



INSTITUTE OF AERONAUTICAL ENGINEERING (Autonomous)

Dundigal, Hyderabad - 500 043

COMPUTER SCIENCE AND ENGINEERING

TUTORIAL QUESTION BANK

Course Title	WEB TECHNOLOGIES				
Course Code	AITB09				
Program	B.Tech				
Semester	V				
Course Type	Core				
Regulation	IARE - R18				
Course Structure	Theory			Practical	
	Lecture	Tutorials	Credits	Laboratory	Credits
	3	1	4	-	-
Course Coordinator	Mrs. B Madhavi Devi, Assistant Professor				

COURSE OBJECTIVES:

The students will try to learn:

I	The fundamentals of designing static and dynamic web pages using HTML and DHTML for creation of websites.
II	The concepts of client - server programming with JavaScript, XML, Servlets, JSP and PHP.
III	The project-based experience needed for designing real time web based client-server applications

COURSE OUTCOMES:

After successful completion of the course, students should be able to:

CO 1	Explain the structure and basic elements of HTML for designing the web pages.	Understand
CO 2	Demonstrate client server web applications fwith the help of appropriate protocol and technologies.	Understand
CO 3	Analyze static and dynamic web pages for appropriately using them in Web applications.	Analyze
CO 4	Develop effective and interactive web pages using elements and selectors s in style sheets and dynamic HTML.	Apply

CO 5	Make use of functions in JavaScript and PHP for implementing data validations in web applications.	Apply
CO 6	Develop the XML document for storing and transporting the web page information in a structured form through web.	Apply
CO 7	Develop reusable software components s by using JavaBeans in a web application.	Apply
CO 8	Develop a server side web application using servlets for request-response programming paradigm.	Apply
CO 9	Develop the web applications using java server pages (JSP)with model view control architecture.	Apply
CO 10	Outline an interface between the front end and back end (database) to perform CRUD operations.	Understand
CO 11	Summarize the process of developing client/server applications fthrough Asynchronous JavaScript and XML (AJAX).	Understand
CO 12	Develop dynamic web site using server side and PHP programming and database connectivity.	Apply

QUESTION BANK:

Q.No	QUESTION	Taxonomy	How does this subsume the level	CO's
MODULE I				
INTRODUCTION TO HTML AND JAVASCRIPT				
PART A-PROBLEM SOLVING AND CRITICAL THINKING QUESTIONS				
1	Build a javascript page to display the denomination of the amount deposited in the bank	Apply	Recall javascript concepts and relate them to model a page for banking system.	CO4
2	Build a HTML document that has the form with the following controls: (a) A text box to collect the customer's name. (b) Four checkboxes, one each for the following items: i. Four HTML textbooks for Rs.1000. ii. Eight XML textbooks for Rs.2000. iii. Four Javabeans books for Rs.2500. iv. Eight UML textbooks for Rs.1500.	Apply	Recall and relate html elements, form controls to model a form.	CO1

3	State the order of evaluation of the operators in the following JavaScript statements and show the value of x after each statement is performed. $X=22/2$; $X=(3*9*(3+(9*3/(3))))$;	Understand	Recall and relate the concept of javascript operators and types of them.	CO4
4	Build a script that inputs three integers from the user and displays sum, average, product, smallest and largest of these numbers in an alert dialog.	Apply	Recall the concepts in scripting languages and relate to model the code to display largest and smallest among three numbers using javascript.	CO4
5	Build a script that calculates the product of the odd integers from 1 to 15 and then	Apply	Recall the concepts in scripting languages Then relate them to model	CO4
	outputs HTML text that displays the results.		the code to display the product of the odd integers from 1 to 15 using javascript.	
6	Build a script that reads a series of strings and outputs in an HTML TEXTAREA only those strings beginning with the letter "b".	Apply	Recall and relate various tags in html, concepts in scripting languages Then make use of form controls.	CO4
7	Write a CSS rule that makes all text 1.5 times larger than the base font of the system and colors it green.	Apply	Recall the elements and selectors in stylesheets .Then relate them and make use of CSS properties.	CO4
8	Write an HTML page that has one input, which can take multi-line text and a submit button. Once the user clicks the submit button should show the number of characters, words and lines in the entered using an alert message. Words are separated with space and lines are separated with new line character.	Understand	Recall the concepts in scripting languages html. Then relate them with form controls	CO3

