

**Mid-West University**  
**Examinations Management Office**  
End Semester Examinations 2081

Bachelor level/ B. Sc. / CSIT6<sup>th</sup> Semester  
Time: 3 hours

Full Marks: 60  
Pass Marks: 30

**Subject: Database Administration (COM465B)**

*Candidates are required to give their answer in their own words as far as Practicable. The figures in the margin indicate full marks.*

**Group A**

**Very short answer questions. Attempt all the questions.**

[8x2 = 16]

1. What is SQL\*Plus? List its uses.
2. Define PMON and SMON.
3. Define control file.
4. What are redo records? Mention their significance in database recovery.
5. Highlight benefits of role.
6. What is database security auditing?
7. What are incremental and full backups?
8. Explain different types of non-media failures in database environment.

**Group B**

**Short answer questions. Attempt any five questions.**

[5x4 = 20]

9. What are the components of SGA? Explain in brief.
10. Explain the logical and physical structure of Oracle database.
11. What are the main determinants of size of control file?
12. Enlist the steps of switching database mode from NOARCHIVELOG to ARCHIVELOG.
13. How is a user created in a database? Explain the process with an example.
14. Explain profile in Oracle database with example.

**Group C**

**Long answer questions. Attempt any three questions.**

[3x8 = 24]

15. Define advanced stored procedure. Write a stored procedure to calculate and display the minimum, maximum, and average salary of employees for a given department number. Include an example of how to execute this stored procedure with a sample department number.
16. Assume that you are a DBA at a departmental store. Explain the roles and responsibilities that you are supposed to undertake to ensure the smooth functioning of the database system. Provide examples of how each responsibility is critical in the context of a departmental store.
17. What is database backup? Differentiate between system privileges and object privileges. Discuss each with suitable examples to illustrate their usage in managing database access and security.
18. What is RMAN? Compare RMAN with user-managed recovery, highlighting their features, advantages, and limitations in database backup and recovery processes.

**The End**