel, but other scripts will not. You should not issue another CONFIGURE RMAN command to allocate a new channel. If you do so, the setting will be persistent and other stored RMAN scripts may execute on that channel.

The option that states you cannot successfully execute the script because more than one channel is allocated is incorrect. By default, a stored RMAN script will execute on the channels you have configured, and you may have more than one channel allocated.

The option that states you cannot run the script on a different channel because the RMAN persistent channel settings will remain in effect is incorrect. By default, a stored RMAN script will execute on the channels you have configured. However, you can override this by including an ALLOCATE CHANNEL command in the RUN block before executing the script. The channel will be allocated only for the duration of the RUN block.

#### **QUESTION 255**

Which statement about creating a recovery catalog is true?

- A. You can only create a recovery catalog if you have SYSDBA privileges.
- B. When you create a recovery catalog, catalog tables are created.
- C. When you create a recovery catalog, you must specify the target databases to initially be registered.
- D. A recovery catalog is implicitly created when you issue the first REGISTER DATABASE; command.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

When you create a recovery catalog, catalog tables are created. To create a recovery catalog, you should first connect to the recovery catalog as the catalog owner. Then, you should issue the CREATE CATALOG; command. This will create catalog tables in the catalog owner's default tablespace.

The option that states you can only create a recovery catalog if you have SYSDBA privileges is incorrect. You can create a recovery catalog if you have been granted the RECOVERY\_CATALOG\_OWNER role. The option that states when you create a recovery catalog, you must specify the target databases to initially be registered is incorrect. You cannot specify target databases when you create the recovery catalog. After the recovery catalog is created, you can connect to the recovery catalog database and the target database, and then use the REGISTER DATABASE; command to register the target database in the recovery catalog. When you issue a REGISTER DATABASE; command, information is copied from the target database's control file into the catalog tables in the recovery catalog database.

The option that states a recovery catalog is implicitly created when you issue the first REGISTER DATABASE; command is incorrect. A recovery catalog must be explicitly created using the CREATE CATALOG; command.

#### **QUESTION 256**

Which three are prerequisites to successfully executing an RMAN stored script? (Choose three.)

- A. You must configure a recovery catalog to use as your RMAN repository.
- B. You must connect to the target database and recovery catalog.
- C. You must be granted the RECOVERY CATALOG OWNER role.
- D. You must register the target database using the REGISTER DATABASE; RMAN command.
- E. You must issue a RESYNC CATALOG; RMAN command to resynchronize the recovery catalog.

Correct Answer: ABD Section: (none) Explanation

## Explanation/Reference:

Explanation:

To successfully execute an RMAN stored script, you must configure a recovery catalog to use as your RMAN repository, register the target database using the REGISTER DATABASE; RMAN command, and connect to the target database and recovery catalog. To use RMAN stored scripts, you must use a recovery catalog rather than a control-file based RMAN repository. After the recovery catalog has been created, you must register the target database using the REGISTER DATABASE; RMAN command. Executing this command stores the information about the target database in the recovery catalog. Then, before executing the stored script, you should connect to both the target database and the recovery catalog. You can then execute an RMAN stored script by creating a RUN block that includes the EXECUTE SCRIPT command. The option that states you must be granted the RECOVERY\_CATALOG\_OWNER role is incorrect. The RECOVERY\_CATALOG\_OWNER role grants the user privileges to administer a recovery catalog. The option that states you must issue a RESYNC CATALOG; RMAN command to resynchronize the recovery catalog is incorrect. Resynchronizing the recovery catalog is not required to be able to execute an RMAN stored script. RMAN usually automatically resynchronizes the recovery catalog, and an implicit

resynchronization occurs when a database backup is taken. However, you might need to manually resynchronize the recovery catalog if the recovery catalog has been unavailable, if you do not take frequent backups, or if you make structural changes to the database.