9	Build a simple calculator application that takes two numbers and an operator (+, -, *, /, the operands.	Apply	Recall javascript concepts and relate them with html elements to model a calculator application.	CO4
10	Build a Javascript program to define a user defined function for sorting the values in an array.	Apply	Recall arrays in javascript and relate them functions to model an array application.	CO4
PART-B LONG ANSWER QUESTIONS				
1	Build web page for a library system, page should be in such a way that it should contain all book details- details include fields like Book name, Author name, ISBN and no. of copies available. The web page design should be performed using CSS.	Apply	Recall and relate the HTML elements and properties of CSS to select required tags for a library system page.	CO4
2	Develop the code using JavaScript for student information system. Student registration number should not be negative, if that is the case it should display a message using popup window.	Apply	Recall and relate the HTML elements and properties of CSS to select required tags for student information system.	CO4
3	Illustrate the concept and properties of CSS with an example.	Understand	Recall and relate the concept of CSS and its properties.	CO4
4	Explain in detail about CSS borders, margins and padding with example.	Understand	Recall the concept of elements and selectors in stylesheets and relate them with CSS properties.	CO4
5	Construct HTML page for a company home page and explain.	Apply	Recall and relate the structure and basic elements of html to select the for a company page.	CO1

6	Model a HTML document that contains at least 200 words of text. The text of every starting word in the sentence should be blue, every last word in the Sentence should be green and nouns should be yellow.	Understand	Recall and relate HTML elements and select appropriate elements for an html page.	CO4
7	Explain how functions can be written in JavaScript with an example	Understand	Recall and relate the functions available in java scripting language.	CO4
8	Build the page(s) for accepting the values of name and marks in a table then display them in the descending order of the marks.	Apply	Recall and relate the concepts in scripting languages. Make use of them to display the marks in descending order.	CO4
9	Explain the following input components in HTML forms with proper syntax of the corresponding HTML tags. a) Text Input b) Selectable list with multiple selection option c) Radio Buttons	Understand	Recall and relate the structure and basic elements available in html for designing web pages.	CO1
10	Write a java script program to sum the multiple s of 3 and 5 under 1000	Apply	Recall and relate the concepts in scripting languages. Then model the sample code to display the sum of multiples of 3 and 5 under 1000.	CO4
11	Explain about the different types of Selectors in CSS	Understand	Recall the elements and selectors in stylesheets and list various selectors of CSS.	CO4
12	Explain briefly about form elements in html with example?	Understand	Recall the structure and basic elements of html and relate them for designing the webpages.	CO1
13	Explain list and its types in html?	Understand	Recall the concept of html elements and relate list element.	CO1

14	Design html document for timetable using rowspan and colspan attributes.	Understand	Recall the structure and basic elements of html .Then relate them to specify tables with row and col span attributes	CO1
15	Design the nested list using ordered and unordered lists.	Understand	Recall the structure and basic elements of html and relate them for specifying list concept.	CO1
16	Develop a Javascript code to check whether given input in textbox is even or odd.	Apply	Recall and relate the concepts in scripting languages. Then model the code to check the given input in html form is even or odd.	CO4
17	Explain briefly about mathematical functions in javascript with example.	Understand	Recall the basic concepts in javascript and relate them for designing dynamic webpages.	CO4
18	Explain different string manipulation functions? Write the javascript program to demonstrate the string functions.	Understand	Recall the basic concepts in javascript and relate them for designing dynamic webpages.	CO4
19	How to apply your own style for HTML document using CSS.	Remember	-	CO4
20	Explain types of popup boxes in javaScript with a program?	Understand	Recall and relate pop-up boxes available in html.	CO4
PART-C SHORT ANSWER QUESTIONS				
1	Define HTML tags with syntax?	Remember	-	CO1
2	Show the tags and sections of HTML documents?	Understand	Recall structure of HTML document and relate the concept sections a HTML document contain	CO1
3	What is the difference between <title>...</title> and <h1>...</h1>?	Remember	-	CO1

