

Level 4 Oracle DBA Interview Questions and Answers

Senior DBA interview preparation guide covering architecture, RMAN, patching, upgrades, multitenant, security, performance, RAC, Data Guard, GoldenGate, and production scenarios.

These questions are designed for a senior / Level 4 Oracle DBA role. At this level, interviewers expect strong production support, troubleshooting, architecture, backup/recovery, patching, upgrades, performance, RAC, Data Guard, security, and incident-handling knowledge.

1. Senior DBA Role and Troubleshooting Approach

1. What is expected from a Level 4 Oracle DBA?

Answer:

A Level 4 Oracle DBA is expected to independently handle complex production issues, lead root-cause analysis, guide junior DBAs, work with application and infrastructure teams, and make safe decisions during critical incidents.

Key responsibilities include:

- Production database administration
- Performance tuning
- Backup and recovery
- RAC and Data Guard support
- Patching and upgrades
- Security and auditing
- Space management
- Incident handling
- Automation
- Capacity planning
- Root cause analysis

2. A production database is slow. What is your approach?

Answer:

I first avoid guessing. I identify the scope and the time of issue.

1. Confirm whether issue is database-wide or application-specific.
2. Check whether issue is happening now or happened in the past.
3. Check active sessions and wait events.
4. Check blocking sessions.
5. Check CPU, memory, I/O, and storage.
6. Check top SQL.
7. Review AWR/ASH for the issue window.
8. Identify root cause.
9. Apply the safest fix.
10. Validate improvement using metrics.

Useful query:

```
SELECT event, COUNT(*)
FROM v$session
WHERE status = 'ACTIVE'
GROUP BY event
ORDER BY COUNT(*) DESC;
```

3. How do you handle a critical production incident?

Answer:

My approach is:

1. Stabilize the system first.
2. Gather symptoms and impact.
3. Identify affected database/application/module.
4. Check recent changes.
5. Review alerts, wait events, locks, and top SQL.
6. Apply temporary workaround if required.
7. Communicate status clearly.
8. Implement permanent fix.
9. Prepare RCA.
10. Document lessons learned.

In production, communication is as important as technical troubleshooting.

2. Oracle Architecture

4. Explain Oracle database architecture.

Answer:

Oracle architecture has two main parts:

Component	Description
Instance	Memory structures and background processes
Database	Physical files such as datafiles, control files, redo logs

Main memory areas:

SGA
PGA

Main background processes:

DBWn
LGWR
CKPT
SMON
PMON
ARCn
MMON
MMNL
RECO

5. What is SGA?

Answer:

SGA means System Global Area. It is shared memory used by all database sessions.

SGA Component	Purpose
Database Buffer Cache	Stores data blocks
Shared Pool	Stores SQL, PL/SQL, dictionary cache
Redo Log Buffer	Stores redo before LGWR writes
Large Pool	RMAN, parallel query, shared server
Java Pool	Java execution
Streams Pool	Streams/GoldenGate-related memory

6. What is PGA?

Answer:

PGA means Program Global Area. It is private memory used by each server process.

It is used for:

- Sorting
- Hash joins
- Bitmap operations
- Session memory
- Cursor state

If PGA is insufficient, operations can spill to TEMP tablespace.

7. What happens when a user issues COMMIT?

Answer:

When COMMIT is issued:

1. Server process creates redo entries.
2. Redo is copied to redo log buffer.
3. LGWR writes redo to online redo log.
4. Commit is acknowledged after redo is safely written.
5. Data blocks may still remain dirty in buffer cache.
6. DBWR writes dirty blocks later.

Important point:

COMMIT does not mean datafiles are immediately updated.
COMMIT means redo is safely written.

8. What is checkpoint?

Answer:

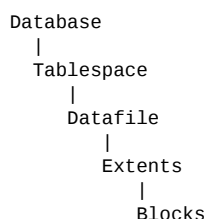
Checkpoint synchronizes datafiles with redo by ensuring dirty buffers are written to disk. Checkpoint updates datafile headers and the control file. CKPT signals DBWR to write dirty blocks. Checkpoint helps reduce recovery time after instance crash.

3. Tablespace and Space Management

9. What is a tablespace?

Answer:

A tablespace is a logical storage unit in Oracle. It contains one or more datafiles. Objects like tables and indexes are stored in tablespaces.