#### **QUESTION 257**

You want to move your recovery catalog from one database to another database. Which statement is true about moving a recovery catalog?

- A. To move a recovery catalog, you must back up the recovery catalog and restore it to the new database.
- B. You can use the expdp and impdp utilities to move the recovery catalog to the new database, and the new recovery catalog will be implicitly created during import.
- C. You can use the expdp and impdp utilities to move the recovery catalog to the new database, but you must manually create the recovery catalog on the new database using the CREATE CATALOG; RMAN command before performing the import.
- D. You cannot move a recovery catalog from one database to another database.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

**Explanation:** 

You can use the expdp and impdp utilities to move the recovery catalog to the new database, and the new recovery catalog will be implicitly created during import. To move a recovery catalog from one database to another database using the expdp and impdp utilities, you should perform the following tasks: Export the recovery catalog using the expdp utility.

Create the recovery catalog owner on the new database and grant the user the necessary privileges. Import the recovery catalog data into the new database using the impdp utility.

The option that states to move a recovery catalog, you must back up the recovery catalog and restore it to the new database is incorrect. You can move a recovery catalog from one database to another using the traditional export and import utilities or using Data Pump.

The option that states you can use the expdp and impdp utilities to move the recovery catalog to the new database, but you must manually create the recovery catalog on the new database using the CREATE CATALOG; RMAN command before performing the import, is incorrect. The recovery catalog on the new database will be created when you perform the import.

The option that states you cannot move a recovery catalog from one database to another database is incorrect. You can do so using traditional export import utilities or using Data Pump.

# **QUESTION 258**

You have production database, PROD. You are using a recovery catalog to store RMAN backup information for the database. You recently made some structural changes to the PROD database.

Which action should you take to ensure the recovery catalog is synchronized with the control file of the PROD database?

- A. Drop the recovery catalog and re-create it.
- B. Manually resynchronize the recovery catalog using the RESYNC CATALOG; command.
- C. Issue the UPGRADE CATALOG; command to update the contents of the recovery catalog.
- D. Do nothing. Synchronization will automatically occur during the next maintenance window.

Correct Answer: B Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

You should manually resynchronize the recovery catalog using the RESYNC CATALOG; command. When you issue most RMAN commands, RMAN usually automatically resynchronizes the recovery catalog if the

recovery catalog is available and the target database's control file is mounted. Also, an implicit resynchronization is done each time a database backup is taken. You can manually perform resynchronization using the RESYNC CATALOG; command. When you issue this command, RMAN compares the target database's control file to the recovery catalog, and updates the recovery catalog if necessary to match the control file. While you should not have to manually resynchronize the recovery catalog often, you should manually resynchronize if the recovery catalog has been unavailable, if you do not make frequent database backups, or if you have made structural changes to the target database.

You should not drop the recovery catalog and re-create it. This would delete all recovery catalog information for all registered target databases.

You should not issue the UPGRADE CATALOG; command to update the contents of the recovery catalog. The UPGRADE CATALOG; command is used to perform a recovery catalog upgrade. A recovery catalog upgrade upgrades the recovery catalog schema to be compatible with newer RMAN clients.

The option that states you should do nothing because synchronization will automatically occur during the next maintenance window is incorrect. Synchronization does not occur during the maintenance window. It occurs when RMAN commands are issued, implicitly when backup is taken, and when you issue the RESYNC CATALOG; command.

#### **QUESTION 259**

Which statement about using RMAN stored scripts is true?

- A. To create and execute an RMAN stored script, you must use a recovery catalog.
- B. When executing a stored script and a command fails, the remainder of the script is executed, and a message is written to the alert log file.
- C. RMAN stored scripts can always be executed against any target database that is registered in the recovery catalog.
- D. When you execute a stored script, it always executes using the persistent channel settings previously set with the CONFIGURE command.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

To create and execute an RMAN stored script, you must use a recovery catalog because RMAN stored scripts are stored in the recovery catalog. You cannot use RMAN stored scripts if you are using the control file for your RMAN repository.

