Oracle

Exam 1z0-064

Oracle Database 12c: Performance Management and Tuning

Version: 8.0

[Total Questions: 84]

Question No : 1

To investigate the slow response time of queries on the TRANS table, you gathered the table statistics and executed the query:

```
SQL> SELECT chain_cnt, round(chain_cnt/num_rows*100,2) pct_chained, avg_row_len,
pct_free , pct_used
     FROM user_tables
     WHERE table_name = 'TRANS';
CHAIN_CNT   PCT_CHAINED AVG_ROW_LEN PCT_FREE  PCT_USED
---------   ----------- ----------- --------  --------
4789                100        3691       10        40
```

The table is stored in a tablespace that has Automatic Segment Space Management (ASSM) enabled. The tablespace is created with a standard block size of 8192 bytes.

Which three can be reasons for the slow response time of the queries? (Choose three.)

A. Row size is too large to fit into a single block during insert operations.
B. Row moves from one data block to another data block because the row grows too large to fit in the original block.
C. The table is subject to frequent insert, update, and delete DML activity leading to sparsely populated blocks.
D. The value of PCTUSED is set to a value lower than the default, causing row changing.
E. The value of PCTFREE is set to a value lower than the default, causing row chaining.

Answer: A,B,C

Question No : 2

You are administering a database that supports a DSS workload. Automatic Shared Memory Management is enabled for the database instance. Users issue queries to perform large soft operations and complain about degraded performance of the queries. On investigation, you notice that the queries are performing multipass work area executions and the I/O contention on one of the temporary tablespaces is very high.

Which two can be possible resolutions for this issue? (Choose two.)

A. Increase the size of the large pool.
B. Increase the value of the PGA_AGGREGATE_TARGET parameter.
C. Create a temporary tablespace group and assign it to users.
D. Increase the value of the PGA_AGGREGATE_LIMIT parameter.

E. Create another temporary tablespace and assign it to users.
F. Enable temporary undo.

Answer: C,D

Question No : 3

Examine this list of possible tasks:

1. Ensure that STATISTICS_LEVEL is set to TYPICAL or ALL.

2. Ensure that TIMED_STATISTICS is set to TRUE.

3. Set MAX_DUMP_FILE_SIZE to UNLIMITED and DIAGNOSTIC_DEST to an appropriate destination.

4. Ensure that SQL_TRACE is set to TRUE.

5. Enable tracing at the database instance level by using the DBMS_MONITOR.DATABASE_TRACE_ENABLE procedure.

6. Enable tracing in the required session by using the DBMS_SESSION.SET_SQL_TRACE procedure.

7. Run TKPROF with the EXPLAIN parameter on the output trace file.

8. Run the trcsess utility on the output trace files, and then run TKPROF on the output of the trcsess utility.

Select the minimum tasks to perform, in the correct order, to generate both a formatted trace file with timing information and an explain plan for each SQL statement for all sessions. (Choose the best answer.)

A. 1, 2, 5, 8
B. 1, 3, 6, 7
C. 2, 4, 5, 8
D. 1, 3, 4, 5, 6, 7
E. 1, 2, 4, 8

Answer: C

Question No : 4

Which two statements are true about the interpretation of Buffer Cache Hit Ratio in the Instance Efficiency Percentages section of an AWR report? (Choose two.)

A. A high value indicates that the buffer cache is adequately sized for the current workload.
B. Poor hit ratios indicate that a large number of indexed lookups or small table scans are being performed.
C. A low hit ratio does not necessarily imply that increasing the size of the buffer cache will improve performance.
D. A high hit ratio may indicate that repeated scanning of the same large table or index is being performed.
E. A low hit ratio indicates that a KEEP buffer pool should be configured based on the size of the largest object accessed in the buffer cache.

Answer: C,D

Question No : 5

Examine the partial Activity Over Time section of an Active Session History (ASH) report:

Slot Time (Duration)	Slot Count	Event	Event Count	% Event
14:10:50 (1.2 min)	5	control file sequential read	4	0.11
		CPU + Wait for CPU	1	0.03
14:12:00 (3.0 min)	9	CPU + Wait for CPU	5	0.14
		control file parallel write	2	0.05
		null event	1	0.03

Which two inferences are correct? (Choose two.)

