

Final Syllabus for DBA and Cloud DBA - 18122021

Oracle DBA Syllabus	
Focused on OCA and OCP -2021 (1Z0-082 and 1Z0-083)	
Retrieving Data Using the SQL SELECT Statement	List the capabilities of SQL SELECT statements
	Execute a basic SELECT statement
Restricting and Sorting Data	Limit the rows that are retrieved by a query
	Sort the rows that are retrieved by a query
	Use ampersand substitution to restrict and sort output at runtime
Using Single-Row Functions to Customize Output	Describe various types of functions available in SQL
	Use character, number, and date functions in SELECT statements
Using Conversion Functions and Conditional Expressions	Describe various types of conversion functions that are available in SQL
	Use the TO_CHAR, TO_NUMBER, and TO_DATE conversion functions
	Apply conditional expressions in a SELECT statement
Reporting Aggregated Data Using the Group Functions	Identify the available group functions
	Describe the use of group functions
	Group data by using the GROUP BY clause
	Include or exclude grouped rows by using the HAVING clause
Displaying Data from Multiple Tables	Write SELECT statements to access data from more than one table using equijoins and nonequijoins
	Join a table to itself by using a self-join
	View data that generally does not meet a join condition by using outer joins
	Generate a Cartesian product of all rows from two or more tables
Using Subqueries to Solve Queries	Define subqueries

	Describe the types of problems that the subqueries can solve
	List the types of subqueries
	Write single-row and multiple-row subqueries
Using the Set Operators	Describe set operators
	Use a set operator to combine multiple queries into a single query
	Control the order of rows returned
Manipulating Data	Describe each data manipulation language (DML) statement
	Insert rows into a table
	Update rows in a table
	Delete rows from a table
	Control transactions
Using DDL Statements to Create and Manage Tables	Categorize the main database objects
	Review the table structure
	List the data types that are available for columns
	Create a simple table
	Explain how constraints are created at the time of table creation
	Describe how schema objects work
Creating Other Schema Objects	Create simple and complex views
	Retrieve data from views
	Create, maintain, and use sequences
	Create and maintain indexes
	Create private and public synonyms
Exploring the Oracle Database Architecture	Explain the Memory Structures
	Describe the Process Structures
	Overview of Storage Structures
Preparing the Database Environment	Identify the tools for Administering an Oracle Database
	Plan an Oracle Database installation

	Install the Oracle software by using Oracle Universal Installer (OUI)
Creating an Oracle Database	Create a database by using the Database Configuration Assistant (DBCA)
Managing the Oracle Instance	Setting database initialization parameters
	Describe the stages of database startup and shutdown
	Using alert log and trace files
	Using data dictionary and dynamic performance views
Configuring the Oracle Network Environment	Configure and Manage the Oracle Network
Managing Database Storage Structures	Overview of tablespace and datafiles
	Create and manage tablespaces
	Space management in tablespaces
Administering User Security	Create and manage database user accounts
	Grant and revoke privileges
	Create and manage roles
	Create and manage profiles
Managing Schema Objects	Create and Modify tables
	Manage Constraints
	Create indexes
	Create and use temporary tables
Managing Undo Data	Overview of Undo
	Transactions and undo data
	Managing undo
Implementing Oracle Database Security	Database Security and Principle of Least Privilege
	Work with Standard Database Auditing
Database Maintenance	Use and manage optimizer statistics
	Use and manage Automatic Workload Repository (AWR)
	Manage Alerts and Thresholds
Performance Management	Use Automatic Memory Management

	Troubleshoot invalid and unusable objects
Backup and Recovery Concepts	Identify the types of failure that can occur in an Oracle database
	Overview of flash recovery area
	Configure ARCHIVELOG mode
Performing Database Backups	Create consistent database backups
	Back up your database without shutting it down
	Create incremental backups
	Automate database backups
Moving Data	Explain the general architecture of Oracle Data Pump
	Use Data Pump Export and Import to move data between Oracle databases
Database Architecture and ASM { OPTIONAL }	Describe Automatic Storage Management (ASM)
	Startup and Shutdown ASM instances
	Administer ASM diskgroups
MAA Architecture	Introduction to RAC (Real Application Cluster/s)
	Introduction to DG (DataGuard)
	Concepts of RAC and DataGuard
Maintainance Task	Auto Tasks
	Database Patching
Tools	SQL Developer
	OEM
	Toad
Oracle Support	Overview
	Technical support
	Metalink documents
	Patch updates
Oracle CLOUD DBA	
Focused on Oracle Cloud Infrastructure(OCI) Foundations - 2021 Associate Exam# 1Z0-1085-21	

Cloud Concepts	Understanding of basic cloud concepts and its principles of economics
	Iaas , Paas and Saas Service Models
Getting Started with OCI	Describe the key features and components of OCI
	Describe Core Solutions on OCI
Core OCI Services	Discuss core OCI services
	Discuss Cloud Native services
	Cloud Networking Basics
Security and compliance	Explain the OCI Security model
	Describe the OCI compliance structure
OCI pricing, support and operations	Explain the OCI Pricing model
	Explain the OCI operational and support model
	ATP , DBCS database on Cloud
	What is Autonomous Database
	Types of Database offerings in OCI
	How to Provision Databases in OCI
	Managing Keys in OCI
	Creating Data Guard from Cloud Console
	Migration Tools and Techniques