The option that states when executing a stored script and a command fails, the remainder of the script is executed, and a message is written to the alert log file is incorrect. If you are executing a stored RMAN script and one of the commands in the script fails, the other subsequent commands in the script are not executed because a stored RMAN script is created within a RUN block.

The option that states RMAN stored scripts can always be executed against any target database that is registered in the recovery catalog is incorrect. RMAN stored scripts can be created as local scripts or as global scripts. Local scripts can only be executed against the target database to which you are connected when you create the script. To create a global script that can be executed against any target database registered in the recovery catalog, you must include the GLOBAL keyword when you create the script.

The option that states when you execute a stored script, it always executes using the persistent channel settings set with the CONFIGURE command is incorrect. You can override any persistent channel settings by including an ALLOCATE CHANNEL command in the RUN block before executing the script.

#### **QUESTION 260**

Which statement about an RMAN Virtual Private Catalog (VPC) is true?

- A. A VPC is a virtual subset of the base recovery catalog.
- B. A base recovery catalog can contain only one VPC.
- C. A VPC is an additional recovery catalog that is associated with the base recovery catalog.
- D. A VPC must be owned by SYSDBA.

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

Virtual Private Catalog (VPC) is a virtual subset of the base recovery catalog. It consists of views and synonyms defined in the base recovery catalog. Using a VPC allows you to you restrict access to the base recovery catalog.

The option that states a base recovery catalog can contain only one VPC is incorrect. A base recovery catalog can contain zero or more VPCs.

The option that states a VPC is an additional recovery catalog that is associated with the base recovery catalog is incorrect. A VPC is a subset of the base recovery catalog, not separate from it. That is why when creating a VPC, the base catalog must first exist.

The option that states a VPC must be owned by SYSDBA is incorrect. A VPC can be owned by any user who is granted the RECOVERY\_CATALOG\_OWNER role. However, to perform many RMAN operations SYSDBA or SYSOPER privileges on the target database are needed.

## **QUESTION 261**

You currently have an RMAN base recovery catalog owned by user RMAN. The DB1, DB2, DB3, and TEST1 Oracle 11g databases have been registered in the base recovery catalog. You have two users, PRODVCOWNER and TESTVCOWNER. You want to create a virtual private catalog and use it to restrict access

for TESTVCOWNER. You want TESTVCOWNER to own the virtual private catalog. You want TESTVCOWNER to be

able to access data in the base recovery catalog for only the TEST1 database and be able to perform all RMAN operations.

You issue the following RMAN command:

GRANT RECOVERY CATALOG OWNER TO TESTVCOWNER;

You then connect to the base recovery catalog as RMAN and issue the following command: GRANT CATALOG FOR DATABASE TEST1 TO TESTVCOWNER:

Which additional steps should be taken to create the needed virtual private catalog? (Choose all that apply.)

- A. Connect to the base recovery catalog as TESTVCOWNER.
- B. Issue the GRANT REGISTER command.
- C. Execute the DBMS\_RCVCAT.CREATE\_VIRTUAL\_CATALOG procedure from PL/SQL.
- D. Ensure TESTVCOWNER has either the SYSDBA or SYSOPER privilege on TEST1.
- E. Issue the CREATE VIRTUAL CATALOG; command.

Correct Answer: ADE Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

You should connect to the base recovery catalog as TESTVCOWNER and issue the CREATE VIRTUAL CATALOG; command. After the virtual private catalog owner has been created and granted the RECOVERY\_CATALOG\_OWNERR role by the base recovery catalog owner, the virtual private catalog owner can connect to the base recovery catalog and create the virtual private catalog. Because the base recovery catalog owner issued the GRANT CATALOG command specifying only the TEST1 database, the virtual private catalog owner will only see the TEST1 database registered in the new virtual private catalog. For TESTVCOWNER to be able to perform all RMAN operations, you should also ensure TESTVCOWNER has either the SYSDBA or SYSOPER privilege on TEST1. Most RMAN operations cannot be performed without these privileges. In Oracle 11g, you can use virtual private catalogs to restrict access to the base recovery catalog. To create a virtual private catalog, perform the following steps:

Connected with administrator privileges, create the user that will own the new virtual private catalog. Grant the RECOVERY\_CATALOG\_OWNERR role to the virtual private catalog owner.

