



**Exam Code:** 1z1-054

**Exam Name:** Oracle Database 11g: Performance Tuning

**Vendor:** Oracle

**Version:** DEMO

## Part: A

1: You are managing an online transaction processing (OLTP) system. Many users complain about the slow response time. You investigated and found that in the Top 5 events, direct path read accounts for 73.2% of the total wait time. Which two are the possible reasons for the high direct path read time? (Choose two.)

- A.The I/O subsystem is slow.
- B.The SQL statements are using high CPU.
- C.The SQL statement has a long parsing time.
- D.The SQL statements are performing a large number of physical and logical reads.

**Correct Answers: A D**

2: You notice that two wait events, Latch:cache buffer chains and Latch:cache buffer LRU chains, appear consistently in the Top 5 Timed Events for your database. Which two options describe what these wait events indicate? (Choose two.)

- A.Latch:cache buffer LRU chains - indicates excessive block replacement
- B.Latch:cache buffer LRU chains - indicates insufficient size of application cursor cache
- C.Latch:cache buffer chains - indicates inefficient SQL that accesses many blocks repeatedly
- D.Latch:cache buffer chains - indicates that there are several sessions waiting for a buffer that is presently being read into the buffer cache by another session

**Correct Answers: A C**

3: View the Exhibit and examine the output for the WRC command-line utility that you executed to estimate the number of replay clients.

Identify three prerequisites for completing the replay. (Choose three.)

- A.The replay database should be in the RESTRICTED mode.
- B.You need to start at least 21 replay clients on six CPUs to start the replay.
- C.The replay directory must have all the replay files that have been preprocessed.
- D.The user should be able to use the workload replay package and should have the DBA role.
- E.The replay options for think\_time\_scale and connect\_time\_scale must be set to 100 each.

**Correct Answers: B C D**

4: You upgraded database from the Oracle Database 10g to Oracle Database 11g. To test the performance SQL on the upgraded database. You want to build the before-change performance data by using SQL Performance Analyzer . Which method would allow the task to execute quickly?

- A.the EXPLAIN PLAN method
- B.the TEST EXECUTE method
- C.the COMPARE PERFORMANCE method
- D.the OPTIMIZER\_USE\_SQL\_PLAN\_BASELINE parameter set to TRUE

**Correct Answers: A**

5: A batch workload that historically completed in the maintenance window between 10:00 PM and midnight is currently showing poor performance and completing at 2 AM.

To help in the diagnosis of the performance degradation, the senior DBA in your organization asks you to execute the awrddrpt.sql script to produce a Compare Periods report.

Which two statements are true about the report produced by this script? (Choose two.)

- A.It is refreshed automatically based on the moving window baseline.
- B.It compares details between any two selected time periods of the same duration.
- C.It normalizes the statistics by the amount of time spent on the database for each time period.
- D.It compares details between two consecutive time periods of the same or different durations and is refreshed every 60 minutes.

**Correct Answers: B C**

6: View the Exhibit and examine the result of Automatic SQL Tuning for a period.

None of the recommended SQL profiles are implemented. What would you do to allow the Automatic SQL Tuning implement the SQL profiles automatically?

- A.Set the OPTIMIZER\_MODE parameter to ALL\_ROWS for the database instance.
- B.Set the SQLTUNE\_CATEGORY parameter to DEFAULT for the database instance.
- C.Set the OPTIMIZER\_CAPTURE\_SQL\_PLAN\_BASELINES parameter to TRUE for the database instance.
- D.Use the DBMS\_SQLTUNE.SET\_TUNING\_TASK\_PARAMETERS procedure to set ACCEPT\_SQL\_PROFILES to TRUE.

**Correct Answers: D**

7: You query the V\$SYSSTAT view and notice a significantly high value for the redo log space requests statistic. Which three components would you consider for further investigation based on this information? (Choose three.)

- A.LGWR
- B.checkpoints
- C.archiver activity
- D.size of the log buffer
- E.size of the redo log files

**Correct Answers: B C E**

8: The users in your online transaction processing (OLTP) environment complain that the query response time has increased considerably. You checked the Program Global Area (PGA)- related information in the AWR report to investigate it further.

View the Exhibit named PGAHIT and note the PGA cache-hit percentage.

View the Exhibit named PGAADV and analyze the content.

If you want to increase the size of PGA, you have sufficient memory available in the system. What would be the correct decision?