10. Difference between SYSTEM, SYSAUX, TEMP, and UNDO tablespaces?

Tablespace	Purpose
SYSTEM	Core data dictionary
SYSAUX	Auxiliary Oracle components
TEMP	Sorting/hash operations
UNDO	Undo records for rollback/read consistency

11. Tablespace is full. What will you do?

Answer:

First identify whether it is permanent, TEMP, or UNDO tablespace.

```
SELECT tablespace_name,  
       ROUND(used_percent,2) used_percent  
FROM dba_tablespace_usage_metrics  
ORDER BY used_percent DESC;
```

Actions:

1. Check free space.
2. Check autoextend.
3. Add datafile if needed.
4. Resize existing datafile if possible.
5. Identify large segments.
6. Purge/archive old data if applicable.
7. Rebuild/shrink only after analysis.

Add datafile:

```
ALTER TABLESPACE users ADD DATAFILE '+DATA' SIZE 10G AUTOEXTEND ON NEXT 1G MAXSIZE 100G;
```

12. How do you find top segments in a tablespace?

```
SELECT owner,  
       segment_name,  
       segment_type,  
       ROUND(bytes/1024/1024/1024,2) size_gb  
FROM dba_segments  
WHERE tablespace_name = 'USERS'  
ORDER BY bytes DESC  
FETCH FIRST 20 ROWS ONLY;
```

13. What is high water mark?

Answer:

High Water Mark, or HWM, is the highest block ever used by a segment. Even if rows are deleted, HWM may not come down automatically. A full table scan reads blocks up to the HWM.

To reduce HWM:

```
ALTER TABLE table_name SHRINK SPACE;
```

or:

```
ALTER TABLE table_name MOVE;
```

Indexes may need rebuild after table move.

4. Undo Management

14. What is undo?

Answer:

Undo stores before-images of changed data.

Undo is used for rollback, read consistency, flashback query, and transaction recovery.

15. What causes ORA-01555 snapshot too old?

Answer:

Common causes:

- Long-running query
- Undo overwritten before query completes
- Small undo tablespace
- High DML activity
- Frequent commits in batch jobs
- Poor query performance

Fix:

- Tune long query
- Increase undo tablespace
- Increase undo_retention
- Avoid frequent commits
- Schedule reports during low DML period

16. How do you check undo usage?

```
SELECT begin_time,
       end_time,
       undoblks,
       txncount,
       maxquerylen,
       ssolderrcnt,
       nospacerrcnt
FROM v$undostat
ORDER BY begin_time DESC;
```

17. Undo tablespace is full. What will you do?

Answer:

Actions:

1. Check active transactions.
2. Identify long-running transactions.
3. Check undo retention.
4. Add datafile if needed.
5. Tune large DML jobs.
6. Avoid killing sessions unless approved.

Find active transactions:

```
SELECT s.sid,
       s.serial#,
       s.username,
       t.used_ublk,
       t.used_urec,
       s.sql_id
```

```
FROM v$transaction t
JOIN v$session s ON t.ses_addr = s.saddr
ORDER BY t.used_ublk DESC;
```

5. TEMP Tablespace

18. What is TEMP tablespace used for?

Answer:

TEMP is used for sorts, hash joins, GROUP BY, ORDER BY, index creation, global temporary tables, and parallel query operations.

19. TEMP tablespace is full. What will you do?

Answer:

First identify sessions using TEMP.

```
SELECT s.sid,
       s.serial#,
       s.username,
       s.sql_id,
       u.tablespace,
       ROUND(u.blocks * t.block_size / 1024 / 1024, 2) temp_mb
FROM v$tempseg_usage u
JOIN v$session s ON u.session_addr = s.saddr
JOIN dba_tablespaces t ON u.tablespace = t.tablespace_name
ORDER BY temp_mb DESC;
```

Actions:

1. Identify SQL consuming TEMP.
2. Check execution plan.
3. Add tempfile if immediate space issue.
4. Tune SQL permanently.
5. Increase PGA if workarea spills are high.

