

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VI EXAMINATION – WINTER 2025

Subject Code:3161611

Date:25-11-2025

Subject Name:Advanced Web Programming

Time:02:30 PM TO 05:00 PM

Total Marks:70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Describe Selectors in CSS.	03
	(b) Explain DOM in detail.	04
	(c) Write a JavaScript program to demonstrate use of following functions on Array: 1. indexOf() 2. lastIndexOf() 3. includes() 4. sort() 5. reverse()	07
Q.2	(a) What is AngularJS? What is the purpose to use it? List out all the directives used in AngularJS.	03
	(b) Create an example demonstrating the concept of Angular JS Routing.	04
	(c) Create a HTML form that will accept Enrolment No., Name, Semester, Branch, Mobile Number, Email, Address etc. from the student and display them on the page using Angular JS Directives and Expressions.	07
	OR	
	(c) Write Angular JS code to read Customer's data in JSON format available in a Customers.php file using \$http service and display the same on a webpage in tabular format.	07
Q.3	(a) List and explain characteristics of AngularJS.	03
	(b) Explain ng-repeat with example.	04
	(c) Explain filters in AngularJS with example.	07
	OR	
Q.3	(a) List and explain advantages of AngularJS.	03
	(b) How to define and use a module in an Angular JS application? Explain with suitable example.	04
	(c) Explain various services available in Angular JS with suitable example.	07
Q.4	(a) Enlist and explain the features of Node JS.	03
	(b) Write a note on Streams.	04
	(c) Explain the concept of event-driven programming in detail with example.	07
	OR	
Q.4	(a) How can we create a Buffer in NodeJS? Show all possible ways with example.	03
	(b) Explain the difference between blocking and non-blocking code using NodeJS example.	04

- (c) Create a Node JS application that will allow a user to browse and upload a file in localhost. **07**
- Q.5** (a) What is NPM? Explain its role in NodeJS. How to install any module explain with syntax. **03**
- (b) Write a note on : Net utility module. **04**
- (c) Create a Node JS application that will allow a user to create new file, read file, write into a file and delete a file. **07**
- OR**
- Q.5** (a) Write a short-note on Errors in NodeJS. **03**
- (b) Write a short note on NoSQL databases. List the differences between NoSQL and relational databases? **04**
- (c) Explain CRUD Operation in MongoDB with example. **07**
