Complete DBA(Oracle 11G DBA +MySQL DBA+Amazon AWS)

Oracle DBA workshop I

Exploring the Oracle Database Architecture

Oracle Database Architecture Overview

Oracle ASM Architecture Overview

Process Architecture

Memory structures

Logical and physical storage structures

ASM storage components

Installing your Oracle Software

Tasks of an Oracle Database Administrator

Tools Used to Administer an Oracle Database

Installation: System Requirements

Oracle Universal Installer (OUI)

Installing Oracle Grid Infrastructure

Installing Oracle Database Software

Silent Install

Creating an Oracle Database

Planning the Database

Using the DBCA to Create a Database

Password Management

Creating a Database Design Template

Using the DBCA to Delete a Database

Managing the Oracle Database Instance

Start and stop the Oracle database and components

Use Oracle Enterprise Manager

Access a database with SQLPlus

Modify database installation parameters

Describe the stages of database startup

Describe database shutdown options

View the alert log

Access dynamic performance views

Manage the ASM Instance

Set up initialization parameter files for ASM instance

Start up and shut down ASM instances

Administer ASM disk groups

Configuring the Oracle Network Environment

Use Enterprise Manager to create and configure the Listener

Enable Oracle Restart to monitor the listener

Use tnsping to test Oracle Net connectivity

Identify when to use shared servers and when to use dedicated servers

Managing Database Storage Structures

Storage Structures

How Table Data Is Stored

Anatomy of a Database Block

Space Management in Tablespaces

Tablespaces in the Preconfigured Database

Actions with Tablespaces

Oracle Managed Files (OMF)

Administering User Security

Database User Accounts

Predefined Administrative Accounts

Benefits of Roles

Predefined Roles

Implementing Profiles

Managing Data Concurrency

Data Concurrency

Enqueue Mechanism

Resolving Lock Conflicts

Deadlocks

Managing Undo Data

Data Manipulation

Transactions and Undo Data

Undo Data Versus Redo Data

Configuring Undo Retention

Implementing Oracle Database Auditing

Describe DBA responsibilities for

security Enable standard database

auditing Specify audit options

Review audit information

Maintain the audit trail

Database Maintenance

Manage optimizer statistics

Manage the Automatic Workload Repository (AWR)

Use the Automatic Database Diagnostic Monitor

(ADDM) Set alert thresholds

Use server-generated

alerts Use automated tasks

Performance Management

Performance Monitoring

Managing Memory Components

Enabling Automatic Memory Management (AMM)

Automatic Shared Memory Advisor

Using Memory Advisors

Dynamic Performance Statistics

Troubleshooting and Tuning Views

Invalid and Unusable Objects

Backup and Recovery Concepts

Statement Failure

User Error

Understanding Instance Recovery

Phases of Instance Recovery

Using the MTTR Advisor

Media Failure

Archive Log Files

Performing Database Backups

Backup Solutions: Overview

Oracle Secure Backup

User-Managed Backup

Terminology

Recovery Manager (RMAN)

Configuring Backup Settings

Backing up the Control File to a Trace File

Monitoring the Flash Recovery Area

Performing Database Recovery

Opening a Database

Data Recovery Advisor

Loss of a Control File

Loss of a Redo Log File

Data Recovery Advisor

Data Failures

Listing Data Failures

Data Recovery Advisor Views

Moving Data/Migration

Describe ways to move data

Create and use directory objects

Use SQL*Loader to move data

Use external tables to move data

General architecture of Oracle Data Pump

Use Data Pump export and import to move data

Working with Support

Use the Enterprise Manager Support Workbench

Work with Oracle Support

Log service requests (SR)

Manage patches

Oracle DBA workshop II

The Oracle Database Architecture: Overview

ASM Storage Concepts

Connecting to the Database and the ASM Instance

DBA Tools Overview

Configuring for Recoverability

Purpose of Backup and Recovery (B&R), Typical Tasks and Terminology

Using the Recovery Manager (RMAN)

Configuring your Database for B&R Operations

Configuring Archivelog Mode

Configuring Backup Retention

Configuring and Using a Flash Recovery Area (FRA)

Using the RMAN Recovery Catalog

Tracking and Storing Backup

Information Setting up a Recovery

Catalog Recording Backups

Using RMAN Stored Scripts

Managing the Recovery Catalog (Backup, Export, Import, Upgrade, Drop and Virtual Private Catalog)

Configuring Backup Settings

Configuring and Managing Persistent Settings for RMAN

Configuring Autobackup of Control File

Backup optimization

Advanced Configuration Settings: Compressing Backups

Configuring Backup and Restore for Very Large Files (Multisection)

Creating Backups with RMAN

RMAN backup types

Creating and Using the following:

- Backup Sets and Image Copies
- Whole Database Backup
- Fast Incremental Backup
- Configure Backup Destinations
- Duplexed Backup Sets
- Archival Backups

Restore and Recovery Task

Restoring and Recovering

Causes of File Loss

Automatic Tempfile Recovery

Recovering from the Loss of a Redo Log Group

Recovering from a Lost Index Tablespace

Re-creating a Password Authentication File

Complete and Incomplete Recovery

Other Recovery Operations

Using RMAN to Perform Recovery

Complete Recovery after Loss of a Critical or Noncritical Data File

Recovering Image Copies and Switching Files

Restore and Recovery of a Database in NOARCHIVELOG Mode Incomplete Recovery

Performing Recovery with a Backup Control File

Restoring from Autobackup: Server Parameter File and Control File

Restoring and Recovering the Database on a New Host

Monitoring and Tuning RMAN

Monitoring RMAN Jobs

Balance Between Speed of Backup Versus Speed of Recovery

RMAN Multiplexing

Synchronous and Asynchronous I/O

Explaining Performance Impact of MAXPIECESIZE, FILESPERSET, MAXOPENFILES and BACKUP DURATION

Diagnosing the Database

Data Recovery Advisor (DRA)

Block Corruption

Automatic Diagnostic Repository (ADR)

Health Monitor

Using Flashback Technology I

Flashback Technology: Overview and Setup

Using Flashback Technology to Query Data

Flashback Table

Flashback Transaction Query

Performing Flashback Transaction Backout

Flashback Drop and the Recycle Bin

Performing Flashback Database

Configuring Flashback Database

Performing Flashback Database Operations

Monitoring Flashback Database

Managing Memory

Oracle Memory Structures

Oracle Database Memory Parameters

Using Automatic Memory Management

Automatic Shared Memory Management

Using Memory Advisors

Using Data Dictionary Views

Managing Database Performance

Tuning Activities

Using Statistic Preferences

Optimizer Statistics Collection

Monitor the Performance of Sessions and

Services Automatic Workload Repository (AWR)

Describing the Benefits of Database Replay

Managing Performance by SQL Tuning

SQL Tuning and SQL Advisors

Using SQL Tuning Advisor

SQL Access Advisor

SQL Performance Analyzer Overview

Managing Resources

Database Resource Manager: Overview and

Concepts Accessing and Creating Resource Plans

Creating Consumer Group

Specifying Resource Plan Directives, including:

- Limiting CPU Utilization at the Database Level

- Instance Caging

Activating a Resource Plan

Monitoring the Resource Manager

Automating Tasks with the Scheduler

Simplifying Management Tasks

Creating a Job, Program, and Schedule

Using Time-Based, Event-Based, and Complex Schedules

Describing the Use of Windows, Window Groups, Job Classes, and Consumer Groups Multi-Destination Jobs

Managing Space in Blocks

Free Space Management

Monitoring Space

Compressing Data

Managing Space in Segments

Segment Creation on Demand

Additional Automatic Space-Saving Functionalit

Shrinking Segments

Segment Advisor

Managing Resumable Space Allocation

Managing Space for the Database

Transporting Tablespaces

Transporting Databases

Duplicating a Database

Purpose and Methods of Cloning a Database

Using RMAN to Create a Duplicate Database

Cloning a Database from a Backup

Duplicate a Database Based on a Running

Standby Database and Maintenance of Database

Setting up of standby database and maintenance of standby server

Troubleshooting of database error

Theoretical concepts of Oracle RAC

AWS Technical Essentials

Module 1: Introduction & History to AWS

- Navigate the AWS Management Console
- Recognize AWS Global Infrastructure
- Describe the security measures AWS provides

Module 2: AWS Storage & Content Delivery

- Identify key AWS storage options
- Describe Amazon EBS
- Create an Amazon S3 bucket and manage associated objects

Module 3: Compute Services & Networking

- Identify the different AWS compute and networking options
- Describe an Amazon Virtual Private Cloud (VPC)
- Create an Amazon EC2 instance
- Verify how to use Amazon EBS

Module 4: AWS Managed Services & Database

- Describe Amazon DynamoDB
- Verify key aspects of Amazon RDS
- Execute an Amazon RDS drive application

Module 5: Deployment and Management

- Identify AWS CloudFormation
- Describe Amazon CloudWatch metrics and alarms
- Describe Amazon Identity and Access Management (IAM)

MySQL Administration

- Installation and configuration of MySQL server
- Creation of user, database objects
- Grant privilege and securing database
- Setting of replication and maintenance of replication
- Performance optimization by changing server configuration

Total Tuition Fee: - 20,000(10,000 1st Installment payable at starting of course + 10,000 2nd Installment after completion of Oracle Workshop 1)

NOTE:-Certification fee need to pay separately, No Exam discount Code will be available