Connect to the base recovery catalog as the base recovery catalog owner.

Grant the necessary access to the virtual private catalog owner using GRANT CATALOG FOR DATABASE and/or GRANT REGISTER commands.

Connect to the base recovery catalog as the virtual private catalog owner.

Create the virtual private catalog. For 11gg target databases, issue the CREATE VIRTUAL CATALOG; command. For databases prior to 11g,, execute the DBMS\_RCVCAT.CREATE\_VIRTUAL\_CATALOG procedure.

You should not issue the GRANT REGISTER command. When connected to the base recovery catalog as the base recovery catalog owner, the GRANT REGISTER command is used to grant the virtual private catalog owner permission to register a database.

You should not execute the DBMS\_RCVCAT.CREATE\_VIRTUAL\_CATALOG procedure from PL/SQL. In this scenario, only 11g databases are being used, so you would use the CREATE VIRTUAL CATALOG; RMAN command to create the virtual catalog.

#### **QUESTION 262**

You have an Oracle 11g database with an RMAN base recovery catalog owned by user RMAN. The DB1, DB2, and TEST1 Oracle 10g databases have been registered in the base recovery catalog. Connected with system administrator privileges, you create the VPCOWNER user and grant the user the RECOVERY CATALOG OWNER role.

You connect to the target database as RMAN and issue the following commands:

GRANT CATALOG FOR DATABASE DB1, TEST1 TO VPCOWNER; GRANT REGISTER TO VPCOWNER; Which statement is true?

- A. VPCOWNER can connect to the base recovery catalog but cannot create a virtual private catalog until the DB1 and TEST1 databases are upgraded to Oracle 11g.
- B. VPCOWNER can connect to the base recovery catalog and create a virtual private catalog using PL/SQL.
- C. VPCOWNER can connect to the base recovery catalog and create a virtual private catalog using the CREATE VIRTUAL CATALOG; RMAN command.
- D. VPCOWNER cannot connect to the base recovery catalog.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

VPCOWNER can connect to the base recovery catalog and create a virtual private catalog using PL/SQL. In Oracle 11g, you can use virtual private catalogs to restrict access to the base recovery catalog. To create a virtual private catalog you should perform the following steps:

Connected with administrator privileges, create the user that will own the new virtual private catalog.

Grant the RECOVERY\_CATALOG\_OWNER role to the virtual private catalog owner.

Connect to the base recovery catalog as the base recovery catalog owner.

Grant the necessary access to the virtual private catalog owner using GRANT CATALOG FOR DATABASE and/or GRANT REGISTER commands.

Connect to the base recovery catalog as the virtual private catalog owner.

Create the virtual private catalog. For 11g target databases, issue the CREATE VIRTUAL CATALOG; command. For databases prior to 11g, execute the DBMS\_RCVCAT.CREATE\_VIRTUAL\_CATALOG procedure.

The options that state VPCOWNER can connect to the base recovery catalog but cannot create a virtual private catalog until the DB1 and TEST1 databases are upgraded to Oracle 11g and that VPCOWNER can connect to the base recovery catalog and create a virtual private catalog using the CREATE VIRTUAL CATALOG; RMAN command are incorrect. You can create a virtual private catalog for earlier databases, but you must do so using the DBMS\_RCVCAT.CREATE\_VIRTUAL\_CATALOG procedure.