6. Backup and Recovery

20. Explain your RMAN backup strategy.

Answer:

A production RMAN strategy usually includes:

- Full backup weekly
- Incremental backup daily
- Archive log backup frequently
- Control file autobackup enabled
- Backup validation
- Retention policy
- Backup encryption if required
- Offsite backup copy
- Regular restore testing

Example:

```
CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF 14 DAYS;
CONFIGURE CONTROLFILE AUTOBACKUP ON;
BACKUP DATABASE PLUS ARCHIVELOG;
```

21. Difference between full backup and incremental backup?

Backup Type	Description
Full backup	Backs up all used blocks
Level 0 incremental	Base incremental backup
Level 1 incremental	Backs up changed blocks since previous backup
Cumulative incremental	Backs up changes since level 0
Differential incremental	Backs up changes since previous incremental

22. What is RMAN retention policy?

Answer:

Retention policy defines how long backups are kept for recovery.

```
CONFIGURE RETENTION POLICY TO REDUNDANCY 2;  
CONFIGURE RETENTION POLICY TO RECOVERY WINDOW OF 14 DAYS;
```

23. What is obsolete backup?

Answer:

A backup is obsolete when it is no longer needed according to RMAN retention policy.

```
REPORT OBSOLETE;  
DELETE OBSOLETE;
```

24. What is expired backup?

Answer:

Expired means RMAN repository has a record of backup, but the physical backup file is missing from disk or media.

```
CROSSCHECK BACKUP;  
LIST EXPIRED BACKUP;  
DELETE EXPIRED BACKUP;
```

25. Database lost one datafile. How do you recover?

Answer:

If database is in ARCHIVELOG mode:

1. Take affected datafile offline if database is open.
2. Restore datafile from backup.
3. Recover datafile using archive logs.
4. Bring datafile online.

Commands:

```
ALTER DATABASE DATAFILE 5 OFFLINE;  
  
RESTORE DATAFILE 5;  
RECOVER DATAFILE 5;  
  
ALTER DATABASE DATAFILE 5 ONLINE;
```

26. Control file is lost. How do you recover?

Answer:

If control file autobackup exists:

```
STARTUP NOMOUNT;  
RESTORE CONTROLFILE FROM AUTOBACKUP;  
ALTER DATABASE MOUNT;  
RECOVER DATABASE;  
ALTER DATABASE OPEN RESETLOGS;
```

If multiplexed control file exists, copy good control file to missing location and restart database.

27. What is incomplete recovery?

Answer:

Incomplete recovery means recovering database to a point before the latest available redo. It is used for accidental table drops, wrong data loads, logical corruption, and point-in-time recovery.

```
RUN {  
  SET UNTIL TIME "TO_DATE('2026-06-14 10:00:00', 'YYYY-MM-DD HH24:MI:SS')";  
  RESTORE DATABASE;  
  RECOVER DATABASE;  
}  
ALTER DATABASE OPEN RESETLOGS;
```

28. What is RESETLOGS?

Answer:

RESETLOGS resets the online redo log sequence and creates a new incarnation of the database. It is required after incomplete recovery or recovery using backup control file.

7. Data Pump

29. What is Data Pump?

Answer:

Data Pump is Oracle's logical export/import utility. Tools are expdp and impdp. It is used for schema migration, table refresh, metadata export, cross-platform migration, and version upgrade migration.

30. Difference between exp/imp and expdp/impdp?

exp/imp	expdp/impdp
Older utility	Newer utility
Client-side processing	Server-side processing
Slower	Faster
Limited parallelism	Supports parallel
Deprecated for many use cases	Recommended

31. How do you export a schema?

```
expdp system/password schemas=HR directory=DP_DIR dumpfile=hr_%U.dmp logfile=hr_exp.log parallel=4
```

32. How do you import schema with remap?

```
impdp system/password schemas=HR directory=DP_DIR dumpfile=hr_%U.dmp logfile=hr_imp.log remap_schema=HR:HR_TEST remap_tablespace=USERS:TEST_TBS
```

33. Data Pump job is slow. What will you check?

Answer:

Check parallel value, dump file location speed, network if NETWORK_LINK is used, large LOBs, index creation, constraints, table statistics, I/O performance, TEMP usage, and unnecessary objects.