4	Classify the need of dynamic web pages?	Understand	Recall the structure and basic elements of html for designing the web pages to show the use of dynamic web pages	CO1
5	What are differences between html elements and tags?	Remember	-	CO1
6	What is the difference between a static web page and a dynamic web page?	Remember	-	CO4
7	Demonstrate the various ways that styles can be added to a page?	Understand	This would require the learner to recall and relate the elements and selectors in style sheets for designing the interactive webpages.	CO4
8	What is HTTP Protocol?	Remember	-	CO2
9	Show the syntax to design a simple table with left, right column with Border “1”.	Understand	Recall the structure and basic elements of html and relate the concept of table element for designing the webpages.	CO1
10	What do you mean by Column Spanning and Row Spanning?	Remember	-	CO1
11	Show simple java script that displays the line of text “Welcome to Java Script Programming”.	Understand	Recall and relate the basic concepts of javascript for designing dynamic webpages.	CO1
12	What are global variables? How are these variable declared and what are the problems associated with using them?	Remember	-	CO4
13	Define text area control in forms.	Remember	-	CO1
14	What is type Selector?	Remember	-	CO4
15	How to group Selectors using CSS.	Remember	-	CO4
16	What is the difference between bgcolor and background attribute in HTML?	Remember	-	CO1

17	Show anchor tag with an example.	Understand	Recall HTML element and relate the concept of hyper link elements available in HTML.	CO1
18	What is the difference between div and span tag?	Remember	-	CO1
19	List the properties of CSS styles.	Remember	-	CO4
20	What is the difference between internal and external stylesheets?	Remember	-	CO4
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MODULE II				
OBJECTS IN JAVASCRIPT AND XML				
PART-A PROBLEM SOLVING AND CRITICAL THINKING QUESTIONS				
1	Build javascript code to demonstrate examples by using innerHTML and innerText in document object.	Apply	This would require the learner to recall the concept of document object methods. Then illustrate how to use a document methods.	CO5
2	Build javascript code to display the perfect numbers in tabular representation by reading the range from html form.And also style the table using CSS	Apply	This would require the learner to understand functions in JavaScript recall their implementation. Apply programming skills to implement our own code for determining perfect numbers.	CO4
3	Create an XML DTD to represent the Grade Card of a student which contains: (i) Name- Last, Middle, and First (ii) Subjects- Five subjects (iii) Assignments marks (iv) Total Marks Result- Pass/Fail	Apply	This would require the learner to recall the concept of XML DTD. Then explaining the significance of them.	CO6

4	Develop javascript page to display list of Armstrong numbers among 1000 numbers by extracting the value from the html form.	Analyze	This would require the learner to recall and relate the functions in JavaScript. Then make use of form controls in html to simplify the implementation of determining Armstrong numbers	CO4
5	Develop JavaScript page to validate the following fields of the above registration page. Name (Name should contains alphabets and the length should not be less than 6 characters). Password (Password should not be less than 6 characters length). E-mail id (should not contain any invalid and must follow the standard pattern name@domain.com) 4. Phone number (Phone number should contain 10 digits only).	Apply	This would require the learner to recall the concept of client side validation. Then illustrate how to validate a form to model a JavaScript page.	CO5
6	Explain the working of XML processors in detail. Also mention the purpose of XML processors.	Understand	This would require the learner to recall and relate the concept of XML and it parsers.	CO6
7	Build XSLT code to display Employee details in a table from which is stored in XML.	Apply	This would require the learner to recall the concept XML and XSLT. Then illustrate the design of xml document to model a table form..	CO6
8	Get the students details like name, register number and mark using form. Generate DTD for this XML document. Generate the collected information in the descending order of marks using XSLT. Results should be displayed in the above format. Write a source code and explain the same.	Understand	This would require the learner to recall the concept of XML and DTD Then explaining them with proper examples.	CO6

9	What is rollover button? Demonstrate the types of rollover buttons in javascript with example?	Understand	This would require the learner to recall the concept of javascript. Then illustrate how rollover buttons are used in scripting.	CO3
10	Build an XML File using the following information structure including DTD section appropriately:- < Accounting >< Inventory >< Inventory _i tem >< Invoices >< Invoice >< Item >< Sales >	Apply	This would require the learner to recall and relate the concept of XML. Then make use of the fields of information are wrapped in XML document in DTD section.	CO6
PART-B LONG ANSWER QUESTIONS				
1	Demonstrate the window object and opening a new window in javascript.	Understand	This would require the learner to recall the concept of window object in JavaScript. Then illustrate opening a new window.	CO4
2	Explain form validation in JavaScript.	Understand	This would require the learner to recall the concept of client side validation. Then illustrate how to validate a form in JavaScript.	CO5
3	Build javascript code to display number, its square and cube in tabular format by reading the value from html form.(for n numbers)	Apply	This would require the learner to recall the concept of methods in JavaScript, display number, its square and cube in tabular format by reading the value from html form.	CO3

