

- (b) What are MongoDB's design goals in terms of scalability and performance? Explain how they are achieved. (8)
7. - (a) How can you use the .animate() in jQuery to create custom animations? Provide an example. (7)
- (b) What are AJAX callbacks in jQuery? Explain with an example how callbacks help in handling asynchronous operations in a web page. (8)

[This question paper contains 4 printed pages.]

Your Roll No.....

Sr. No. of Question Paper : 3505 J

Unique Paper Code : 6332492401

Name of the Paper : Full Stack Web Development-I

Name of the Course : B.Voc. (Web Designing)
(NEP UGCF)

Semester : IV

Duration : 3 Hours Maximum Marks : 90

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Section A is compulsory.
3. Attempt any four questions from Section B.
4. Parts of a question must be answered together.

Section A

1. (a) What is the purpose of jQuery, and how does it simplify DOM manipulation? (3)
- (b) Explain the difference between ID, class, and element selectors in jQuery. (3)

- (c) How do you bind a click event to a button using jQuery? Provide an example. (3)
- (d) What is the difference between `.fadeIn()` and `.fadeOut()` in JQuery? (3)
- (e) What is the use of `$.ajax()` in JQuery? Briefly explain its syntax. (3)
- (f) Explain the concept of MVC in AngularJS. (3)
- (g) How do you create a new component using Angular CLI? (3)
- (h) Describe the difference between one-way data binding in Angular. (3)
- (i) What is the role of MongoDB in a web application, and how does it differ from traditional relational database? (3)
- (j) What is the difference between `insertOne()` and `insertMany()` in MongoDB? (3)

Section B

- 2. (a) Describe the various types of selectors available in jQuery with examples. (7)

- (b) Explain how jQuery chaining works. Write a jQuery script that chains multiple actions on an HTML element. (8)
- 3. (a) Explain the purpose and use of `@Input` and `@Output` decorators in Angular. (7)
- (b) Discuss the concept of Angular components. How do you create a component using Angular CLI? Provide an example. (8)
- 4. (a) What are the main differences between AngularJS and Angular 2+? (7)
- (b) What are lifecycle hooks in Angular? Explain the `ngOnInit` and `ngOnDestroy` hooks with examples. (8)
- 5. (a) Explain how to perform a basic `find()` operation in MongoDB. (7)
- (b) Discuss how embedding data works in MongoDB. Compare it with referencing data and explain the benefits and challenges of each. (8)
- 6. (a) Discuss the concept of Modularization in MongoDB. How can you organize routes and controllers in a MongoDB application? (7)