

Training Day wise breakup

Foundation - 4 Days

Day 1

- Software Engineering
 - o Different types of model
 - o Agile
 - o Scrum

Day 2

- Software Testing
 - o Types of Testing
 - o Manual Testing
 - o Automation Testing
 - Test cases

Day 3

- Support and Configuration Management
 - Service configuration management
 - o Features
 - o Methodology
- Service configuration
- Discussion on the different deployment tools
 - o Docker
 - o Jenkins
 - o Kubernates

Day 4

- Agile
 - o Agile Overview, Roles in Agile,
 - What is User Story
 - o Agile Principles
 - o What is a Standup?
 - o What is a Product Backlog?
 - o Agile Planning Overview

Foundation Assessment



<u>Unix – 5 Days</u>

Day 1

- Introduction to Unix
- Working with Linux OS
- Linux Concepts
- Linux System and Linux GUI and Desktop Ops
- CLI, System Configuration
- Common Applications and Command Line Operations
- Working with Processes and File Operations

Day 2

- File Management
 - o Creating file
 - o Creating directory
 - o Copy
 - o Move
 - o Rename
- Using Text Editors

Day 3

- Filters
 - o Grep
 - o Cut
 - o Tr
 - o More
 - o Less
 - o Head
 - o Tail
- Find
- Permissions
- Creating users, groups

Day 4

- The Bash Shell and Basic Scripting, Shell Environment, #!,
- ps Utility, Processes and Scripting on the BASH shell
- PATH variable and sub-shell scripting
- Parameters and Command substitution
- .bash_profile, system profile scripts
- Using shell Commands

Day 5

- Constructs and conditional statements
- Variables
- loops
- Special variables \$\$, \$#, \$

Linux Assessment



SQL & NoSQL – 5 Days

Day 1

- Introduction SQL
- DQL
- Select
 - o Where
 - o Order by
 - o Aggregate functions
 - o Group by
 - o Having
- Joins

Day 2

- Sub Queries
- DDL
 - o Create
 - o alter
 - o drop
- Constraints
- DML
 - o Insert
 - o Delete
 - o Update

Day 3

- Normalization
 - o First normal form
 - Second normal form
 - o Third normal form
- De-normalization

Day 4

NoSQL

- Introduction
- NoSQL Databases
- Installing and Configuring MongoDB
- Data storage, documents, and types
- Querying and working with data
- Working with operators and collections

Day 5

- Advanced querying
- CRUD functionality in MongoDB
- ase study on SQL with a specific Domain

RDBMS Assessment



Java – 10 Days

Eclipse, STS

Day 1

- Introduction to Java
- Eclipse (Overview, debugging technique)
- Java Data types
- Variables, Operators
- Conditional Statement
- Loops
- Array

Day 2

- Object Oriented Programming with Java
 - o Classes
 - Objects
 - o Functions
 - Constructors
 - Modifiers
 - Relationships
 - Has-a
 - Is-a

Day 3

- Abstract
- Interface
- Polymorphism
- Packages

Day 4

- Exceptions (Compile & Run time)
- Custom Exceptions
- Wrapper Classes

Day 5 - 6

- Collections (Arrays, List, Map, set, iterator, Hashing)
- Generics

Day 7

- Java IO Overview
- Junit

Day 8 - 9

- JDBC
- Maven

Day 10



• Case study on Java

Java Assessment

Web Programming – 10 Days

Day 1

- HTML5
 - o Tags
 - o Elements
 - o Tables
 - o Link
 - o Image
 - o Semantics Tags
 - o Storage
 - o Canvas
 - o Googlemap
 - o Forms

Day 2

- CSS3
 - o Stylesheet
 - o Selector
 - ID
 - Class
 - HTML
 - Inheritance
 - o Style Properties

Day 3

- Java Script
 - o Dialog Box
 - o Conditional Statement
 - o Loop statement
 - o Array
 - \circ DOM

Day 5

- Spring Core
 - Introduction
 - Dependency Injection
 - Constructor
 - Setter
 - o Annotation based

Day 6

• Spring JDBCTemplate



Day 7

- Spring MVC framework
- DispatcherServlet, Handler mappings, Resolving views

Day 8

• JPA

Day 9

- RestAPI
- Spring Boot
- Spring Boot JPA, MongoDB

Day 10

- Swagger
- Introduction to SOA and Microservices
- Future technologies
- Devops
- CI/CD

Tools: POSTMAN

Web and Spring Assessment



SOA – 12 Days

Days 1 - 3

- SOUP UI
 - Web Service Testing
 - Introduction to SOAPUI
 - SOAP UI Installation and Configuration: Complete Guide
 - SoapUI Tutorial: Create a Project, Test Suite, TestCase
 - Assertions in SoapUI

SOA

Overview of Oracle SOA SOA to a Layman Overview of Oracle SOA Real Time Examples Advantages in using Oracle SOA Why Oracle SOA is Important Day 4

XPATH

- Overview
- XPath Expression
- Query language for xml
- XPath Nodes
- XPath Absolute Path
- XPath Relative Path
- XPath Axes
- XPath Operators
- XPath Wildcard
- XPath Predicate

Day 5 - 8

Apache JMeter for conducting Web page , Database server, FTP, JMS and Web Services Performance Testing.

- Introduction Performance Testing
- Introduction to Apache JMeter
- Elements of JMeter Test Plan
- Building a JMeter Test Plan
- Recording Tests Using JMeter
- Enhancements in Test Scripts
- JMeter Result Analysis
- Running Mutiple Scripts with JMeter
- Different Types of JMeter Test Plans
- Jmeter Distributed (Remote) Testing
- JMeter Functions, Variables and Regular Expressions
- JMeter Best Practices



Day 9 - 10

- Automation Testing Tool
 - o Basics of automation testing why, when and how to perform automation testing
 - o Factors for choosing a particular tool
 - An overview for the major functional testing tools
 - Overview of Test management and bug tracking tools

Day 11 – Day 12

Paas, Saas, AWS,

Cloud introduction

- Definition of cloud computing
- Categorization of the various service types
- Drivers of Cloud Solutions
- Handling cloud security
- Business Demands
- Deployment of software solutions and web applications
- Exploring Platform as a Service (PaaS) Different
- Evaluating the architecture

SOA Assessment