8. Patching

34. How do you apply Oracle database patch?

Answer:

High-level steps:

1. Read patch README.
2. Check database and Grid version.
3. Take backup.
4. Check OPatch version.
5. Run conflict check.
6. Stop services/database if required.
7. Apply binary patch using opatch.
8. Start database.
9. Run datapatch.
10. Validate registry and alert logs.

Commands:

```
opatch lsinventory
opatch prereq CheckConflictAgainstOHWithDetail -ph ./
opatch apply
```

After DB startup:

```
datapatch -verbose
```

Check:

```
SELECT patch_id, status, action_time
FROM dba_registry_sqlpatch
ORDER BY action_time DESC;
```

35. Difference between OPatch and datapatch?

Tool	Purpose
OPatch	Applies binary patch to Oracle Home
datapatch	Applies SQL changes inside database

Both are usually required for database patching.

36. What if datapatch fails?

Answer:

Check datapatch verbose output, DBA_REGISTRY_SQLPATCH, alert log, invalid objects, PDB open mode, catcon logs, and patch README known issues. For multitenant, ensure all required PDBs are open before running datapatch.

9. Upgrade and Migration

37. How do you upgrade Oracle database?

Answer:

Common upgrade approaches:

- DBUA
- Manual upgrade
- AutoUpgrade tool
- Data Pump migration
- Transportable tablespace
- GoldenGate zero-downtime migration

Senior DBA preferred modern method: AutoUpgrade.

38. What are pre-checks before upgrade?

Answer:

1. Check source and target compatibility.
2. Run preupgrade tool.
3. Check invalid objects.
4. Check timezone version.
5. Check dictionary stats.
6. Check backup.
7. Check deprecated parameters.
8. Check application certification.
9. Check rollback plan.
10. Test upgrade in lower environment.

39. What is compatible parameter?

Answer:

COMPATIBLE controls database feature compatibility.

```
SHOW PARAMETER compatible;
```

Once COMPATIBLE is increased, downgrade may not be possible.

40. What is your rollback plan for upgrade?

Answer:

Rollback options include restore database from backup, Flashback Database, guaranteed restore point, Data Guard switchover/failback, and keeping old environment available.

10. Multitenant / CDB-PDB

41. What is CDB and PDB?

Term	Meaning
CDB	Container Database
PDB	Pluggable Database
Root Container	Stores common metadata
Seed PDB	Template to create new PDBs

CDB contains one or more PDBs.

42. How do you check containers?

```
SHOW PDBS;
```

```
SELECT con_id, name, open_mode
FROM v$pdb;
```

43. How do you open and close a PDB?

```
ALTER PLUGGABLE DATABASE pdb1 OPEN;
ALTER PLUGGABLE DATABASE pdb1 CLOSE IMMEDIATE;
ALTER PLUGGABLE DATABASE pdb1 SAVE STATE;
```

44. How do you clone a PDB?

```
CREATE PLUGGABLE DATABASE pdb2 FROM pdb1 FILE_NAME_CONVERT=('pdb1', 'pdb2');
ALTER PLUGGABLE DATABASE pdb2 OPEN;
```

45. What are common multitenant issues?

Answer:

Common issues include PDB not open after restart, datapatch not applied to closed PDB, wrong container while creating users/objects, local vs common user confusion, service not configured for PDB, PDB clone file path issues, and resource manager limits.

11. Security and User Management

46. How do you create a user?

```
CREATE USER app_user IDENTIFIED BY password
DEFAULT TABLESPACE users
TEMPORARY TABLESPACE temp
QUOTA 1G ON users;
GRANT CREATE SESSION TO app_user;
```

47. Difference between role and privilege?

Privilege	Role
Direct permission	Collection of privileges
Example: CREATE TABLE	Example: DBA role
Can be granted directly	Can be enabled/disabled

48. What is profile?

Answer:

A profile controls user resource limits and password policies such as failed login attempts, password lifetime, password lock time, sessions per user, and CPU per session.

49. How do you lock and unlock a user?

```
ALTER USER app_user ACCOUNT LOCK;
ALTER USER app_user ACCOUNT UNLOCK;
ALTER USER app_user IDENTIFIED BY new_password;
```

50. What is auditing?

Answer:

Auditing tracks database actions such as login attempts, object access, privilege usage, DDL operations, and security violations. Modern Oracle uses unified auditing.

