



**NAMIBIA UNIVERSITY
OF SCIENCE AND TECHNOLOGY**

**FACULTY OF COMPUTING AND INFORMATICS
DEPARTMENT OF COMPUTER SCIENCE**

QUALIFICATION: Bachelor of Computer Science	
QUALIFICATION CODE: 07BACS	LEVEL: 7
COURSE NAME: Database Administration	COURSE CODE: DBA721S
DATE: July	PAPER: THEORY
DURATION: 3 HOURS	MARKS: 70

SECOND/SUPPLEMENTARY OPPORTUNITY EXAMINATION QUESTION PAPER	
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THIS QUESTION PAPER CONSISTS OF 4 PAGES (Including this front page)

INSTRUCTIONS

- 1) Answer ALL the questions on the answer scripts provided.
- 2) Write clearly and neatly.
- 3) Be guided by the number of marks allocated when answering the questions.
- 4) Show all your calculations.
- 5) Number your questions clearly.

Question 1: Write down the question number and the correct answer next to it.

[10]

1. The _____ records changes made to the data
 - a) Redo log
 - b) Archive log
 - c) Both and B
 - d) Data file

2. Which of the following is *not* a standard attribute of a database account?
 - a) A unique username
 - b) An authentication method
 - c) A default tablespace
 - d) A unique nickname

3. Which of the following privileges manages data encryption operations?
 - a) SYSDBA
 - b) SYSOPR
 - c) SYSKM
 - d) SYSBACKUP

4. Which is the preferred method to recover a database after a transaction in progress terminates abnormally?
 - a) Rollback
 - b) Roll forward
 - c) Switch to duplicate database
 - d) Reprocess transactions

5. When is an Oracle database created, which user/s is automatically created and granted the DBA role?
 - a) SYS
 - b) SYSTEM
 - c) SGA
 - d) Both a and b

6. Which Oracle edition was the first edition to extend databases to be transformed into datacentres and a shared pool of resources?
 - a) Oracle Database 9i
 - b) Oracle Database 10g
 - c) Oracle database 8i
 - d) Oracle database 12C

7. Which of the following commands is used to start listeners in Oracle?

- a) listeners start
 - b) lsnrctl start
 - c) Lis starts
 - d) None of the above
8. Multiple sessions can be created concurrently for a single Oracle database user using the same username.
- a) True
 - b) False
9. Oracle database physical storage can be managed without affecting the logical structure.
- a) True
 - b) False
10. The instance consists of memory structures and background processes associated with that instance.
- a) True
 - b) False

Question 2: Structured Questions

[40]

1. You were recently appointed Junior Database Administration in an organisation. You were presented with a problem whereby the HR department needs to purchase an application that uses an Oracle database as the repository for application data. Your job is to recommend a suitable application and install and configure the Oracle Database 10g software on the server. As the DBA, how would you go about this? (8)
2. For a user to access the Oracle database, they need to have an account created and configured with various settings/parameters. Distinguish between the following setting when administering Oracle database account users and give an example of each. (4)
 - a) Privilege:
 - b) A role:
3. List and explain two types of initialization parameter files in Oracle. (4)
4. List and explain any 2 types of auditing in databases. (8)
5. Upon creating a user account, Maria in Oracle, the DBA has not granted the session privilege to this user. However, she was still able to connect to the database. Explain why this is possible (3)
6. One of the key duties of DBA is to protect the database from failure wherever possible. List and explain any four (4) categories of database failure. (8)
7. List and explain any four types of back-ups in databases. (7)

Question 3: Practical and Long Questions

[18]

The disk on which your redo log file is located is corrupted. As a result, you have decided to relocate the redo log files to a different disk.

- a) After you shut down the database, what actions can you take to relocate the log file redo, and what changes will you make to the database? (10)
- b) Write SQL commands to create a *user called Kermit* and assign a password to the user, grant the user a profile called *HRCLERK*, and the user must be able to *create a session*. (8)
(Write the code using the correct syntax)

Total Marks 70