



R22 Regulation

Subject code: 4P6EA

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VI Semester Regular Examinations, May 2025

FULL STACK DEVELOPMENT

(CSE)

Maximum Marks: 60

Date: 23.06.2025

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

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	Bloom Tx
1.a)	What is GitHub?	1M	1	L1
b)	List the types of CSS.	1M	1	L2
c)	What is JSON?	1M	2	L1
d)	List any 4 java script functions	1M	2	L2
e)	What is the purpose of the <Switch> component in React Router?	1M	3	L2
f)	What does dispatch() do in Redux?	1M	3	L3
g)	Which annotation is used to define a controller class in Spring?	1M	4	L2
h)	What is the difference between @GetMapping and @PostMapping?	1M	4	L3
i)	What is a sprint in Agile methodology?	1M	5	L1
j)	What is the main purpose of applying 1NF (First Normal Form)?	1M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	Bloom Tx
2	Create a responsive personal portfolio website using HTML and CSS. The website should include sections for your profile, skills, experience, projects, and contact information.	10M	1	L6
OR				
3	a) What is the UNIX Command-Line Interface (CLI), and why is it essential for web developers? b) Provide examples of basic commands used in file navigation and management.	5M 5M	1 1	L1 L2
4	Discuss the process of making an AJAX request using JavaScript. What are the different methods available (e.g., XMLHttpRequest, fetch), and how do they differ in terms of syntax and functionality?	10M	2	L3
OR				
5	Explain about jQuery events with Example program.	10M	2	L2
6	Discuss how React Router manages dynamic routing in a React application. Include in your answer how routing differs between traditional multi-page applications and SPAs built using React.	10M	3	L2

	OR			
7	Introduce Redux as a state management library in the context of React. Explain the core concepts of Redux such as store, actions, reducers, and middleware.	10M	3	L2
8	Explain how the Spring Framework supports the MVC architecture. Describe the roles of @Controller, @RequestMapping, ModelAndView, and ViewResolver.	10M	4	L2
	OR			
9	What is a RESTful web service? How does Spring Boot simplify the development of RESTful APIs in Java?	10M	4	L1
10	a) What is Spring JDBC and how does it simplify database access in Java applications?	5M	5	L1
	b) outline the role of JdbcTemplate in Spring JDBC.	5M	5	L2
	OR			
11	a) Explain the typical steps involved in deploying a Java-based web application to the cloud.	5M	5	L2
	b) Discuss the benefits and challenges of cloud deployment	5M	5	L4