

Code No: **R20A0516****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY****(Autonomous Institution – UGC, Govt. of India)****III B.Tech II Semester Regular/Supplementary Examinations, June 2024****Full Stack Development****(CSE, CSE-AIML & B.Tech-AIML)**

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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	A	Define HTML and explain its role in web development.	L1	CO-I	[7M]
	B	Define Git and GitHub. Explain the difference between them.	L1,L5	CO-I	[7M]
OR					
2	A	Explain the process of hosting a website on a web server. Describe the steps involved in configuring a domain name, setting up DNS records, and uploading website files to a web server.	L5,L6	CO-I	[7M]
	B	Explain the difference between inline, internal, and external CSS stylesheets. Discuss the advantages and disadvantages of each approach, and provide examples of when each approach might be appropriate.	L5,L6	CO-I	[7M]

SECTION-II

3	A	Explain the basic concepts of OOP in JavaScript and provide examples of how to create objects, classes, and inheritance in JavaScript.	L5	CO-II	[7M]
	B	Discuss the structure of JSON data with an example.	L6	CO-II	[7M]
OR					
4	A	Discuss various UI components provided by jQuery UI library, Provide examples of how to use these components to enhance the user interface of a web application.	L2	CO-II	[7M]
	B	Discuss the concept of AJAX callbacks and how they are used to handle asynchronous responses from the server. Provide examples of handling AJAX responses using callback functions.	L6	CO-II	[7M]

SECTION-III

5	A	Describe the role of React Router in building Single Page Applications (SPAs). How does React Router handle routing in a React application?	L2	CO-III	[7M]
	B	Compare and contrast Redux actions and reducers. How do actions and reducers work together to manage state changes in a Redux application?	L2	CO-III	[7M]
OR					
6	A	Explain the concept of Flow architecture and its role in	L5	CO-III	[7M]

- managing data flow in React.js applications.
- B Explain the concept of client-server communication in React.js applications. Describe common methods used for making HTTP requests and handling responses in React. **L5 CO-III [7M]**

SECTION-IV

- 7 A Describe the MVC architecture pattern used in web development. Explain the responsibilities of each component and how they interact with each other. Provide a diagram to illustrate the MVC architecture. **L6 CO-IV [7M]**
- B Demonstrate the implementation of a simple Java web application using the MVC architecture pattern and Spring Framework. Provide a step-by-step explanation of how each component is implemented and integrated within the application. **L2 CO-IV [7M]**

OR

- 8 A Explain the basic concepts of Java programming. Provide examples to illustrate each concept. **L5 CO-IV [7M]**
- B Describe the key features of the Spring Framework and how it facilitates building web applications in Java. Discuss the advantages of using Spring for web development. **L6 CO-IV [7M]**

SECTION-V

- 9 A Explain the concept of relational schemas and normalization. How does normalization help in designing efficient databases? Provide examples to illustrate your answer. **L3 CO-V [7M]**
- B Compare and contrast the primary key and foreign key constraints in SQL databases. Discuss their roles in maintaining data integrity and enforcing relationships between tables. Provide examples to illustrate their usage. **L3 CO-V [7M]**

OR

- 10 A Explain the Agile development principles and their significance in software development projects. **L3 CO-V [7M]**
- B Describe the concept of deploying applications in the cloud. Provide examples of popular cloud platforms and deployment strategies. **L3 CO-V [7M]**