A. In the first time slot, five different sampled sessions were connected to the database instance.
B. In the second time slot, out of the nine sampled sessions connected to the database instance, only one sampled session was idle at the time of report generation.
C. In the first time slot, only one sampled session was using the CPU.
D. In the second time slot, five different sampled sessions were using the CPU.
E. In the second time slot, 0.14% of the time was spent on the CPU.

Answer: A,E

Question No : 6

Examine the parameters set for your database instance:

```
NAME                                      TYPE           VALUE
------------------------------            ------------   -----------
optimizer_capture_sql_plan_baselines      boolean        FALSE
optimizer_use_sql_plan_baselines          boolean        TRUE
optimizer_index_cost_adj                  integer        100
optimizer_mode                            string         ALL_ROWS
cursor_sharing                            string         EXACT
```

You are administering a database that supports an OLTP workload. Users complain about the degraded performance of some queries. While diagnosing, you notice a large number of hard parses occurring for several syntactically almost identical SQL statements that differ only in literal values in the WHERE clause.

Which two actions would you recommend to improve performance? (Choose two.)

A. Create the KEEP cache and cache the tables used in the queries.
B. Set the CURSOR_SHARING parameter to FORCE.
C. Use bind variables instead of literals.
D. Create SQL plan baselines for the almost identical SQL statements and load them into the cursor cache.
E. Set the OPTIMIZER_CAPTURE_SQL_PLAN_BASELINES parameter to TRUE.

Answer: B,E

Question No : 7

You define the warning threshold for the tablespace usage metric for the USERS tablespace to be 60% and the critical threshold to be 80%.

Which two sources should you check for the alert information when either the warning or the critical threshold is exceeded? (Choose two.)

A. the alert log
B. Oracle Enterprise Manager Cloud Control
C. DBA_ALERT_HISTORY
D. DBA_OUTSTANDING_ALERTS
E. DBA_ACTIVE_SESSION_HISTORY
F. DBA_THRESHOLDS

Answer: A,F

Question No : 8

Examine the initialization parameters set for a database instance:

```
NAME                              TYPE       VALUE
------------------------------    --------   --------
dbwr_io_slaves                    integer    0
db_writer_processes               integer    1
filesystemio_options              string     NONE
disk_asynch_io                    boolean    TRUE
```

The database supports an OLTP workload. Applications connect to the instance using shared server connections and perform small, random I/Os. All the data files are on the same disk. You notice free buffer wait events for sessions in the database instance.

To solve the problem, you increase the size of the buffer cache. But after some time, you notice sessions waiting again on free buffer waits.

What will you recommend to alleviate the issue? (Choose the best answer.)

A. Run the I/O calibration tool.
B. Configure the database instance to make asynchronous I/O available to DBWR.
C. Spread the data files over multiple disks, controllers, and I/O buses to ensure that there are no hotspots in the I/O subsystem.
D. Configure dedicated server connections for the applications.

Answer: B

Question No : 9

Your database supports a mixed workload. The ERP application creates short sessions and performs small, random I/Os; the REPORTING application executes long-running DSS queries.

You want to set a priority for the workload generated by the ERP application and optimize resource usage for them.

Which three objectives can be achieved by the Resource Manager? (Choose three.)

A. limiting the amount of time that a session is idle and blocking other sessions of the ERP application
B. limiting the amount of undo generated by operations performed by sessions created by the ERP application
C. creating two resource plans with resource limits defined for the workload generated by the applications and automatically changing resource plans based on the workload
D. allocating a lower percentage of CPU to sessions used by the REPORTING application than to those used by the ERP application
E. limiting the physical I/O performed by the sessions or users of the ERP application that are connected to the database

Answer: B,D,E

Question No : 10

Your database supports an OLTP workload during the day and batch processing at night. You want to monitor performance metrics to detect any degradation of performance in both types of workloads over a time period of 30 days.

Examine this list of possible steps:

1. Create a fixed baseline.

2. Create a baseline template.

3. Create a new moving window baseline.

4. Increase the retention period default value to 30 days.

5. Increase the size of the existing moving window baseline to 30 days.

6. Create warning and critical alerts for the relevant metrics.

7. Enable adaptive thresholds to detect the workload patterns and specify a high-significance-level threshold type.

8. Enable adaptive thresholds to detect the workload patterns and set different threshold values as a percentage of the maximum value.

