

Chapter 1

1. Explain 3-tier web architecture.
2. Write a short note on HTTP, HTTP methods and HTTPS
3. Short note on HTTP request and response message
4. Explain Client Server Handshake mechanism in SSL/TLS Protocol.
5. Difference between SSL and TLS
6. Explain XML and JSON with example
7. What is DOM? Explain different types of DOM with example.
8. Differentiate between URL and URI with example.
9. Explain principles of REST API.
10. Explain REST API methods in detail.
11. Differentiate between HTML and XML.
12. What is DNS? Explain the steps of DNS Lookup process.

Chapter 2

- 1) Difference between ES5 and ES6.
- 2) Explain dynamic typing and variable hoisting in javascript.
- 3) Differentiate between arrow function and parameterised function.
- 4) Differentiate between for loop and for.....of loop.
- 5) Explain single and multilevel inheritance with example. Explain the role of super() method in multilevel inheritance.
- 6) Write a short note on iterator.
- 7) What is the usage of yield statement and next() in generator? Explain with example.
- 8) How to set CSS style using JavaScript? Explain with an example.
- 9) What is meant by promise in JavaScript? What are the different methods of promise?

10) What are events in JavaScript. Explain different types of events with example.

11) Demonstrate the usage of generator () function in JavaScript to display a sequence of values with code example.

12) Differentiate between let, var and const keywords used for variable declaration with example.

13) Apply the concept of iterator and write a code to create an iterator object and display values of given array on the console.

```
array = [20, 10, 30, 40, 25]
```

Chapter 3

- What is ReactJS? What are the features of ReactJS? What are the advantages of ReactJS?
- What is JSX? Why we need to use JSX in ReactJS? Justify with example.
- How to create and render class and function components in ReactJS? Explain with examples.
- Write a short note on Files and folders in Reactjs.
- Differentiate between states and props. Give a proper example.
- Explain different phases of component life-cycle with a neat Component life cycle diagram.
- Demonstrate the use of following methods in component life-cycle with proper example:
 - `componentDidMount()`
 - `shouldComponentUpdate()`
 - `componentDidUpdate()`
 - `getSnapshotBeforeUpdate()`
- How to create a form in react? Explain with an example.
- How the events can be handled in react? Explain with an example

- What do you mean by a single page application? How will you create a single page application? Explain with a code example.
- Write a stepwise process to create an app using React JS to print “Hello World”.