The option that states VPCOWNER cannot connect to the base recovery catalog is incorrect because VPCOWNER has been granted the RECOVERY\_CATALOG\_OWNER role. This allows the user to connect to the

base recovery catalog.

#### **QUESTION 263**

Which statement about a recovery catalog is true?

- A. When you unregister a database registered in the recovery catalog, information about the database is kept until synchronization is performed.
- B. When moving a recovery catalog to another database, you must first create the new recovery catalog using the CREATE CATALOG; command.
- C. A recovery catalog cannot be dropped until you unregister all databases registered in it.
- D. Each database registered in a recovery catalog is uniquely identified by its database ID (DBID).

Correct Answer: D Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

Each database registered in a recovery catalog is uniquely identified by its database ID (DBID). This can present problems when you duplicate a database and attempt to register both the original database and the duplicate database in the same recovery catalog because they have the same DBID. To avoid this problem, you must first use the DBNEWID utility to modify the DBID of one of the databases.

The option that states when you unregister a database registered in the recovery catalog, information about the database is kept until synchronization is performed is incorrect. When you unregister a database, all information for the database is deleted from the recovery catalog.

The option that states when moving a recovery catalog to another database, you must first create the new recovery catalog using the CREATE CATALOG; command is incorrect. The new recovery catalog is automatically created during the import.

The option that states a recovery catalog cannot be dropped until you unregister all databases registered in it is incorrect. You can drop a recovery catalog even if it has databases currently registered. If you drop a recovery catalog, backup information for all databases registered in the recovery catalog is deleted.

## **QUESTION 264**

You are trying to determine whether to use a control-file based RMAN repository or a recovery catalog. Which statement about the RMAN repository is true?

- A. You must use a control-file based RMAN repository to use RMAN stored scripts.
- B. You can use either a control-file based RMAN repository or a recovery catalog to store backup information for multiple databases.
- C. You can only use a recovery catalog if you plan to use backup optimization.
- D. You must use a recovery catalog if you want to perform archival backups using the KEEP FOREVER clause of the BACKUP command.

Correct Answer: D Section: (none) Explanation

### **Explanation/Reference:**

Explanation:

You must use a recovery catalog if you want to perform archival backups using the KEEP FOREVER clause of the BACKUP command. Using a recovery catalog requires more administrative effort because you must maintain the database in which the recovery catalog is stored. If you use a recovery catalog, then more historical backup information can be stored, you can store backup information for multiple databases, and you have more features available than are available with a control-file based RMAN repository. These additional features that require a recovery catalog include:

Using the KEEP FOREVER clause of the BACKUP command

Using RMAN stored scripts

Using the AT option of the REPORT SCHEMA command

The option that states you must use a control-file based RMAN repository to use RMAN stored scripts is

incorrect. To use RMAN stored scripts, you must use a recovery catalog.

The option that states you can use either a control-file based RMAN repository or a recovery catalog to store backup information for multiple databases is incorrect. To store backup information for multiple databases, you must use a recovery catalog. A control-file based RMAN repository can store backup information for only a single database.

The option that states you can only use a recovery catalog if you plan to use backup optimization is incorrect. You can use backup optimization regardless of where your RMAN repository is located.

#### **QUESTION 265**

Which statement about using a recovery catalog is true?

- A. Using a recovery catalog requires less administrative effort than using a control-file based RMAN repository.
- B. Using a recovery catalog allows you to store more historical backup information.
- C. Using a recovery catalog is required if you want to use the KEEP clause of the BACKUP command to perform archival backups.
- D. Using a recovery catalog is required if you plan to use compressed backups.

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

Using a recovery catalog allows you to store more historical backup information. Your RMAN repository can be stored in the control file or in a recovery catalog. When using a recovery catalog, more historical backup information can be stored, you can store backup information for multiple databases, and additional features are available that are not available with a control-file based RMAN repository. These additional features that require a recovery catalog include:

Using the KEEP FOREVER clause of the BACKUP command

Using RMAN stored scripts

Using the AT option of the REPORT SCHEMA command

The option that states using a recovery catalog requires less administrative effort that using a control-file based RMAN repository is incorrect. Using a recovery catalog requires more administrative effort because you must maintain the database in which the recovery catalog is stored.

