

S.NO	Title	Topics
1	<p>JAX – RS (Restful Service)</p>	<p>What is JAX – RS</p> <p>Need for JAX – RS</p> <p>Web Services VS Web Resource</p> <p>Building Web Resource using JAX – RS SUN Jersey implementation</p> <p>Building a Web Resource client using Apache Commons HTTP Client API</p> <p>What is ws – address, ws – security, ws – atomic transactions</p>
2	<p>SpringBoot</p>	<p>Types of software architectures</p> <p>SOA and Monolith Architecture</p> <p>Why Micro services</p> <p>Detailed Micro Service Architecture</p> <ul style="list-style-type: none"> – App Layer – Business Layer <p>Enterprise Layer</p> <ul style="list-style-type: none"> – Infra Layer <p>Need of Spring Boot</p>

		<p>Difference between Spring & Spring Boot</p> <p>Advantages with Micro Services</p>
3	Building Spring Boot Application	<p>Normal Spring Manual Approach</p> <p>Maven Overview</p> <p>Spring Initializer</p> <p>STS</p> <p>Eclipse with STS Plugin</p> <p>Understanding the Spring Boot auto configuration</p>
4	CRUD Operations	PostMan or Swagger Overview
5	Rest Annotation with Relation DB	MYSQL
6	JPA Repository Concepts	<p>Crud Repository</p> <p>JPA Query Concepts</p> <p>NamedQueries</p> <p>QueryAnnotation</p> <p>AsyncResultts</p>

		<p>Pagination and Sorting</p>
7	Actuator Concepts	<p>Production Monitoring</p> <p>Health Check Concepts</p> <p>Security Measurements</p>
9	Spring Boot Custom Logging	<p>Logging Level</p> <p>Patterns Changes</p> <p>Rolling Logs</p>
10	Spring Boot Profile Components	<p>Introduction</p> <p>Multiple Properties</p> <p>Command Line Runner Example</p> <p>Real time scenarios of components</p>
11	Integration with Spring Web	<p>Using Spring Web MVC</p> <p>Using Spring Restful</p> <p>Need of embedded servers & customization</p>
12	Spring Boot Security	<p>Basics</p> <p>Basic Authentication</p> <p>Form Based Authentication</p> <p>Authorization</p> <p>Role Based Access Control</p> <p>Attribute Based Access Control</p>

		<p>LDAP Based</p> <p>SSL Security</p> <p>TLS Security</p>
13	Database Concepts	<p>Spring JDBC</p> <p>Database to CSV</p> <p>Spring Batch</p> <p>Flyway Database Migration</p> <p>Liquid Database Migration</p> <p>Flyway vs Liquid</p> <p>Hikari Connection Pool</p>
14	Core Concepts	<p>Spring Boot AOP</p> <p>Spring Boot Cache</p> <p>Guava Cache integration</p> <p>Caffeine Cache</p> <p>EH Cache</p> <p>MultiResourceItemReader</p> <p>Spring MVC vs JAX-RS</p> <p>SpringBoot with Jersey</p> <p>Junit Integration</p>

		Rest Integration Test Cases
15	Micro Services	<p>Micro Services Introduction</p> <p>Principle and Characteristics</p> <p>Use cases and Benefits</p> <p>Challenges</p> <p>Design standards</p> <p>Micro Services Communication</p> <ul style="list-style-type: none"> – Synchronous – Asynchronous <p>Pitfalls</p>
16	Micro Services Design Considerations	<p>Micro Services per JVM?</p> <p>Micro Services share the data stores?</p> <p>Micro Services Transaction boundaries</p> <p>User Interfaces integration with Micro Services</p> <p>Challenges in Micro Services implementation</p>
17	Spring Cloud	<p>Introduction</p> <p>Cloud Architecture</p> <p>Cloud application benefits</p>
18	Swagger API	Introduction

		Integration
19	Netflix	Introduction Eureka Server & Eureka Client Feign Client Ribbon
20	Cloud Hosting	AWS Account Setup Hosting to AWS Enabling cloud features like load balancing, security