

Code No: **R20A0516****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY****(Autonomous Institution – UGC, Govt. of India)****III B.Tech I Semester Supplementary Examinations, June 2025****Full Stack Development****(B.Tech-AIDS)**

Roll No									
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Time: 3 hours**Max. Marks: 70**

Note: This question paper Consists of 5 Sections. Answer **FIVE** Questions, Choosing **ONE** Question from each SECTION and each Question carries 14 marks.

SECTION-I

			BCLL	CO(s)	Marks
1	<i>A</i>	What is Git and how is it used in version control? Explain its integration with GitHub.	L1	CO-I	[7M]
	<i>B</i>	Explain the significance of web servers in delivering content over the internet.	L2	CO-I	[7M]

OR

2	<i>A</i>	Compare HTML5 and older versions of HTML. What new features does HTML5 provide for modern web applications?	L4	CO-I	[7M]
	<i>B</i>	What are the advantages of using Git for version control in collaborative projects?	L1	CO-I	[7M]

SECTION-II

3	<i>A</i>	Compare jQuery and vanilla JavaScript in terms of event handling and UI manipulation. Provide examples	L4	CO-II	[7M]
	<i>B</i>	What is the significance of AJAX in asynchronous web development? Explain with a use case.	L1	CO-II	[7M]

OR

4	<i>A</i>	Explain how the jQuery framework simplifies DOM manipulation. Provide examples of event handling in jQuery.	L2	CO-II	[7M]
	<i>B</i>	Describe the memory management techniques used in JavaScript to avoid memory leaks.	L4	CO-II	[7M]

SECTION-III

5	<i>A</i>	Compare React and traditional JavaScript frameworks. What advantages does React offer for building dynamic web applications?	L4	CO-III	[7M]
	<i>B</i>	Describe the lifecycle methods in React and their importance in managing component behavior.	L4	CO-III	[7M]

OR

6	<i>A</i>	Explain how Redux helps in state management in large React applications.	L2	CO-III	[7M]
	<i>B</i>	Discuss the benefits and challenges of using Redux for state management in a React application.	L6	CO-III	[7M]

SECTION-IV

7	<i>A</i>	What are the key components of the Spring MVC framework? Explain the role of each component in building web	L1	CO-IV	[7M]
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		applications.			
	B	Discuss the importance of dependency injection in Spring framework. How does it enhance modularity?	L6	CO-IV	[7M]
		OR			
8	A	Explain how the Spring framework handles HTTP requests in a web application	L2	CO-IV	[7M]
	B	Describe the process of creating a RESTful API using the Spring framework.	L4	CO-IV	[7M]
		<u>SECTION-V</u>			
9	A	Describe the process of creating relational schemas and the importance of normalization in database design.	L4	CO-V	[7M]
	B	Explain Agile development principles. How are these principles applied when deploying applications to the cloud?	L2	CO-V	[7M]
		OR			
10	A	Discuss the role of Spring JDBC in database persistence. How does it simplify interaction with relational databases?	L6	CO-V	[7M]
	B	Explain the process of deploying web applications in the cloud. What are the key factors to consider?	L2	CO-V	[7M]