The option that states using a recovery catalog is required if you plan to use compressed backups is incorrect. You can use compressed backups regardless of where your RMAN repository is located.

The option that states using a recovery catalog is required if you want to use the KEEP clause of the BACKUP command to perform archival backups is incorrect. You can use the KEEP clause regardless of where your RMAN repository is located. However, you must use a recovery catalog to use the KEEP FOREVER clause of the BACKUP command.

## **QUESTION 266**

When using a recovery catalog, which statement is NOT true based on Oracle's recommendations for configuring your backup and recovery environment?

- A. The recovery catalog database should run in NOARCHIVELOG mode.
- B. When making backups of the recovery catalog database, you should use the BACKUP DATABASE PLUS ARCHIVELOG command.
- C. You should issue the CONFIGURE command with a RETENTION POLICY TO REDUNDANCY value greater than 1.
- D. The recovery catalog database should be regularly backed up to disk and tape.

Correct Answer: A Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

Oracle does not recommend that the recovery catalog database run in NOARCHIVELOG mode. Instead, Oracle recommends that the recovery catalog database run in ARCHIVELOG mode. You must take care to protect your recovery catalog database because it contains information needed for recovery of registered databases.

All of the other options are incorrect. In addition to running the recovery catalog database in ARCHIVELOG mode, Oracle also recommends that you make backups of the recovery catalog database using the BACKUP DATABASE PLUS ARCHIVELOG command, that you configure your retention policy for the recovery catalog to a REDUNDANCY value greater than 1, and that you regularly back up the recovery catalog to disk and tape. Oracle also recommends that you use a control-file based RMAN repository for your recovery catalog database, and that you configure the recovery catalog database for control file autobackup.

#### **QUESTION 267**

You need to perform the actions to create a recovery catalog owner. Consider the following possible steps:

- 1. Create a user specifying the tbs1 tablespace as the user's default tablespace.
- 2.Grant the user the RECOVERY\_CATALOG\_OWNER role.
- 3. Create a tablespace tbs1 for the recovery catalog.
- 4.Issue the CREATE CATALOG; command.
- 5. Grant the user UNLIMITED QUOTA on the tbs1 tablespace.
- 6. Grant the user the SYSDBA privilege

Which option identifies the correct steps and sequence of steps for creating a recovery catalog owner?

A. 1, 5,

B. 3, 1, 2

C. 4

D. 3, 1, 4, 2

E. 3, 1, 5, 2

Correct Answer: E Section: (none) Explanation

# **Explanation/Reference:**

**Explanation:** 

The correct steps and sequence of steps for creating a recovery catalog owner is 3, 1, 5, 2. First, you create a tablespace for the recovery catalog. Then, you create the user that will be the catalog owner. In the CREATE USER statement, you should specify the previously created tablespace as the user's default tablespace. Although, it is not required, it is recommended that you give the user unlimited quota on the tablespace. You can do so by either including the QUOTA UNLIMITED ON clause in the CREATE USER statement or by explicitly granting unlimited quota to the user after the user is created. After the user is created, you should grant the user the RECOVERY\_CATALOG\_OWNER role.

All of the other options are incorrect because they do not list the correct sequence of steps to create a recovery catalog owner. You do not need to issue the CREATE CATALOG; command. This command will create the catalog tables in the recovery catalog owner's default tablespace after the recovery catalog owner is created. You do not need to grant the user the SYSDBA privilege. The recovery catalog owner should be granted the RECOVERY\_CATALOG\_OWNER role, not the SYSDBA privilege.

#### **QUESTION 268**

With a partial recovery catalog synchronization, which information is NOT updated in the recovery catalog?

