



R22 Regulation

Subject code: 4E4FB

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

## B.Tech IV Semester Regular Examinations, July 2024

### WEB TECHNOLOGIES (INFORMATION TECHNOLOGY)

Maximum Marks: 60

Date:27.07.2024 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A		CO	Bloom Tx
All the following questions carry equal marks (10X1M=10 Marks)			
1.a)	Give the advantages of putting the CSS in a separate file instead of embedding it into our HTML?	CO1	BL2
b)	What is the use of JavaScript?	CO1	BL1
c)	What Node.js can do?	CO2	BL1
d)	How do you format a text in JSON?	CO2	BL2
e)	What are the features of Express JS?	CO3	BL2
f)	How are the cookies sent in a post request?	CO3	BL2
g)	What type would you use to declare a variable that can hold a string in TypeScript?	CO4	BL2
h)	What is an Angular component?	CO4	BL1
i)	What is a directive in Angular?	CO5	BL1
j)	Which Angular service is used to make HTTP requests?	CO5	BL1
Part-B			
Answer All the following questions. (5X10M=50Marks)			
2	Write a program in JavaScript to find the largest three elements in an array by using loops. [10]	CO1	BL4
OR			
3	A. Discuss about inline, internal and external CSS. [5] B. Describe how responsive design can be achieved using CSS. [5]	CO1	BL4
4	What are the different steps to create and run a node.js file? Explain. [10]	CO2	BL2
OR			
5	Explain the steps to create an HTTP Client and servers in Node.js [10]	CO2	BL3
6	Explain how to serve static files in Express JS. [10]	CO3	BL2
OR			

7	Explain how to apply basic HTTP authentication in Express. Provide examples of implementing session authentication. [10]	CO3	BL3
8	Illustrate the concepts of Angular JS with a suitable diagram. [10]	CO4	BL3
	OR		
9	Explain the module system in TypeScript. Provide examples of how to organize and import/export modules. [10]	CO4	BL4
10	Explain the concept of data binding in Angular. Provide examples of one-way and two-way data binding. [10]	CO5	BL3
	OR		
11	Describe the built-in services provided by Angular. Provide examples of using services like HttpClient for making HTTP requests. [10]	CO5	BL5