12. Locks and Blocking

51. How do you find blocking sessions?

```
SELECT sid,
       serial#,
       username,
       blocking_session,
       event,
       sql_id,
       seconds_in_wait
FROM v$session
WHERE blocking_session IS NOT NULL;
```

52. How do you find locked objects?

```
SELECT s.sid,
       s.serial#,
       s.username,
       o.owner,
       o.object_name,
       o.object_type,
       l.locked_mode
FROM v$locked_object l
JOIN dba_objects o ON l.object_id = o.object_id
JOIN v$session s ON l.session_id = s.sid;
```

53. How do you kill a session?

```
ALTER SYSTEM KILL SESSION 'sid,serial#' IMMEDIATE;
ALTER SYSTEM KILL SESSION 'sid,serial#,@inst_id' IMMEDIATE;
```

54. What is deadlock?

Answer:

Deadlock occurs when two sessions wait for each other's locks. Oracle automatically detects deadlock and rolls back one statement.

```
ORA-00060: deadlock detected while waiting for resource
```

13. Performance Tuning

55. What is AWR?

Answer:

AWR means Automatic Workload Repository. It stores historical performance data such as DB time, wait events, top SQL, instance activity, I/O statistics, and segment statistics.

56. What is ASH?

Answer:

ASH means Active Session History. It samples active sessions and helps identify SQL ID, wait event, blocking session, object, module, program, and session details.

57. How do you tune a slow SQL?

Answer:

1. Get SQL_ID.
2. Check execution plan.
3. Compare estimated vs actual rows.
4. Check wait events.
5. Check buffer gets and physical reads.
6. Check object statistics.
7. Check indexes.
8. Check bind variable issues.
9. Test rewrite or SQL profile/baseline.
10. Validate improvement.

Execution plan:

```
SELECT *
FROM TABLE(DBMS_XPLAN.DISPLAY_CURSOR('sql_id_here', NULL, 'ALLSTATS LAST +PEEKED_BINDS'));
```

58. What is SQL Plan Baseline?

Answer:

SQL Plan Baseline is used to preserve accepted execution plans and prevent bad plan changes. It is useful when a SQL suddenly becomes slow due to plan regression.

59. Difference between SQL Profile and SQL Plan Baseline?

SQL Profile	SQL Plan Baseline
Helps optimizer estimate better	Controls accepted execution plans
Does not force exact plan	Helps stabilize plan

SQL Profile	SQL Plan Baseline
Created by SQL Tuning Advisor	Part of SQL Plan Management
Good for bad cardinality	Good for plan regression

14. Alert Log and Diagnostics

60. What is alert log?

Answer:

Alert log records important database events such as startup/shutdown, ORA errors, checkpoints, log switches, archiver errors, datafile errors, deadlocks, and recovery messages.

61. Where is alert log located?

```
SHOW PARAMETER diagnostic_dest;
```

Usually:

```
$ORACLE_BASE/diag/rdbms/<db_name>/<instance_name>/trace/alert_<instance>.log
```

62. What is ADRCI?

Answer:

ADRCI means Automatic Diagnostic Repository Command Interpreter. It is used to view incidents, alert logs, and package diagnostic data.

```
adrci
show homes
set home diag/rdbms/prod/PROD1
show alert -tail 100
```

15. Archivelog and Redo

63. Database archive destination is full. What will you do?

Answer:

Actions:

1. Check archive destination usage.
2. Confirm archive backups.
3. Backup archive logs if needed.
4. Delete archive logs using RMAN.
5. Add temporary space if needed.
6. Fix archive deletion policy.

Commands:

```
BACKUP ARCHIVELOG ALL DELETE INPUT;
DELETE ARCHIVELOG ALL COMPLETED BEFORE 'SYSDATE-2';
```

Never delete archive logs manually without checking backup and Data Guard requirements.

64. What causes frequent log switches?

Answer:

Frequent log switches can be caused by redo logs being too small, heavy DML workload, batch jobs, direct path loads, index rebuilds, and supplemental logging.

```
SELECT sequence#, first_time
FROM v$log_history
ORDER BY first_time DESC;
```

65. What is ideal log switch frequency?

Answer:

There is no fixed rule, but many production systems target around 15-30 minutes per switch. Too frequent log switches can increase checkpoint and archiving pressure.