4	Demonstrate the multiple pages in single window using html and javascript.	Understand	This would require the learner to recall the concept of methods in JavaScript. Then illustrate multiple pages in single window.	CO3
5	Explain the difference between XML and HTML, and also between DTD and XML Schema.	Understand	This would require the learner to recall the concept of XML. Then illustrate types of XML schemas.	CO6
6	Explain the date object in javascript with example	Understand	This would require the learner to recall the concept of date object methods. Then illustrate how to create a date and displays the date.	CO4
7	Explain how linking of XML with cascading style sheets. Design the XML document using CSS for displaying books information.	Understand	This would require the learner to recall the concept elements in XML. Then explaining how to style the XML elements.	CO6
8	Describe briefly about built-in objects in javascript.	Understand	This would require the learner to recall the concept of built in objects in javascript	CO4
9	Explain about document object and its methods in javascript with example.	Understand	This would require the learner to recall the concept of document object methods. Then illustrate how to use a document ethods.	CO3
10	Explain about XML DTD with examples.	Understand	This would require the learner to recall the concept of XML DTD. Then explaining the significance of them.	CO6

11	Develop a code to create an html page to change the background color for every click of a button using JavaScript	Apply	This would require the learner to recall and relate the concept of HTML and JavaScript. Then make use of color property on events.	CO3
12	Define XML and its tree structure?and also, explain building blocks of XML?	Understand	This would require the learner to recall the concept of XML. Then explain its structure.	CO6
13	Design an XML schema for hospital information management. Include every feature available with schema.	Understand	This would require the learner to recall the concept of XML schema. Then illustrate the designing of hospital management information using schema.	CO6
14	Describe interactive and non interactive events with an appropriate example in JavaScript.	Understand	This would require the learner to recall the concept of events in HTML. Then explaining the functionality of events.	CO3
15	Explain how styling XML with cascading style sheets is done for the library information domain.	Understand	This would require the learner to recall the concept elements in XML. Then explaining how to style the XML elements.	CO6
16	Describe different types of events in JavaScript.	Understand	This would require the learner to understand what are events in JavaScript and apply event handlers in scripting language	CO4

17	Describe exception handling mechanism in JavaScript.	Understand	This would require the learner to recall the concept of Exception handling. Then explain how the exceptions are handled in JavaScript.	CO4
19	Create a XML document to prepare a table for employee with fields like Employee Name as EName, Employee ID as EID and employee salary as ESalary.	Analyze	This would require the learner to recall and relate XML, XSLT and make use of their functionality to simplify the XML document creation.	CO6
20	Create a XML document to store visitor's information with fields like Name, Organization, Date and Time of arrival, contact number. Create a DTD to validate the document	Apply	This would require the learner to recall and relate the concept of XML. Then make use of fields for information to be wrapped in XML document.	CO6

PART-C SHORT ANSWER QUESTIONS

1	How JavaScript support automatic type conversion?	Remember	-	CO3
2	What are different types of events and explain them.	Remember	-	CO2
3	Describe built-in objects of JavaScript.	Understand	This would require the learner to recall the concept of built-in objects in JavaScript. Then explaining each one of their significance in JavaScript.	CO2
4	What is HTML DOM and mention its uses.	Remember	-	CO3
5	What is the difference between "==" and "===" operators.	Remember	-	CO3
6	What is the difference between an alert box and a confirmation box?	Understand	-	CO2

7	Define negative infinity and what is the return type of isNaN function?	Remember	-	CO2
8	Contrast between undeclared variables and undefined variables.	Understand	This would require the learner to recall the concept of variables in JavaScript. Then explaining how they can be implied in different situations.	CO2
9	How can we replace HTML with XML?	Remember	-	CO2
10	What is a prompt box, explain with an example.	Understand	This would require the learner to recall the concept of popup boxes in JavaScript. Then explaining the importance of Prompt box with example.	CO3
11	What is the purpose of 'this' keyword in JavaScript?	Remember	-	CO2
12	Explain confirm method and mention its syntax.	Understand	This would require the learner to recall the concept of methods in JavaScript. Then explaining the purpose of confirm method with an example.	CO3
13	What is JavaScript and how is it different from HTML.	Remember	This would require the learner to recall the concept of JavaScript and HTML. Then explaining how they are different.	CO2
14	What is the difference between CDATA and PCDATA?	Remember	-	CO2
15	List different types of errors in JavaScript and explain them.	Remember	-	CO2
16	What is DTD and explain its components.	Remember	-	CO3
17	What are built-in data types for XML Schema?	Remember	-	CO2