Which option represents the required steps in the correct order? (Choose the best answer.)

A. 5, 7
B. 2, 4, 3
C. 3, 4, 8
D. 4, 5, 7
E. 5, 1, 6, 8

Answer: E

Question No : 11

Which two situations can lead to sparsely populated index blocks? (Choose two.)

A. Data is frequently inserted using direct path load into a table with an index.
B. Indexed columns in a table are frequently updated.
C. Values in an indexed column are inserted using monotonically incrementing sequences.
D. Bulk delete operations are performed on a table with indexes.
E. Online table move operations are performed frequently on a table with indexes.

Answer: B,D

Question No : 12

Which two statements are true about viewing the details of Real-Time Database Operations? (Choose two.)

A. In V$SQL_MONITOR monitoring, statistics are cumulative over several executions of the SQL statement that is being monitored in a session.
B. SQL Developer can be used to view running database operations.
C. Oracle Enterprise Manager Database Express can be used to view running database operations.
D. When the SQL statement that is being monitored is executing, V$SQL_MONITOR is refreshed once every minute. After the execution ends, the monitoring information in V$SQL_MONITOR is deleted immediately.
E. Oracle Enterprise Manager Cloud Control can be used to view running database operations.

Answer: A,D

Question No : 13

Examine the command to change a parameter value from the default to 50:

SQL> ALTER SYSTEM SET OPTIMIZER_INDEX_COST_ADJ = 50;

What is the effect of changing the value of the parameter? (Choose the best answer.)

A. It influences the optimizer to use full table scans instead of index scans as the estimated cost of full table scan is reduced.
B. It influences the optimizer to use bitmap indexes as the estimated cost of conversion from bitmap to rowid is reduced.
C. It influences the optimizer to always use fast full index scans as the estimated cost of using an index is reduced.
D. It influences the optimizer to use indexes instead of full table scans as the estimated cost of using an index is reduced.

Answer: A
Reference: http://www.dba-oracle.com/oracle_tips_cost_adj.htm

Question No : 14

Examine the parameters set for your database instance:

```
NAME                          TYPE              VALUE
---------------------------   --------------    ---------
memory_max_target             big integer       0
memory_target                 big integer       0
pga_aggregate_target          big integer       500M
sga_target                    big integer       0
db_cache_size                 big integer       604M
shared_pool_size              big integer       328M
sga_max_size                  big integer       1G
large_pool_size               big integer       24M
```

You upgrade your database to Oracle Database 12c. The database supports a mixed workload and works with different workloads at different times. You notice in an ADDM report that the shared pool is inadequately sized. You resize the shared pool by decreasing the sizes of other pools, which results in inadequate sizes for other pools. You want to

automate the sizing of SGA components.

Which two actions should you perform? (Choose two.)

A. Set the SGA_TARGET parameter equal to SGA_MAX_SIZE.
B. Set the SGA_TARGET parameter to the sum of DB_CACHE_SIZE,SHARED_POOL, and LARGE_POOL_SIZE.
C. Set the MEMORY_MAX_TARGET parameter to the sum of DB_CACHE_SIZE,SHARED_POOL, and LARGE_POOL_SIZE.
D. Set DB_CACHE_SIZE,SHARED_POOL, and LARGE_POOL_SIZE to their minimum required values.
E. Set the PGA_AGGREGATE_TARGET parameter to 0 and the SGA_TARGET parameter to 1.5G.

Answer: A,E

Question No : 15

Which two statements are true about DB time in V$SYS_TIME_MODEL? (Choose two.)

A. DB time cannot exceed the total elapsed time (walk clock time) since the database instance started.
B. DB time cannot exceed the maximum number of concurrent sessions multiplied by the actual elapsed time for each session.
C. DB time includes the time spent on client processes and background processes.
D. Reducing DB time allows a database instance to support more user requests by using the same resources.
E. DB time is always greater than or equal to the DB CPU time.

Answer: D,E

Question No : 16

You are administering a database that supports an OLTP workload. Users complain about the degraded response time of a query. You want to gather new statistics for objects accessed by the query and test query performance with the new statistics without affecting other sessions connected to the instance.

The STALE_PERCENT statistic preference is set to a default value and the