

## Unit 1

- Why is a service description needed? Explain in detail about WSDL.
- Develop the WSDL for Create user service which accepts following arguments **userId, name, address, gender**
- Define a web service. Discuss Client Service Model with respect to Web Service.
- Explain web service life cycle in detail.
- Develop the WSDL for ShowStudentAttendance service which accepts following argument **studentID, class, roll number, month, year**
- Write a web service method that accepts a class name show the total male and female present in given class using JAX-WS.
- Discuss the handshaking and how the client server communication is established
- Differentiate Between SOAP and REST
- Differentiate using example web service and web application
- Why SOAP web services are called as lightweight webservice

## Unit 2

- Summarize the following: @WebMethod, @WebServices
- Develop the JS Script to accept the user registration data minimum 5 attributes and save that data to JSON
- Explain call back of JS and concept of call back hell
- Explain the different Annotations for specifying request-response.
- Differentiate Node and express with example
- “JavaScript is a single threaded” is the given statement is true or not Justify your answer.
- Discuss the use of call backs in JS and how you can handle the call backs
- Develop JavaScript web service for authentication of user

## Unit 3

- What is GraphQL? Discuss on how GraphQL is the better REST.

- Develop GraphQL service where create employee type which accepts **id, name, gender, address** and write a query for get employee.
- Differentiate between apollo client and server
- Using SDL Create the schema for Employee assume any 5 attributes
- Elaborate on NoSQL Databases provide the example of it
- Explain SDL in GraphQL with example
- Explain the following: Query, Mutation
- Explain the concept of middleware, how GraphQL will act as middleware
- Explain the working of mutation and create the mutation for adding Student which consists of **id, dob, name and gender**

## Unit 4

- Explain WCF in detail
- Develop the C# Code to compute transaction credit and debit
- Explain MVC pattern.
- How we can increase the security of any webservice provide 2 examples
- Elaborate on AWS S3 Services
- Explain various advantages of QoS
- Explain various contracts used in WCF