**501-01 : Advance Web Designing**

Unit-1: Concepts of NoSQL: MongoDB

1.1 concepts of NoSQL. Advantages and features.

1.1.1 MongoDB Datatypes (String, Integer, Boolean, Double, Arrays, Objects)

1.1.2 Database creation and dropping database

1.2 create and Drop collections

1.3 CRUD operations (Insert, update, delete, find, Query and Projection operators)

1.4 Operators (Projection, update, limit (), sort ()) and Aggregation commands

Unit-2: Fundamentals of React.js

2.1 Overview of React

2.1.1 Concepts of React.

2.1.2 Using React with HTML

2.1.3 React Interactive components: Components within components and Files

2.1.4 Passing data through Props

2.2 Class components

2.2.1 React class and class components

2.2.2 Conditional statements, Operators, Lists

2.2.3 React Events: Adding events, Passing arguments, Event objects

Unit-3: Forms and Hooks in React.JS

3.1 Forms: (Adding forms, Handling forms, Submitting forms)

3.1.1 event.target.name and event. Target.event, React Memo

3.1.2 Components (TextArea, Drop down list (SELECT))

3.2 Hooks: Concepts and Advantages

3.2.1 useState, useEffect, useContext

3.2.2 useRef, useReducer, useCallback, useMemo

3.2.3 Hook: Building custom hook, advantages and use

Unit-4: Angular JS

4.1 Concepts and characteristics of Angular JS

4.1.1 Expressions in Angular JS (Numbers, Strings, Objects, Arrays)

4.1.2 Setting up Environment, Angular JS Filters

4.1 3 Understanding MVC (Model, View, Controller) architecture

4.2 AngularJS Directive (ng-app, ng-init, ng-controller, ng-model, ng-repeat)

4.2.1 Some other directives: ng-class, ng-animate, ng-show, ng-hide

4.2.2 Expressions and Controllers

4.2.3 Filters (Uppercase, Lowercase, Currency, order by)

Unit-5: Angular JS: Single page application:

5.1 Single page application using AngularJS

5.1.1 Create a module, Define Simple controller

5.1.2 Embedding AngularJS script in HTML

5.1.3 AngularJS’s routine capability

5.1.3.1 $routeProvider service from ngRoute

5.1.3.2 Navigating different pages

5.2 HTML DOM directives

5.2.1 ng-disabled, ng-show, ng-hide, ng-click

5.2.2 Modules (Application, Controller)

5.2.3 Forms (Events, Data validation, ng-click)