18	Describe date object and window object, mention their syntax.	Understand	This would require the learner to recall the concept of objects of the browser. Then explaining the significance of date and window objects.	CO3
19	What are the advantages of schema over DTD?	Remember	-	CO2
20	Describe navigator object explain it with an example.	Understand	This require the learner to recall the concept of objects of the browser. explaining navigator object.	CO3
MODULE III				
SERVLETS AND JSP				
PART A-PROBLEM SOLVING AND CRITICAL THINKING QUESTIONS				
1	Write a Java code to display username and password of user using servlet by reading the parameters from html page?.	Apply	This would require the learner to recall and relate servlet concepts and make use of methods, classes of servlet to demonstrate the reading parameters from html form to display username and password.	CO 8
2	Demonstrate the handling HTTP GET Request to display favourite color from list of options using servlet?	Understand	This would require the learner to recall the methods and classes of servlet. for handling HTTP Get request to display the favourite color using servlet	CO 8

3	Explain the reading initialization parameters using servlet with example code?	Understand	This would require the learner to recall the methods and classes of servlet and relate them to demonstrate the reading initialization parameters from XML using servlets.	CO 8
4	Define cookie and list types of cookies? Explain briefly working of cookies with neat architecture?	Remember	-	CO 8
5	Demonstrate the handling HTTP POST request to display the information of user using servlet by reading values from html.	Understand	This would require the learner to recall and relate the methods and classes of servlet for handling HTTP POST request to display the User information using servlet.	CO 8
6	Define session? Explain the session tracking in servlets along with its techniques?	Remember	-	CO 8
7	Build an application using JSP to display sum of multiples of given number by reading value from html page?	Apply	This would require the learner to recall and relate the concept of JSP and model a program to display sum of multiples of given number.	CO 9
8	What is JavaBean? write a syntax for UseBean property and Explain with an example implement java bean in JSP page.	Understand	This would require the learner to recall the java bean and relate with JSP action elements for Use bean property.	CO 9
9	Build JSP application that allows the user to select an item from a list and to press submit button later prints the item on web page.	Apply	This would require the learner to recall the concept and relate with form controls to model a JSP page to display the the result and respond through yes/no answers.	CO 9

10	Explain about implicit objects in JSP with example?	Understand	This would require the learner to recall the Objects in JSP and relate them with JSP implicit objects.	CO 9
PART-B LONG ANSWER QUESTIONS				
1	Explain the servlet life cycle with a neat architecture?	Understand	This would require the learner to recall the concept of servlet Then Illustrate what are the methods and phases are used to create servlets.	CO 8
2	List the features of servlet? Distinguish between GET and POST method in servlets.	Remember	.-	CO 8
3	What is servlet container? Explain common tasks performed by Servlet Container?	Understand	This would require the learner to recall the concept of server. Then illustrate important tasks of servlet container to handle request and responses.	CO 8
4	Distinguish between servlet and CGI with neat architecture.	Understand	This would require the learner to recall the concept of servlet and CGI. Then relate difference between servlet and CGI with neat architecture.	CO 8
5	Demonstrate the simple servlet to display “hello world” message.	Understand	This would require the learner to recall the methods and classes in servlet. Illustrate classes and methods to display the helloworld message	CO 8
6	What are Servlet API's? Write about javax.servlet package?	Remember	-	CO 8

7	Explain about javax.servlet.HTTP package?	Understand	This would require the learner to recall the concept of servlet API's .Then explaining what are the javax servlet HTTP package methods classes and interfaces.	CO 8
8	Demonstrate the working of servlet with neat architecture?	Understand	This would require the learner to recall the concept of servlet Then Illustrate the steps for working of servlet using architecture.	CO 8
9	What is HTTP?Explain the HTTP Request and HTTP Response format structure with representation?	Remember	-	CO 8
10	Distinguish between Generic servlet class and HTTP Servlet class with example?	Remember	-	CO 8
11	What is JSP?Explain the advantages of JSP over servlet.	Remember	-	CO 9
12	Explain the Anatomy of JSP Page with example?	Understand	This would require learner to recall and relate the concept of directives in JSP.	CO 9
13	Describe the JSP Processing with neat architecture	Understand	This would require the learner to recall the concept of JSP and Then relate the steps include in processing a request and response in JSP.	CO 9
14	Explain the Translation phase and request processing phase in JSP with flow charts.	Understand	This would require the learner to recall the concept of JSP processing, then relate the steps included in translation phase and request processing phase in JSP.	CO 9

