

Code No: R22A6616

**MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**

(Autonomous Institution – UGC, Govt. of India)

**III B.Tech II Semester Regular Examinations, April 2025****Web Technologies****(CSE-AIML & B.Tech-AIML)**

<b>Roll No</b>									
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**Time: 3 hours****Max. Marks: 60****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 10 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer **FIVE** Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

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<b><u>PART-A ( 10 Marks)</u></b>			<b>BCLL</b>	<b>CO(s)</b>	<b>Marks</b>
<b><u>(Write all answers of this part at one place)</u></b>					
1	A	What is Session Management?	L1	CO-I	[1M]
	B	What is Web Server?	L1	CO-I	[1M]
	C	What is JSP? What are the advantages of JSP over Servlets?	L1	CO-II	[1M]
	D	How is a JSP page compiled?	L1	CO-II	[1M]
	E	Analyze how <code>errorPage</code> and <code>isErrorPage</code> directives work together in error handling.?	L4	CO-III	[1M]
	F	What is the purpose of the <code>&lt;jsp:forward&gt;</code> tag in JSP?	L2	CO-III	[1M]
	G	What is advantage of Spring boot?	L2	CO-IV	[1M]
	H	What is the role of <code>@RestController</code> in a REST API?	L1	CO-IV	[1M]
	I	What is JDBC?	L1	CO-V	[1M]
	J	Define <code>ResultSet</code> Object	L1	CO-V	[1M]
<b><u>PART-B ( 50 Marks)</u></b>					
<b><u>SECTION-I</u></b>					
2	A	Explain the life cycle of a Servlet with example?	L2	CO-I	[5M]
	B	Explain the significance of cookies and sessions with suitable example?	L1	CO-I	[5M]
OR					
3	A	List out the classes and interfaces in <code>javax.servlet</code> package.	L1	CO-I	[5M]
	B	How to handle HTTP request and responses? Explain	L2	CO-I	[5M]
<b><u>SECTION-II</u></b>					
4	A	Give a brief note on Anatomy of a JSP Page.	L2	CO-II	[5M]
	B	Discuss various implicit objects in JSP?	L2	CO-II	[5M]
OR					
5	A	Demonstrate the usage of page and include directives in JSP?	L2	CO-II	[5M]
	B	How to use Scripting Elements in JSP ? Explain.	L2	CO-II	[5M]

**SECTION-III**

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|----------|---|---|-----------|---------------|-------------|
| <b>6</b> | A | List and explain the different types of errors that can occur in a JSP?                               | <b>L1</b> | <b>CO-III</b> | <b>[5M]</b> |
|          | B | Describe how data can be shared between JSP pages using the request, session, and application scopes. | <b>L2</b> | <b>CO-III</b> | <b>[5M]</b> |
| OR       |   |   |           |               |             |
| <b>7</b> | A | Explain with an example how data is passed between two JSP pages using the request object.            | <b>L2</b> | <b>CO-III</b> | <b>[5M]</b> |
|          | B | Evaluate different techniques available in JSP for passing control and data between pages             | <b>L5</b> | <b>CO-III</b> | <b>[5M]</b> |

**SECTION-IV**

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|----------|---|--|-----------|--------------|-------------|
| <b>8</b> | A | Illustrate the architecture of Spring Boot with neat diagram   | <b>L2</b> | <b>CO-IV</b> | <b>[5M]</b> |
|          | B | Create a simple RESTful application using Spring Boot that includes a controller handling HTTP GET requests                | <b>L6</b> | <b>CO-IV</b> | <b>[5M]</b> |
| OR       |   |  |           |              |             |
| <b>9</b> | A | Describe the main components of a Spring Boot RESTful web application. How does Spring Boot simplify REST API development? | <b>L2</b> | <b>CO-IV</b> | <b>[5M]</b> |
|          | B | What is Spring Boot Actuator? Discuss its role in monitoring and managing Spring Boot applications.                        | <b>L1</b> | <b>CO-IV</b> | <b>[5M]</b> |

**SECTION-V**

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|-----------|---|---|-----------|-------------|-------------|
| <b>10</b> | A | How prepared statements are different with statement? List the types of JDBC driver.    | <b>L1</b> | <b>CO-V</b> | <b>[5M]</b> |
|           | B | Explain the working of JDBC template in spring boot with a simple CRUD example.         | <b>L1</b> | <b>CO-V</b> | <b>[5M]</b> |
| OR        |   |   |           |             |             |
| <b>11</b> | A | How do you access a database from JSP page? Explain with an example.                    | <b>L2</b> | <b>CO-V</b> | <b>[5M]</b> |
|           | B | Demonstrate with example to connect database using JSP application to retrieve the data | <b>L2</b> | <b>CO-V</b> | <b>[5M]</b> |

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