- A.Double the size of PGA.
- B.Increase the size of PGA to 120 MB.
- C.Increase the size of PGA to 160 MB or more.
- D.Leave the PGA at its current size and investigate other possible causes.

**Correct Answers: C**

9: You created two services HR and FINANCE on a single instance database. These services are used by the middle-tier applications to connect to the database by using connection pools. The applications have various modules and you asked the developers to invoke the DBMS\_APPLICATION\_INFO.SET\_MODULE procedure to set the module name and action in the code for the application.

As part of performance management, you want to gather statistics for these modules and see the amount of workload created by these modules.

What would you recommend to accomplish the task?

- A. Using the DBMS\_MONITOR.SERV\_MOD\_ACT\_STAT\_ENABLE procedure to collect statistics for a module and querying the V\$SERVICE\_EVENT view
- B. Using the DBMS\_MONITOR.SERV\_MOD\_ACT\_STAT\_ENABLE procedure to collect statistics for a module and querying the V\$SERVICE\_STATS view
- C. Using the DBMS\_MONITOR.SERV\_MOD\_ACT\_STAT\_ENABLE procedure to collect statistics for a module and querying the V\$SERV\_MOD\_ACT\_STATS view
- D. Querying the V\$SERVICE\_STATS view because the statistics for the modules are collected automatically when you invoke the DBMS\_APPLICATION\_INFO.SET\_MODULE procedure

**Correct Answers: C**

10: View the Exhibit.

Which statement is true about applying the threshold setting in the Exhibit.

- A. The threshold does not depend on any baseline.
- B. The threshold is decided by comparing the warning and threshold values with the LAST\_NIGHT baseline.
- C. The threshold is decided by comparing the warning and threshold values with the SYSTEM\_MOVING\_WINDOW baseline.
- D. The threshold is decided by comparing the warning and critical values with the baseline set on the performance page.

**Correct Answers: A**

11: You are working on an online transaction processing (OLTP) system. The CUST table in the SH schema was populated by direct load and after that it has gone through a lot of updates and deletions. The statistics for the CUST and SALES tables were updated recently.

View the Exhibit and examine the query plan.

The query is performing a lot of I/O for a query that fetches only 168 rows. To investigate further, you queried the ALL\_TABLES view to find out PCTUSED, PCTFREE, and the number of rows in the CUST table, as given below:

```
SQL> SELECT table_name ,blocks, pct_used, pct_free, num_rows
      2 FROM all_tables
      3* WHERE table_name = 'CUST';
```

TABLE_NAME	BLOCKS	PCT_USED	PCT_FREE	NUM_ROWS
CUST		13768		80111060

What would you recommend to reduce the I/O?

- A.reorganizing the table to use fewer blocks
- B.rebuilding the index on the CUST\_FIRST\_NAME column
- C.increasing the value for the PCTFREE attribute for the CUST table
- D.increasing the value for the PGA\_AGGREGATE\_TARGET initialization parameter

**Correct Answers: A**

12: Examine the initialization parameter values for the instance given below:

NAME	TYPE	VALUE
optimizer_capture_sql_plan_baselines	boolean	FALSE
optimizer_dynamic_sampling	integer	2
optimizer_features_enable	string	11.1.0.6
optimizer_index_caching	integer	0
optimizer_index_cost_adj	integer	100
optimizer_mode	string	
ALL_ROWS		
db_file_multiblock_read_count	integer	64

The index created on the column used in the WHERE clause of the query. You notice that the query is not using the index. Instead of an index scan, a full table scan is used.

View the Exhibit and examine the autotrace output for a query.

What could be the reason for it? (Choose all that apply.)

- A.The OPTIMIZER\_INDEX\_COST\_ADJ initialization parameter has a low value.
- B.The DB\_FILE\_MULTIBLOCK\_READ\_COUNT initialization parameter has a low value.
- C.The statistics for the table and all the indexes associated with the table are not current.
- D.The table has less than DB\_FILE\_MULTIBLOCK\_READ\_COUNT blocks under the high-water mark.

**Correct Answers: C D**

13: View the Exhibit and examine the plans in the SQL plan baseline.

You observe that the last two SELECT statements (outlined in red and blue) are identical, but have two different plans. Also, the second plan (in blue) is not being used by the optimizer.

Which two steps do you perform to ensure that the optimizer uses the second plan (in blue) if the plan is more efficient? (Choose two.)