15	What is JSP element? Explain the types of JSP elements in detail?	Understand	This would require the learner to recall the JSP tags to relate different types of JSP elements	CO 9
16	Explain the JSP Directive elements and Scripting elements.	Understand	This would require the learner to recall the JSP tag elements and relate different types of JSP elements	CO 9
17	List the Action elements? Explain the include action and forward action elements in JSP with example?	Understand	This would require the learner to recall the JSP tags and relate them with JSP action elements.	CO 9
18	Develop JSP code to display the multiplication table reading the input from html form.	Apply	This would require the learner to recall and relate the methods in JSP and model the code for displaying multiplication table.	CO 9
19	Explain include directive and include Action of JSP with example?	Understand	This would require the learner to recall the JSP elements and Then relate the functionalities of include directive and include action elements in JSP..	CO 9
20	Explain the following terms in detail. a Page b Declarations c Expressions d UseBean	Understand	This would require the learner to recall and relate the JSP elements with their functionality.	CO 8
PART-C SHORT ANSWER QUESTIONS				
1	What is servlet?	Remember	-	CO 8

2	Distinguish between PrintWriter and ServletOutputStream?	Understand	This would require the learner to recall the concept of Java input output then explaining the difference between PrintWriter, ServletOutputStream class.	CO 8
3	What are the types of protocols supported by HttpServlet ?	Remember	-	CO 8
4	Distinguish Static and Dynamic webpage?	Understand	This would require the learner to recall the concept of webpages Then explaining the difference between static and dynamic webpage.	CO 8
5	What are the uses of Servlet?	Remember	-	CO 8
6	List the different types of session tracking mechanism supported by Servlets?	Remember	-	CO 8
7	How to invalidate a session in servlet?	Remember	-	CO 8
8	List the life-cycle methods for a servlet?	Remember	-	CO 8
9	What is Servlet interface and what's the use of it?	Remember	-	CO 8
10	Why using cookies for session tracking is a bad practice?	Remember	-	CO 8
11	What are the advantages of JSP over Servlet?	Remember	-	CO 9
12	List the types of JSTL tags?	Remember	-	CO 9
13	What are different types of comments used in JSP?	Remember	-	CO 9
14	How do we configure init params for JSP?	Remember	-	CO 9
15	Show various scope values of <jsp:useBean> tag? .	Understand	This would require the learner to recall the concept of JSP standard action explaining the scope values of <jsp:useBean> tag.	CO 9

16	Explain the use of info attribute in JSP?	Understand	This would require the learner to recall the concept of attributes in JSP explaining how to set the information of the JSP page using info attribute.	CO 9
17	Show the tags used in JSP bean development?	Understand	This would require the learner to recall the concept of javabean explaining what are the tags used development of java bean.	CO 9
18	Distinguish between JSP Scriptlet tag and Declaration tag.	Remember	-	CO 9
19	How to delete Cookie in JSP?	Remember	-	CO 9
20	How can I prevent the output of my JSP or Servlet pages from being cached by the browser?	Remember	-	CO 9

MODULE IV

INTRODUCTION TO PHP

PART A- PROBLEM SOLVING AND CRITICAL THINKING QUESTIONS

1	Write a PHP script to display string, and its values within a table.	Apply	This would require the learner to recall functions in PHP and relate them to model table form.	CO11
2	What is parameterized function in PHP? Demonstrate the parameterized function with example.	Understand	This would require the learner to recall the concept of functions in PHP. Then illustrate how parameterized functions are used.	CO12
3	Build a simple calculator using PHP.	Apply	This would require the learner to recall functions in PHP relate them to model a simple calculator.	CO11

