

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2023

Subject Code:3161611

Date:14-07-2023

Subject Name:Advanced Web Programming

Time:10:30 AM TO 01:00 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) Define CSS. Enlist the benefits of it.	03
(b) Explain CSS types with suitable examples.	04
(c) i) List and discuss the advantages of JavaScript. ii) Explain JavaScript inbuilt objects in brief.	03 04
Q.2 (a) Write a note on Features of Angular JS.	03
(b) Define MVC. How it is implemented in an Angular JS application? Explain with suitable example.	04
(c) Create a webpage using Angular JS that displays details of students' objects (such as Enrollment No., Name, Semester, Branch, Mobile Number, Email Address, Address etc.) in a tabular format with appropriate CSS effects.	07
OR	
(c) Create a HTML form using bootstrap controls that will accept Enrollment No., Name, Semester, Branch, Mobile Number, Email, Address etc. from the student, combine and display them on the page when button is clicked also validate an Email address using Javascript.	07
Q.3 (a) Define Directive in Angular JS.	03
(b) Demonstrates the use of the following directives: i) ng-bind ii) ng-init iii) ng-model iv) ng-checked	04
(c) Write Angular JS code to create a custom filter that will capitalize vowel characters of a string and the remaining characters must be in lowercase. Also write code to that will read a file SampleText.txt and apply the filter effect on the content of the file.	07
OR	
Q.3 (a) Write a Node JS code to print a list of files present in the current directory.	03
(b) Enlist and explain the features of Node JS.	04
(c) Create a HTML form using bootstrap controls that will accept Employee_ID, Name, Department, Mobile Number, Email_Address from the employee, combine and display them on the page when button is clicked also validate an Email_Address using Javascript.	07
Q.4 (a) Explain the data binding process in Angular JS.	03
(b) Define callback. Explain with suitable example.	04
(c) Explain the use of following Input field states. i) \$untouched ii) \$touched iii) \$pristine iv) \$dirty v) \$valid vi) \$invalid	07

OR

- Q.4** (a) Define REST Architecture in Node JS. **03**
(b) Define Node Package Manager (NPM). Explain the process of installing, upgrading and uninstalling module using NPM. **04**
(c) Write a Node JS code to create a server that will write a log of visited pages in a log.txt file. **07**
- Q.5** (a) Explain an event-loop in Node JS. **03**
(b) Explain piping and chaining of streams with suitable example. **04**
(c) Write code to perform update and delete operations on Employee database using Node JS and MongoDB. **07**
- OR**
- Q.5** (a) Explain in detail the Network module in Node JS. **03**
(b) Explain error-first callback in detail. **04**
(c) Write Node JS programs for database connectivity with MongoDB including insert operation in MySQL database. **07**
