

# WebSphere Admin:- 25 days – 25 hrs

## Introduction

- Presentation – Oriented (Standalone)
- Service Oriented
- Client/Server Application
- Client/Server VS Web Application

## Web Application Architecture

- Middleware
- Web Servers
- Application Server
- Database
- Accessing Web Application
- Difference between WebServers and Application Servers

## WebSphere Application Server (WAS)

- 2-Tier Architecture
- 3-Tier Architecture
- N-Tier Architecture

## SDLC Cycle

- Environments where WAS has scope.
- Internal Architecture of Application Server
- Services provided by Application Server

## Responsibilities For WAS Admin

- Installation of WAS, IHS, Plug-in (GUI, Silent Modes)
- Installing Fixpacks
- Creating Profiles
- Deploying Application
- Federating nodes to the DMGR
- Working with Admin Console & WSADMIN
- Starting/Stopping Servers
- Creating unmanaged nodes for Web Servers
- Backup & Restore the configuration

- Working with Global Security
- Working with Users/groups
- Creating Servers & Clusters
- Modifying the EAR files / WAR files
- Working with WebServers
- Configuring resources (JDBC, JMS, RAR'S, MAIL, URL'S)
- Configuring Core Groups
- Configuring Node Groups
- Creating / Configuring Virtual Hosts
- Generating Plug-in
- Running basic JAAS / JYTHON Scripts
- Analyzing log files
- Generating Heap / Core Dumps
- Analyzing Heap / Core Dumps
- Performance Monitoring
- Performance Tuning
- Implementing SSL
- Certificate Management
- Troubleshooting
- Understanding ITIL Concepts
- Web / Application Server Migration
- IBM Support Assistant (ISA)
- Dump Analysis Tools.

#### Troubleshooting

- Installation Failure
- Profile Creation Failure
- Errors during Federation of Custom Profiles
- Plug-in Problem determination
- Class Loader Problem determination
- Workload Management Problem determination
- Web Container problem

- HTTP 404 errors & HTTP 500 errors
- Load balancing problem determination
- Access problems after enabling security
- Application Access problem
- Application Deployment problems
- Application start-up Errors
- Data access problems

#### Java Core Dumps

- Need of Core Dumps
- Use Java Core files
- Java Heap Dumps
- Verbose Garbage Collection
- Invoking automatically on Out Of Memory Error and Invoking through Special Code