#### 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 ShowStudentAttendace 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 Webservices are called as lightweight webservice

### Unit 2

Summarize the following

## 1. @WebMethod 2. @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

# 1. Query 2. Mutation

Explain the concept of middleware, how graphQL will act as middleware

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