

Tribhuvan University
Institute of Science and Technology
2080
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Bachelor Level / Fourth Year/ Seventh Semester/ Science
Computer Science and Information Technology (CSC414)
(Database Administration)
(NEW COURSE)

Full Marks: 60
Pass Marks: 24
Time: 3 hours.

Candidates are required to give their answers in their own words as far as practicable.
The figures in the margin indicate full marks.

Section A

Attempt any TWO questions.

(2×10=20)

1. Explain storage structure of the oracle database. Also explain different physical files in oracle database with their importance. (4+6)
2. What are different types of backups in the oracle database? Explain how logical backup differs from physical backup with example. Also explain the backup guidelines that can be adopted in an organization. (2+3+5)
3. Write commands for following task: (2×5=10)
 - a. Create a common user and local user with password 123.
 - b. Alter the user with default tablespace "USERS" and give 100MB quota on USERS tablespace.
 - c. Grant "create session" system privileges locally and commonly to the common user.
 - d. Create role, assign some system privileges to the role, and assign role to the user.
 - e. Create profile and assign profile to the user.

Section B

Attempt any EIGHT questions.

(8×5=40)

4. Explain how PDBs are related with CDB in oracle multitenant architecture. (5)
5. What is tablespace? Explain its importance in oracle database. (2+3)
6. Explain AWR and ADDM report in oracle database. (3+2)
7. Explain the importance of sequence with example. (2+3)
8. Explain different types of partitioning in oracle database. (5)
9. Explain the importance of index in database and mention the different guidelines to create index in oracle database. (2+3)
10. What is PLSQL? Explain the PLSQL block structure with an example. (2+3)
11. Explain different steps in media recovery. (5)
12. Write short notes on: (2×2.5=5)
 - a. Virtual Private Database
 - b. Data Guard