16. Oracle Networking

66. Listener is down. What will you do?

Answer:

```
lsnrctl status
lsnrctl start
```

Check listener.ora, tnsnames.ora, port availability, firewall, and database service registration.

67. What is ORA-12514?

Answer:

ORA-12514 means listener does not currently know the requested service. Check service name, database open status, LOCAL_LISTENER, dynamic registration, and listener status.

```
ALTER SYSTEM REGISTER;
```

68. What is ORA-12154?

Answer:

ORA-12154 means TNS alias could not be resolved. Check tnsnames.ora, TNS_ADMIN, Easy Connect string, DNS, and typo in alias.

17. Data Guard Senior Questions

69. Standby is not receiving redo. What will you check?

Answer:

1. LOG_ARCHIVE_DEST_n status.
2. TNS connectivity.
3. Listener on standby.
4. Password file.
5. DB_UNIQUE_NAME.
6. Network/firewall.
7. RFS process.
8. Alert logs on both sides.

```
SELECT dest_id, status, error
FROM v$archive_dest_status
WHERE dest_id > 1;
```

70. Standby receives redo but does not apply. What will you check?

Answer:

1. MRP status.
2. Archive gap.
3. Standby alert log.
4. Datafile errors.
5. Standby open mode.
6. Recovery errors.

```
SELECT process, status, thread#, sequence#
FROM v$managed_standby;
```

```
SELECT * FROM v$archive_gap;
```

18. RAC Senior Questions

71. What is Cache Fusion?

Answer:

Cache Fusion transfers data blocks between RAC instances through the private interconnect. Instead of reading a block from disk, one instance can receive it from another instance's buffer cache.

72. What causes node eviction?

Answer:

Common causes include private interconnect failure, voting disk access issue, CPU starvation, memory starvation, storage freeze, OS hang, and Clusterware communication failure. Check CSSD logs, cluster alert log, OS logs, CHM/OSWatcher, interconnect, and storage.

19. GoldenGate Senior Questions

73. Replicat is lagging. What will you check?

Answer:

1. Replicat status.
2. Target database performance.
3. Blocking sessions.
4. Large transactions.
5. Missing indexes.
6. Constraint errors.
7. Trail backlog.
8. Discard/report files.

74. Extract abended due to missing archive log. What will you do?

Answer:

1. Check Extract report.
2. Identify missing archive log.
3. Restore archive log from backup.
4. Restart Extract.
5. If not available, reposition Extract only after approval.
6. Resync affected tables if required.

20. Scenario-Based Level 4 Questions

Scenario 1: Database is hanging

Answer:

I check active sessions, blocking sessions, wait events, CPU usage, alert log, top SQL, log file sync or row lock waits, and connection pool issues.

```
SELECT sid,
       serial#,
       username,
       blocking_session,
       event,
       sql_id
FROM v$session
WHERE status='ACTIVE';
```

Scenario 2: Application team says database is slow after release

Answer:

I compare before and after release: AWR before/after comparison, new SQL introduced, SQL plan changes, increased executions, new or dropped indexes, statistics changes, blocking or commit pattern changes, and connection pool changes.

Scenario 3: CPU is 100% on DB server

Answer:

Check OS top processes, DB active sessions on CPU, top SQL by CPU, hard parsing, parallel queries, PL/SQL loops, and runaway jobs.

```
SELECT sql_id, COUNT(*)
FROM v$active_session_history
WHERE session_state = 'ON CPU'
GROUP BY sql_id
ORDER BY COUNT(*) DESC;
```

Scenario 4: One SQL suddenly became slow

Answer:

Check current plan, previous plan from AWR, plan hash value change, statistics changes, bind peeking, index status, SQL baseline/profile, and data volume change.

Scenario 5: User dropped a table accidentally

Answer:

Options include flashback table from recycle bin, Flashback Database, RMAN point-in-time recovery, tablespace point-in-time recovery, or restore to clone and export/import table.

```
FLASHBACK TABLE hr.employees TO BEFORE DROP;
```

Scenario 6: Datafile added on primary but standby failed

Answer:

Possible causes:

- STANDBY_FILE_MANAGEMENT is MANUAL.
- DB_FILE_NAME_CONVERT is wrong.
- Standby path missing.
- ASM diskgroup unavailable.