- A.Mark the second plan (in blue) as fixed.
- B.Use SQL Tuning Advisor to tune the plan.
- C.Use SQL Access Advisor to tune the plan.
- D.Use the DBMS\_SPM.EVOLVE\_SQL\_PLAN\_BASELINE function to evolve the plan.

**Correct Answers: B D**

14: You are working as a DBA for a DSS system, on which applications primarily perform large sequential I/Os. The company wants to upgrade the storage used by the database to faster hard disks. What other factors would you consider before giving the go-ahead for the new hard disks? (Choose all that apply.)

- A.the sizing of PGA to meet the faster data access
- B.the sizing of buffer cache to meet the faster data access
- C.the time it takes for a submitted I/O request to be serviced by the storage
- D.the capacity of the I/O channel that connects the server to the storage array

**Correct Answers: C D**

15: What indicates that the rate of writing data blocks to the disk is very slow?

- A.very high cache-hit ratio
- B.increasing number of free buffer waits
- C.increasing number of buffer busy waits
- D.waits on latch: cache buffers chains event

**Correct Answers: B**

16: Your company wants to migrate a single instance Oracle 11g Release 1 database to a RAC environment. The database supports middle-tier applications using connection pooling for connecting to database.

Being a part of the performance management team, you want to test the performance of the SQL statements and the peak workload of the applications in the new environment before upgrading the production system.

Given below are some of the steps in random order to accomplish the task:

- 1) Capture the real workload on the existing system.
- 2) Create a SQL Tuning Set (STS) for the statements executed by the application.
- 3) Transport STS on the test environment and use SQL Tuning Advisor to compare the before and after performance.
- 4) Replay the workload on the test environment.
- 5) Analyze the divergence after replay.
- 6) Use Automatic Workload Repository (AWR) to capture the information for top SQL on the existing system.
- 7) Transport STS on the test environment and use SQL Performance Analyzer to compare the before and after performance.

Identify the correct steps required to perform the test.

- A.2 and 3 only
- B.6 and 7 only
- C.1, 4, and 5 only
- D.2, 3, and 5 only
- E.2, 3, 4, and 5 only

**Correct Answers: C**

17: You work as a DBA for a company and as a performance improvement measure, you implemented the result cache in your database.

Many users in the company say that performance has improved on the queries they use, but some users complain that they have not got any performance benefit on the queries they use.

You checked all the queries they use and the following is one of them:

```
SQL> SELECT /*+ RESULT_CACHE */ slnoq.currval as "SLNO", prod_id, pdname,  
2 cust_name FROM sales WHERE sl_date < sysdate;
```

View the Exhibit and examine the testing performed to check this.

Why is the result cache not used? (Choose all that apply.)

- A.because the query uses SYSDATE
- B.because the query uses an alias for a column
- C.because the query uses the SLNOQ.CURRVAL sequence
- D.because the table might have an index on the SL\_DATE column

**Correct Answers: A C**

18: You are managing an online transaction processing (OLTP) system. The database is supporting a large number of applications using connection pools to connect to the database. Which method would you use for performance management?

- A.Service aggregation for action within application module
- B.Monitoring individual sessions by querying V\$SESSION\_LONGOPS
- C.Monitoring individual sessions in an application by querying V\$SESSION
- D.Mapping the sessions for an application to one resource consumer group

**Correct Answers: A**

19: View the Exhibit and analyze the output of a query executed on the V\$MEMORY\_RESIZE\_OPS view.

Why do INITIAL\_SIZE, TARGET\_SIZE, and FINAL\_SIZE columns have the value zero for some of the components?

- A.because they are the only components that are auto-tuned
- B.because they are the only components that are not auto-tuned
- C.because they are the only components that have not undergone any manual resizing
- D.because they are the only components that do not have a default size or their respective parameters are not set in the initialization parameter file

**Correct Answers: D**

20: The database application developers are planning to make some major schema changes such as creating new indexes and materialized views. They want to check the net impact of these changes on the workload performance. This activity has to be performed in the production database, so they want only the query part of the data manipulation language (DML) statements to be executed so that the side effects to the database or user data can be prevented. What should they use to achieve this?

- A.Database Replay
- B.SQL Tuning Advisor
- C.SQL Access Advisor
- D.SQL Performance Analyzer

**Correct Answers: D**