



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program : Seventh Semester – Fall 2021

Roll No.

Paper: Database Administration

Course Code: IT-403

Time: 3 Hrs. Marks: 60

Q.1. Answer the following short questions:

(6x5=30)

1. Write commands and steps to perform an online Recovery of a database running in Archive log Mode with two Tablespaces and tablespace1 with file tbs1.dbf is damage.

2. Write steps to recover database when database have no backup? (You can take any assumptions)

3. Explain hand shaking and execution of command in shared server environment (only label diagrams required).

4. What is the relationship between safety and reliability? What is our objective in designing the database configuration setting?

5. What is the purpose of spin lock and how it works.

6. Differentiate between Direct Import Utility mode and conventional Import Utility mode.

Q.2. Answer the following questions.

(3x10=30)

- i.
 - a) Explain Recovery Procedure for database?
 - b) Explain the structure of rowid with diagram.
- ii.
 - a) Explain execution of command in Share server environment.
 - b) Create a profile assigning system resources to the user.
- iii.
 - a) Draw and label Server Diagram
 - b) Explain shutdown modes



UNIVERSITY OF THE PUNJAB
Seventh Semester – 2019
Examination: B.S. 4 Years Program

Roll No. in Fig.

Roll No. in Words.

PAPER: Database Administration
Course Code: IT-403 Part-I (Compulsory)

MAX. TIME: 15 Min.
MAX. MARKS: 10

Signature of Supdt.:

Attempt this Paper on this Question Sheet only.

Please encircle the correct option. Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the right answer, cutting and overwriting is not allowed. (1x10=10)

1. Which of the following is the preferred way to recover a database after a system failure?

- a) Rollback
- b) Rollforward
- c) Switch to duplicate database
- d) Reprocess transactions

2. The LGWR process writes information into:

- a) Database files
- b) Control files
- c) Redo log files
- d) All the above

3. What is a DATABLOCK ?

- a) Set of Extents
- b) Set of Segments
- c) Smallest Database storage unit
- d) None of the above

4. A set of Dictionary tables are created :

- a) Once for the Entire Database
- b) Every time a user is created
- c) Every time a Tablespace is created
- d) None of the above

5. The redo log buffer and Shared pool are elements of?

- a) PGA
- b) Buffer cache
- c) PGA and Buffer cache
- d) SGA

P.T.O.

6. A database role:

- a) Can be enabled or disabled
- b) Can consist of system and object privileges
- c) Is owned by its creator
- d) Cannot be protected by a password

7. Which statement does not relate to undo data?

- a) Provides a record of how to undo a change
- b) Is used for rollback, read consistency, and flashback
- c) Is stored in memory only, not written to disk
- d) Protects against inconsistent reads in a multiuser system

8. The _____ is shared by all server and background process.

- a) PGA
- b) SGA
- c) Connection
- d) None of them

9. What is read into the Database buffer Cache from the data files?

- a) Rows
- b) Changes
- c) Blocks
- d) SQL

10. Poor data administration can lead to which of the following?

- a) single definition of the same data entity
- b) Familiarity with existing data
- c) Missing data elements
- d) All of the above



UNIVERSITY OF THE PUNJAB

Seventh Semester – 2019

Examination: B.S. 4 Years Program

Roll No.

PAPER: Database Administration

Course Code: IT-403 Part – II

MAX. TIME: 2 Hrs. 45 Min.

MAX. MARKS: 50

ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

Q.2. Explain the short questions.

(10x2=20)

- i. What is the purpose of Redolog files in the database?
- ii. Explain DML with examples?
- iii. Differentiate between deffered constraints and immediate constraints?
- iv. Define the terms Extents and Blocks?
- v. Explain Types of segments?
- vi. What are **SMON** and **PMON**?
- vii. What is the purpose of **CKPT**?
- viii. Differentiate between complete recovery and incomplete recovery?
- ix. What is Database Instance?
- x. Define Profile?

Q.3. Explain the detailed questions.

(3 x 10 = 30)

- 1 Explain Oracle Database Memory Structures in Detail? Also Draw Diagram.
- 2 Explain the working of Redo log and Archive files in Database?
- 3 Write a command to create user Ali having 1 GB Quota on each tablespace TBS1 & TBS2, TBS1 is default for Ali?



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program : Seventh Semester – Fall 2021

Roll No.

Paper: Database Administration

Course Code: IT-403

Time: 3 Hrs. Marks: 60

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(6x5=30)

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6. Differentiate between Direct Import Utility mode and conventional Import Utility mode.

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- i.
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 - b) Explain the structure of rowid with diagram.
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- iii.
 - a) Draw and label Server Diagram
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UNIVERSITY OF THE PUNJAB

Seventh Semester 2014
Examination: B.S. 4 Years Programme

Roll No.

