Database Administration & Management LAB – BSITF21

Lab-Quiz 2 Key 02-01-2025

TOTAL MARKS: 40

Each question is given four possible answers**. Bold** and underlined option is the correct one.

1. What is the default archiving mode for a newly created Oracle database?
   - **a)** ARCHIVELOG
   - **b)** **NOARCHIVELOG**
   - **c)** AUTOMATIC ARCHIVELOG
   - **d)** MANUAL ARCHIVELOG

2. Which background process is responsible for archiving redo log files in ARCHIVELOG mode?
   - **a)** LGWR
   - **b)** DBWR
   - **c)** **ARCn**
   - **d)** SMON

3. What must you do after changing a database from NOARCHIVELOG mode to ARCHIVELOG mode?
   - **a)** Reboot the system
   - **b)** **Take a full backup of the database**
   - **c)** Reset the redo logs
   - **d)** Run the RECOVER command

4. In ARCHIVELOG mode, which of the following operations is possible that is not possible in NOARCHIVELOG mode?
   - **a)** Automatic recycling of redo logs
   - **b)** **Media recovery to a specific point in time**
   - **c)** Using the database without backups
   - **d)** Manual data export

5. How can you enable automatic archiving in an Oracle database?
   - **a)** **By setting LOG_ARCHIVE_START=TRUE in the initialization parameters**
   - **b)** By setting LOG_ARCHIVE_START=FALSE
   - **c)** By disabling redo logs
   - **d)** By issuing the STOP ARCHIVELOG command

6. Which process is responsible for registering service information with the listener in Oracle9i?

a) **PMON**
b) SMON
c) DBWR
d) LGWR

7. What is the default port number used by the Oracle listener?

a) 8080
b) **1521**
c) 1433
d) 3306

8. Which command in LSNRCTL is used to dynamically change the password for a listener?

a) SET PASSWORD
b) **CHANGE_PASSWORD**
c) ALTER PASSWORD
d) MODIFY PASSWORD

9. In a dedicated server configuration, how does the listener handle a client connection?

a) Redirects it to a dispatcher
b) Drops the connection
c) Hands off to another listener
d) **Spawns a server process and bequeaths the connection**

10. What is required for a listener to accept client requests from an Oracle8 database?

a) Dynamic Service Registration
b) Use of HTTP protocol
c) Oracle Enterprise Manager configuration
d) **Static Service Registration**

11. Which component in Oracle Shared Server architecture is responsible for handling client database connection requests and replies?

a) **Dispatcher**
b) Listener
c) Shared Server
d) User Process

12. What is the primary benefit of the Oracle Shared Server architecture over Dedicated Server architecture?

a) Improved SQL query optimization
b) Increased security for user connections
c) **Reduced number of idle server processes**
d) Simplified network configuration

13. Which parameter specifies the number of shared server processes created at instance startup?

a) MAX_SHARED_SERVERS
b) SHARED_SERVER_SESSIONS
c) **SHARED_SERVERS**
d) DISPATCHERS

14. How can you verify the number of shared server connections currently active?

a) Query the V$DISPATCHER view
b) **Query the V$CIRCUIT view**
c) Query the V$SHARED_SERVER_MONITOR view
d) Query the V$QUEUE view

15. What initialization parameter is necessary to define a listener on a non-default port for instance registration?

a) SHARED_SERVERS
b) DISPATCHERS
c) **LOCAL_LISTENER**
d) CIRCUITS

16. What is the primary purpose of database backups in an Oracle environment?

a) To enhance query performance
b) **To protect data from various types of failures**
c) To optimize storage usage
d) To reduce transaction processing time

17. Which type of failure requires the DBA to employ a tested recovery strategy?

a) Statement failure
b) User process failure
c) Network failure
d) **Media failure**

18. What Oracle feature enables an administrator to suspend and later resume a large database operation in case of space allocation issues?

a) **Resumable space allocation**
b) Autoextend
c) FlashBack
d) LogMiner

19. What is the role of the PMON background process in the case of a user process failure?

a) Restarting the user process
b) Writing the failure to the alert log
c) **Detecting the failure and rolling back the transaction**
d) Shutting down the Oracle instance

20. Which of the following is an effective measure to minimize data loss in the event of a media failure?

a) **Regularly apply archived redo log files**
b) Use of FlashBack for object-level recovery
c) Decrease transaction volume
d) Avoid using physical backups

21. A company operates a database that must be available 24/7. The database is in ARCHIVELOG mode, and the DBA takes a backup while the database is still operational.