- A. information about database backups
- B. information about datafile copies
- C. information about structural database changes to the target database
- D. information about archived redo logs

Correct Answer: C Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

Information about structural database changes to the target database is not updated in the recovery catalog with a partial resynchronization. A full synchronization is required to accomplish this. With a full synchronization, RMAN creates a temporary copy of the control file, compares it to the recovery catalog, and updates all missing or changed information, including structural database changes.

All of the other options are incorrect because information about database backups, datafile copies, and

All of the other options are incorrect because information about database backups, datafile copies, and archived redo logs are updated in the recovery catalog when you perform a partial resynchronization.

#### **QUESTION 269**

After configuring the database in which you will store your recovery catalog, you create the catalog owner and grant the owner the RECOVERY\_CATALOG\_OWNER role. You want to create the recovery catalog. Which two actions should you take? (Choose two.)

- A. Connect to the recovery catalog database as SYSDBA.
- B. Connect to the recovery catalog database as the recovery catalog owner.
- C. Issue the REGISTER DATABASE; command.
- D. Issue the CREATE CATALOG; command.

Correct Answer: BD Section: (none) Explanation

# Explanation/Reference:

Explanation:

To create the recovery catalog you should connect to the recovery catalog database as the recovery catalog owner and issue the CREATE CATALOG; command. This will create the catalog tables in the recovery catalog owner's default tablespace.

You should not connect to the recovery catalog database as SYSDBA. Instead, you should connect as the recovery catalog owner, so the catalog tables will be created in the owner's default tablespace.

You should not issue the REGISTER DATABASE; command. The REGISTER DATABASE; command is used to register a target database in the recovery catalog after the catalog has been created. When you register a target database, data is copied from the target database's control file into the recovery catalog tables and is subsequently available in the recovery catalog.

#### **QUESTION 270**

Which RMAN commands require that you use a recovery catalog? (Choose all that apply.)

- A. BACKUP DATABASE PLUS ARCHIVELOG DELETE INPUT;
- B. BACKUP TABLESPACE tbs1 KEEP FOREVER NOLOGS;
- C. CONFIGURE BACKUP OPTIMIZATION ON;
- D. REPORT SCHEMA AT SCN 1120;
- E. BACKUP AS COMPRESSED BACKUPSET DATABASE; II BACKUP SECTION SIZE 500M TABLESPACE tbs1;

Correct Answer: B Section: (none) Explanation

# **Explanation/Reference:**

Explanation:

A recovery catalog is required to successfully issue the following two RMAN commands:

# BACKUP TABLESPACE tbs1 KEEP FOREVER NOLOGS; REPORT SCHEMA AT SCN 1120;

You must use a recovery catalog to use the KEEP FOREVER clause of the BACKUP command and to use the AT clause of the REPORT SCHEMA command. You must also use a recovery catalog if you want to use RMAN stored scripts or store backup information for multiple databases.

All of the other options are incorrect because they do not require the use of a recovery catalog.

## **QUESTION 271**

In which situation is a recovery catalog NOT required?

- A. when performing block media recovery
- B. when using RMAN stored scripts
- C. when using the AT option of the REPORT SCHEMA command
- D. when using the KEEP FOREVER clause of the BACKUP command

Correct Answer: A Section: (none) Explanation

## **Explanation/Reference:**

Explanation:

A recovery catalog is not required when performing block media recovery. You can perform block media recovery if you use the control file or a recovery catalog for your RMAN repository.

All of the other options are incorrect because to use RMAN stored scripts, the AT option of the REPORT SCHEMA command, or the KEEP FOREVER clause of the BACKUP command you must use a recovery catalog as your RMAN repository. Using a recovery catalog requires more administrative effort because you must maintain the database in which the recovery catalog is stored. However, if you use a recovery catalog, more historical backup information can be stored, you can store backup information for multiple databases, and additional features are available.