4	Build a program using PHP that creates the web Application for result publication.	Apply	This would require the learner to recall the concept of PHP functions. Then relate how to model web application for result publication.	CO12
5	Build an application to send an email using PHP.	Apply	This would require the learner to recall the concept of PHP. Then illustrate how to model an application for email sending using script.	CO12
6	Build a webpage using PHP to display the prime number and its sum in between range of numbers(1-10000)	Apply	This would require the learner to recall the concepts in PHP. Then developing web page for displaying the prime numbers.	CO11
7	Explain about the control statements in PHP with Example.	Understand	This would require the learner to recall the concept of control statements in PHP. Then illustrate them with proper examples.	CO11
8	What type of operations is needed when passing values through a form to PHP with example?	Remember	-	CO12
9	Explain is PHP a strongly typed language? Differentiate the static and dynamic passing parameters to PHP page with example.	Understand	This would require the learner to recall the concepts of PHP. Then illustrate them with proper examples.	CO10
10	What are the characteristics of PHP variables? Demonstrate how to traverse the multi dimensional array in PHP.	Understand	This would require the learner to recall the concept of variables and arrays in PHP. Then illustrate traversal of multidimensional array in PHP.	CO11
PART-B LONG ANSWER QUESTIONS				

1	Define string operator? Demonstrate the for -each looping statements with example?	Understand	This would require the learner to recall the concept of PHP. Then relate how for-each is used in PHP.	CO12
2	Explain the functionality of strstr and lfirst, ucwords functions with examples?	Understand	This would require the learner to recall the concept of strings in PHP. Then relate the functionality of those functions with scripts.	CO12
3	Explain about various data types available in PHP with examples.	Understand	This would require the learner to recall the concept of data types available in PHP. Then Show how they work in PHP with scripts.	CO11
4	Define array and Explain types of arrays supported in PHP with examples.	Understand	This would require the learner to recall the concept of arrays in PHP. Then illustrate various types of arrays with examples.	CO11
5	List and Explain most commonly use string functions in PHP.	Understand	This would require the learner to recall the concept of strings in PHP. Then illustrate commonly use strings in PHP.	CO12
6	Define PHP. What PHP can do? Explain the features of PHP in detail.	Understand	This would require the learner to recall the concept PHP. Then illustrate the features of PHP	CO11
7	Explain PHP form processing with an example.	Understand	This would require the learner to recall the concept of forms in PHP. Then illustrate form processing.	CO12

8	What are the differences between Get and post methods in form submitting. Give the case where we can use get and we can use post methods	Remember	This would require the learner to recall the concept of PHP. Then relate how for-each is used in PHP.	CO12
9	Design a webpage in PHP to explain the usage of for loop.	Understand	This would require the learner to recall the concept of control statements in PHP. Then relate with for loop.	
10	Explain various Math function available in PHP.	Understand	This would require the learner to recall the concept of functions in PHP. Then illustrate math function.	CO11
11	How will you concatenate two strings in PHP explain with example.	Understand	This would require the learner to recall the concept of strings in PHP. Then relate with string concatenation using an example.	CO12
12	Explain anatomy of a PHP page with example.	Understand	This would require the learner to recall the concept of PHP. Then relate with anatomy of it.	CO11
13	Explain different operators used in PHP with examples.	Understand	This would require the learner to recall the concept of operators in PHP. Then relate how operators are used.	CO12
14	Write a PHP script that inserts a new item in an array in any position with step by step procedure and demonstrate the example.	Apply	This would require the learner to recall and relate the concept of PHP. Then model a script for inserting an item in a particular position.	CO11

15	Explain expressions and control flow in PHP with example.	Understand	This would require the learner to recall the concept of PHP. Then illustrate expression available in PHP with examples.	CO12
16	Build an application using functions to calculate the factorial of a number (a non- negative integer). The function accepts the number as an argument.	Apply	This would require the learner to recall and relate PHP functions and make use of them appropriately to find factorial of a given number.	CO11
17	Design PHP script to generate simple random password [do not use rand() function] from a given string. Sample string : '1234567890ABCDEFGH-I- JKLMNOPQR STUVWXYZabcefg-hi- jklmnopqrstuvwxyz' Note: Password length may be 6, 7, 8 etc.	Apply	This would require the learner to recall and relate PHP functions. Make use of them appropriately to generate random password from a given number.	CO12
18	Define function? Explain functions in PHP with example?	Understand	This would require the learner to recall the concept PHP. Then illustrate how functions are used.	CO11
19	Design the diamond and square star patterns on the webpage using PHP by reading values dynamically.	Apply	This would require the learner to recall PHP and recall its functions. Make use of them appropriately to generate star patterns for a given number.	CO12
20	Define array operator? Build a PHP Code to check whether given data in html form is palindrome or not.	Understand	This would require the learner to recall PHP functions. Relate them appropriately to model an application to check whether the number is palindrome or not.	CO11
PART-C SHORT ANSWER QUESTIONS				

