Code No. : 16241 N

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD
Accredited by NAAC with A++ Grade
B.E. VI-Semester Main Examinations, May/June-2023
Full Stack Web Development
(Common to CSE & AIML)

Time: **3 hours**

Max. Marks: **60**

*Note: Answer all questions from **Part-A** and any **FIVE** from **Part-B***

Part-A (10 × 2 = 20 Marks)

Q. No.	Stem of the question	M	L	CO	PO
1.	Write HTML code to create a list as mentioned below and apply foreground color blue for text in ordered list. 1. Programming Languages 2. DSA o Array o Linked List 3. Web Technologies o HTML o CSS o JavaScript	2	3	1	1,2,3
2.	What is the difference between a web server and an application server?	2	1	1	1
3.	What is the role of XML in web development?	2	1	2	1
4.	Describe XML schema for designing a web page as an illustration.	2	1	2	1
5.	Draw microservices architecture.	2	1	3	1
6.	What is session tracking? Illustrate with an example.	2	1	3	1
7.	Write JSP include directive to include "one.html" in a JSP page.	2	1	4	1,2,3
8.	Write a PHP program to print username and email-id submitted by a user through HTML page.	2	3	4	1,2,3
9.	What do you mean by serverless computing?	2	1	5	1
10.	Expand UDDI.	2	1	5	1,2

Part-B (5 × 8 = 40 Marks)

11. a)	What is the difference between WWW and Internet? Design a webpage using HTML and CSS to generate a form to capture data from a user for 100 days National rural employment scheme. The form should allow user to enter exactly 12 digits Aadhaar card number, PAN card number, Ration card number, Gram panchayat a dropdown with names, District a drop down with names, Category with radio buttons, Own a house yes or no with radio buttons, details of agriculture land- Type of land (wet/dry/metta) using radio buttons, survey number and extent in acres in text boxes and provision to upload passbook copy. Provide submit and Reset buttons on it. Include internal CSS to display the controls in center of the page, foreground color blue and button in yellow color.	5	3	1	1,2,3,5

		M	L	CO	PO
b)	Write JavaScript function to validate the PAN card field to accept alphanumeric data, ration card number with starting letter 'S' followed by 9 digits and submit the form only if the validation is successful.	3	3	1	1,2,3,5
12. a)	Write a JDBC program to insert two records into a table User using preparedSatement object in a single transaction. It means either two records to be inserted successfully or not insert any record at all. The structure of the table is User (firstname varchar(12), mobileNo number(10), email varchar(20), photo BLOB).	4	3	2	1,2,3
b)	What is the purpose XML namespaces? Create a XML document named bookstore that contains a root object called "bookinventory" which contains within it 3-5 books. Each book should have nested tags as Title, Author, Year of Publication, Publisher, and Number of Pages. Publisher should have City and State as attributes.	4	3	2	1,2,3,5
13. a)	Draw MVC architecture. What technologies are appropriate for the development of an application using MVC architecture in each layer? Explain.	4	2	3	1,2,3
b)	What is a session? Assume an ecommerce application where the user is allowed to select any item from the list of 10 items displayed in a form. Write a Servlet program to store the name of the item selected by the user in a session object.	4	3	3	1,2,3
14. a)	Write a JSP program to authenticate the customer. If the user credentials of a customer are not present in the database, then display error page with details else display a new page with customer name and success message.	4	3	4	1,2,3
b)	Write a PHP program to read the roll number and name from the user and store it in MySQL database.	4	3	4	1,2,3
15. a)	Describe the key property of cloud computing services (e.g. Amazon Web Services) that make it a game changer for web applications that face uncertain but possibly explosive growth when compared to owning your own servers.	4	2	5	1,2
b)	Implement a SOAP based web service for a Java Program.	4	3	5	1,2,3,5
16. a)	Explain different types of selectors in CSS with an example.	4	2	1	1,2,3
b)	What is connection pooling? Differentiate between Statement and PreparedStatement objects with an example.	4	2	2	1,2,3
17.	Answer any *two* of the following:				
a)	Write a Servlet program to greet the user based on time of the day.	4	3	3	1,2,3
b)	What are implicit objects in JSP? Why should we create JSP pages instead of Servlets when the JSP page is converted to Servlet by the compiler?	4	2	4	1,2,3
c)	What are the features of a webservice? Why REST based service is preferred over SOAP based web service?	4	2	5	1

M : Marks;　L: Bloom's Taxonomy Level;　CO; Course Outcome;　PO: Programme Outcome

i)	Blooms Taxonomy Level – 1	20%
ii)	Blooms Taxonomy Level – 2	30%
iii)	Blooms Taxonomy Level – 3 & 4	50%

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