Fix:

1. Create missing path/diskgroup.
2. Add or rename datafile on standby.
3. Set STANDBY_FILE_MANAGEMENT=AUTO.
4. Restart MRP.

Scenario 7: RMAN backup failed

Answer:

Check RMAN error stack, disk/tape availability, archive log missing, permissions, media manager errors, FRA full, control file autobackup, and channel configuration.

Scenario 8: FRA is full

Answer:

Check FRA usage:

```
SELECT * FROM v$recovery_file_dest;

SELECT file_type, percent_space_used, percent_space_reclaimable
FROM v$flash_recovery_area_usage;
```

Actions:

1. Backup archive logs.
2. Delete obsolete backups.
3. Delete expired records.
4. Increase FRA size.
5. Move backups if needed.
6. Fix retention policy.

Scenario 9: ORA-00600 or ORA-07445 occurs

Answer:

These are internal errors. Check alert log, collect incident trace, check known bugs/patches, validate whether issue is repeatable, raise Oracle SR if needed, and apply workaround or patch after testing.

```
adrci
ips create package incident <incident_id>
ips generate package <package_id>
```

Scenario 10: Database startup fails

Answer:

Check startup stage:

```
NOMOUNT issue = parameter file/memory issue
MOUNT issue   = control file issue
OPEN issue    = datafile/redo/undo/recovery issue

STARTUP NOMOUNT;
ALTER DATABASE MOUNT;
ALTER DATABASE OPEN;
```

Check alert log for exact error.

21. Important Level 4 DBA Commands

Database status

```
SELECT name, open_mode, database_role, log_mode
FROM v$database;
```

Instance status

```
SELECT instance_name, status, database_status
FROM v$instance;
```

Invalid objects

```
SELECT owner, object_type, COUNT(*)
FROM dba_objects
WHERE status='INVALID'
GROUP BY owner, object_type
ORDER BY COUNT(*) DESC;
```

Tablespace usage

```
SELECT tablespace_name,
       ROUND(used_percent,2) used_percent
FROM dba_tablespace_usage_metrics
ORDER BY used_percent DESC;
```

Top active waits

```
SELECT event, COUNT(*)
FROM v$session
WHERE status='ACTIVE'
GROUP BY event
ORDER BY COUNT(*) DESC;
```

Blocking sessions

```
SELECT sid, serial#, blocking_session, event, sql_id
FROM v$session
WHERE blocking_session IS NOT NULL;
```

22. Most Expected Level 4 Oracle DBA Questions

1. How do you troubleshoot database slowness? 2. How do you analyze AWR? 3. How do you tune slow SQL? 4. How do you handle blocking sessions? 5. How do you recover a lost datafile? 6. How do you recover lost control file? 7. What is incomplete recovery? 8. How do you handle archive destination full? 9. What is ORA-01555 and how do you fix it? 10. What causes TEMP usage? 11. How do you perform database patching? 12. Difference between OPatch and datapatch? 13. How do you upgrade Oracle database? 14. What is CDB and PDB? 15. How do you troubleshoot Data Guard lag? 16. How do you troubleshoot RAC node eviction? 17. What is Cache Fusion? 18. How do you manage tablespace growth? 19. How do you handle FRA full? 20. How do you prepare RCA for production incident? 21. What is SQL Plan Baseline? 22. Difference between SQL Profile and Baseline? 23. How do you handle ORA-00600? 24. How do you restore dropped table? 25. What are pre-checks before patching? 26. What are pre-checks before upgrade? 27. How do you validate RMAN backup? 28. What is block corruption and how do you fix it? 29. How do you secure Oracle users? 30. How do you automate DBA tasks?

23. Final Senior DBA Interview Answer Pattern

For Level 4, answer every production issue using this structure:

1. Understand the issue and business impact.
2. Identify whether it is database, SQL, storage, OS, network, RAC, Data Guard, or application.
3. Check alert logs and real-time views.
4. Use AWR/ASH for historical analysis.
5. Identify root cause with evidence.
6. Apply safest fix first.
7. Validate with before/after metrics.
8. Communicate clearly.
9. Document RCA and preventive action.

A strong Level 4 Oracle DBA answer should show technical depth, production safety, structured troubleshooting, and clear communication.