What type of backup is this, and what must be done to bring the database into a consistent state upon restoration?

a) Consistent Backup - No recovery is required.

b) Consistent Backup - Recovery is required.

c) **Inconsistent Backup - Recovery is required.**

d) Inconsistent Backup - No recovery is required

22. A DBA needs to back up a tablespace in a database running in NOARCHIVELOG mode. The tablespace is currently online.

Is this operation valid?

a) TRUE

b) **FALSE**

23. A DBA is managing multiple Oracle databases in an environment where consistent whole database backups are performed using user-managed operations. During a recovery scenario, the DBA finds it challenging to identify which parameter file belongs to the required database.

What could have prevented this issue?

a) Including the online redo log files in the backup.

b) Recording the database identifiers in the Oracle dictionary.

c) **Adopting a naming convention to associate parameter and password files with their respective databases.**

d) Including parameter files and password files in the control file backup.

24. During a scheduled backup of an Oracle database, the DBA executes the following steps:

i. Shuts down the database using the immediate option.

ii. Copies all datafiles, control files, and parameter files to the backup location.

iii. Opens the database for normal operations.

Which of the following statements about this backup process is correct?

a) The backup is inconsistent because online redo logs were not included.

b) **The backup is consistent and includes all necessary files for recovery.**

c) The backup requires additional steps to ensure recovery can be performed.

d) The backup is invalid because the redo logs were excluded.

25. A DBA automates a consistent whole database backup process using a script. During the process, the script shuts down the database using the transactional option, copies all datafiles and control files to a backup location, and opens the database.

Why is this process effective for ensuring a consistent backup?

a) **It minimizes the need for redo log application during recovery.**

b) It ensures all file headers match the dictionary entries during backup.

c) It prevents user-managed backups from failing due to open transactions.

d) It eliminates the need to back up the redo logs for full recovery.

26. A company operates a mission-critical Oracle database that must be available 24/7. The DBA decides to perform a consistent whole database backup during a scheduled downtime window. However, the backup takes longer than anticipated due to the large size of the database and slow file copy speeds.

What is the primary issue with using a consistent whole database backup in this scenario?

a) It increases the risk of data corruption during the backup.

b) It limits the recovery point to the last consistent whole database backup.

c) **It renders the database unavailable for an extended period, disrupting business operations.**

d) It requires all redo logs to be manually reapplied during recovery.

27. A database operating in NOARCHIVELOG mode experiences a media failure, resulting in the loss of a single datafile. The DBA confirms that no redo logs have been overwritten since the last closed database backup.

What steps should the DBA take to recover the database?

a) **Restore and recover the affected datafile only.**

b) Restore all datafiles, control files, and redo logs.

c) Restore all datafiles, even if only one is damaged.

d) Restore the password and parameter files along with the datafiles.B

28. A database in NOARCHIVELOG mode with two redo logs has a closed database backup at log sequence 144. At log sequence 145, datafile 3 is lost. However, log sequence 144 has already been overwritten.

What is the recovery outcome for this scenario?

a) Datafile 3 can be restored and recovered using the available redo logs.

b) **The database cannot be recovered as log sequence 144 has been overwritten.**

c) Only the control files need to be restored for recovery.

d) The parameter file can be used to restore datafile 3.

29. A database operating in ARCHIVELOG mode encounters media failure at 3:00 PM. The last valid backup was taken at 1:00 PM, and archived logs are available for transactions between 1:00 PM and 3:00 PM.