PAPER: Database Administration
Course Code: IT-403

TIME ALLOWED: 2 hrs. & 30 mins.
MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Short Questions(Marks 20)

1. In an organization, the tablespace contain the important Salary table and Redo log files is drop at 11 o'clock. How can we recover our Database? Write all steps, commands (Marks 05)
2. Write steps and commands to take open database backup of database running in Archive log Mode (Marks 05)
3. Write a recovery steps with command. When database running in Archivelog mode and database is initially closed. (Marks 05)
4. Write a command to Create a user Ali having 1GB Quota on each Tablespace TBS1 & TBS2 and TBS1 is a default tablespace for Ali (Marks 05)

Question(Marks 30)

1. Explain the working of a query in Shared server configuration with Diagram? (Marks 5)
2. Multiplex a control file when using SP File. (Marks 5)
3. Write a command to create a temporary Tablespace and than make it Default temporary Tablespace. (Marks 5)
4. Explain Row structure with diagram (Marks 05)
5. Give a comparison of B-Tree Index and Bitmap Index. (Marks 05)
6. Differentiate immediate and deffered constraints. (Marks 05)



UNIVERSITY OF THE PUNJAB

Seventh Semester 2015
Examination: B.S. 4 Years Programme

Roll No.

PAPER: Database Administration
Course Code: IT-403

TIME ALLOWED: 2 hrs. & 30 mins.
MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Q2: Write commands and steps.

(Marks 4 *5=20)

1. Mr. Asif has configured a database in archive log mode. On 01 Feb 2008, a datafile "File1" containing the data of Accounts Department has lost for which he has never made the backup. Write down the steps and commands required to be implemented by Mr. Asif to recover the datafile. Write a recovery steps with command. When database running in Archive log mode and database initially closed.
2. Mr. Jamshaid is working as DBA in ABC (Pvt) Ltd. He has successfully updated the payroll database today (31 Jan 2008). Unfortunately, some other user has dropped the tablespace containing the important salary tables at 11:15 PM. Write down steps and commands which will be implemented by Mr. Jamshaid to recover the important tables.
3. Add redo log member(log01.rdo,log02.rdo) to each group(Group1,Group2) in your database located on "mydb".
4. Create Table space with the name "user01" locally managed with uniform size extents.

Subjective

(Marks 6*5=30)

1. Differentiate between PFILE and SPFILE.
2. Explain the processing of user statements in a shared server environment with the help of diagram.
3. Multiplex a control file when using SPFILE.
4. What is the effect of protection / safety measures taken by DBA on performance of the database? Explain with an example.
5. What is the purpose of cache? How DB Buffer cache works in Oracle. Give some suggestions to improve it.
6. What is a Role? Explain different characteristics of role.



UNIVERSITY OF THE PUNJAB

Seventh Semester 2016
Examination: B.S. 4 Years Programme

Roll No. 7823

PAPER: Database Administration
Course Code: IT-403

TIME ALLOWED: 2 hrs. & 30 mins.
MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Short Questions (Marks 20)

1. In an organization, the tablespaces contain the important Salary table. It is dropped at 10 o'clock. How can we recover our Database? Write all steps, commands (Marks 05)
2. Write command to create a user ALI having 1GB Quota on each Tablespace TBS1 and TBS2 (Marks 05)
3. What is server Process? Explain difference between Dedicated and shared server. (Marks 05)
4. What is Control File? Multiplex a control file when using P File. (Marks 05)

Question (Marks 30)

1. Explain the working of a query in Shared server configuration with Diagram? (Marks 5)
2. What is Parameter file? How many types of parameter files in Oracle? (Marks 5)
3. Write a command to create a Temporary Tablespace and then make it Default Temporary Tablespace. (Marks 5)
4. Explain Index Entry structure with diagram (Marks 05)
5. What is recovery? Write database recovery steps when database running in NoArchive mode. (Marks 05)
6. Explain Role in database. (Marks 05)



UNIVERSITY OF THE PUNJAB

Seventh Semester 2017
Examination: B.S. 4 Years Programme

Roll No. 009485

PAPER: Database Administration
Course Code: IT-403

TIME ALLOWED: 2 hrs. & 30 mins.
MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Q2: Give answer of short question

(Marks 4 *5=20)

1. Write steps and commands to take open database backup of database running in Archive log mode.
2. Write a recovery steps with command. When database running in Archive log mode and database initially closed.
3. Add redo log member(log01.rdo,log02.rdo) to each group(Group1,Group2) in your database located on "mydb".
4. Create Table space with the name "user01" locally managed with uniform size extents.

Subjective

(Marks 6*5=30)

1. Differentiate between PFILE and SPFILE?
2. Describe Different Stages of starting up instances.
3. Create a Locally managed tablespace.
4. Explain the recovery procedure w.r.t Redolog files and Undo Segments .
5. Draw a diagram of explaining relation between database physical structure and logical structure.
6. What is a Role? Explain different characteristics of role.?



UNIVERSITY OF THE PUNJAB

Seventh Semester 2018
Examination: B.S. 4 Years Programme

Roll No.

PAPER: Database Administration
Course Code: IT-403

TIME ALLOWED: 2 hrs. & 30 mins.
MAX. MARKS: 50

Attempt this Paper on Separate Answer Sheet provided.

Q2: Give answer of the short questions

(5*4=20)

1. Explain Database server with diagram?
2. Write a commands to Add online redo members (log1b.rdo, log1c.rdo) into (group3) in your database located on "mydba"?
3. Write a query that is used to create a table space and convert it into Locally Managed table space?
4. Define Profile?
5. Write a command to set password settings through profile?

Subjective

(15*2=30)

Question 3:

- a) Write down steps with recovery of the database in non- archiving mode with commends?
- b) What is Role? Explain the Different Characteristic of role?

Question 4:

- a) Create undo table spaces UNDO2 size 15M in \$HOME/ORADATA/U03. List the rollback segment in table spaces UNDO2.
- b) Write down the steps and commands of taking online database backup?