What is required to perform a complete recovery up to 3:00 PM?

a) The backup taken at 1:00 PM and the archived logs from 1:00 PM to 3:00 PM.

b) The backup taken at 1:00 PM and the redo logs up to 1:00 PM.Tablespace

c) **The backup taken at 1:00 PM, all archived logs, and all redo logs since 1:00 PM.**

d) Only the archived logs from 1:00 PM to 3:00 PM.

30. During a complete recovery of a database in ARCHIVELOG mode, the DBA restores all necessary datafiles, archived logs, and redo logs. The database is recovered to the time of failure.

What distinguishes this recovery process from incomplete recovery?

a) **Complete recovery applies all redo changes, while incomplete recovery does not.**

b) Complete recovery restores only the datafiles, while incomplete recovery restores all files.

c) Complete recovery uses backups taken in NOARCHIVELOG mode.

d) Complete recovery requires only archived logs, while incomplete recovery requires redo logs.

31. A DBA needs to recover a tablespace that is currently read-only. The last backup of the tablespace was also taken when it was read-only.

The DBA must apply redo logs to recover this tablespace.

a) True **b)** **False**

32. A DBA discovers that the control files of a database have been lost due to a hardware failure. The database is configured with mirrored control files.

What is the most efficient way to recover from this situation?

a) Use the CREATE CONTROLFILE command.

b) **Use a current mirrored copy of the control file to restore the lost one.**

c) Use the RECOVER DATABASE USING BACKUP CONTROLFILE command.

d) Restore the control file from a backup trace file.

33. A DBA is tasked with recovering a read-write tablespace that was read-only at the time of its last backup. The tablespace was made read-write shortly afterward.

What steps must the DBA take to recover this tablespace?

a) Restore the tablespace from the backup and bring it online.

b) **Restore the tablespace and apply redo logs from the time it was made read-write.**

c) Restore the tablespace, bring it online, and re-create the control file.

d) Restore the tablespace and perform incomplete recovery to the backup time.

34. A DBA needs to re-create a control file and plans to use the CREATE CONTROLFILE command. The DBA must have a list of all database files before executing the command.

a) **True** **b)** False

35. A DBA encounters a scenario where they cannot restore the datafiles of a read-only tablespace to their original location.

What is the correct recovery approach in this situation?

a) Re-create the control file and place the datafiles in a new location.

b) **Use the ALTER DATABASE RENAME FILE command to update the file location.**

c) Restore all control files and datafiles to their original locations.

d) Perform incomplete recovery to bring the database to a consistent state.

36. A lost datafile that was never backed up can be re-created with the original filename using the ALTER DATABASE CREATE DATAFILE command, provided all archived logs since the file's creation are

a) **True** **b)** False

37. A datafile belonging to the TABLE_DATA tablespace is lost, and it was never included in a backup strategy. The database is open, and you must ensure that users who do not need the TABLE_DATA tablespace can continue working.

What is the correct first step?

a) Shut down the database and restore the datafile.

b) Use the ALTER DATABASE command to create the datafile.

c) **Take the TABLE_DATA tablespace offline immediately.**

d) Run the RECOVER TABLESPACE command.

38. After re-creating a lost datafile without a backup, the DBA checks the recovery status using the V$RECOVER_FILE view. What does the OFFLINE status in the ONLINE column signify?

a) The datafile is not found in the backup but is online.

b) **The datafile is offline and not synchronized with the rest of the database.**

c) The datafile is ready for use but not yet backed up.

d) The datafile is offline because it belongs to the system tablespace.

39. A media failure has shut down the database. The database must be operational 24/7, and downtime should be minimized. The corrupted files do not belong to the system or undo segment tablespace. Which recovery method should be used in this situation?

a) Recovering a Closed Database

b) Recovering an Open Database, Initially Opened

c) **Recovering an Open Database, Initially Closed**

d) Recovering a Datafile with No Backup

40. The recovery method for a database that is not operational 24/7 and requires recovery for system or undo segment tablespaces is Recovering a Closed Database.

a) **True** **b)** False