1	What is PHP, explain with its features?	Remember	-	CO12
2	What is the difference between include and require in PHP?	Remember	-	CO11
3	Distinguish differences between Get and post methods.	Understand	This would require the learner to recall and the concept of methods in PHP.	CO11
4	How can we create a database using PHP and My SQL?	Remember	-	CO10
5	Which programming language does PHP resemble to?	Remember	-	CO11
6	How can we get second of the current time using date	Remember	-	CO11
7	List out the predefined classes in PHP?	Remember	-	CO12
8	What type of inheritance that PHP supports?	Remember	-	CO11
9	List Data types in PHP?	Remember	-	CO12
10	What Is An Array? Show with an example.	Understand	This would require the learner to recall the concept of array in PHP. Then relate to create an array in PHP.	CO12
11	Define types of operators in PHP?	Remember	-	CO11
12	Define string functions in PHP?	Remember	-	CO12
13	What are the ways to define a constant in PHP?	Remember	This would require the learner to recall the concept of JavaScript and HTML. Then relate how they are different.	CO11
14	What type of operation is needed when passing values through a form or an URL?	Remember	-	CO10
15	What are the different types of errors in PHP?	Remember	-	CO11
16	How can you make a connection with MySQL server using PHP?	Remember	-	CO10
17	Explain with an example Is PHP a strongly typed language?	Remember	-	CO11

18	Distinguish between static and dynamic websites?	Understand	This would require the learner to recall the concept of PHP. Then relate with types of websites.	CO10
19	What are the characteristics of PHP variables?	Remember	-	CO12
20	What are the two most common ways to start and finish a PHP block of code?	Understand	-	CO12
MODULE V				
PHP AND DATABASE ACCESS				
PART A-PROBLEM SOLVING AND CRITICAL THINKING QUESTIONS)				
1	List and Explain PHP development framework.	understand	This would require the learner to recall the concept in PHP. Then illustrate the PHP framework development.	CO11
2	Explain about database connectivity with PHP with suitable example.	Understand	This would require the learner to recall the concepts in PHP databases for designing web pages. Then illustrate how database is useful in designing websites.	CO11
3	Explain the process of database retrieving and displaying results with example?	Understand	This would require the learner to recall the concept of databases in PHP. Then illustrate the process of retrieving and displaying results from database.	CO10
4	Explain the following a prepared statement b mysql query c mysql fetch array d mysql connect	Understand	This would require the learner to recall the concepts in PHP for designing web pages. Then illustrate how database is useful in designing websites.	CO10

5	Define Simple XML parser? Differentiate between tree based and event based parsers. Explain the functions in simple xml parser.	Understand	This would require the learner to know the concept of PHP and XML. Then illustrate the different parsers and functions in simple xml.	CO11
6	Design a PHP code to demonstrate the simplexml load string function.	Apply	This would require the learner to recall and relate the concept of PHP and XML. Model simple xml parser using load string function.	CO11
7	Write a PHP Script to validate username and password by reading values from html form and then validate the html form information using XML file?	Apply	This would require the learner to recall and relate concepts in PHP and its functions. Model them to extract the data from html and validate using xml file.	CO11
8	Design a PHP code to demonstrate the simplexml load file function.	Apply	This would require the learner to know the concept of PHP and XML. Then illustrating the simple xml parser using load file function.	CO11
9	Build PHP application to print table of any number using table tag and form controls	Apply	This would require the learner to recall concepts in PHP and its functions. Make use of them to print table of any number using table tag and form controls	CO12

10	Build user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise a failure.	Apply	This would require the learner to recall concepts in PHP and relate its functions. Make use of them appropriately to validate the data entered in html form against the data in database.	CO12
PART-B LONG ANSWER QUESTIONS				
1	Explain the statements that are used to connect PHP with MySQL?	Understand	Recall the concept of PHP, MySQL and relate database connection between PHP and MySQL	CO11
2	How PHP is different from PHP Script? Explain.	Understand	This would require the learner to recall the concept of client side validation. Then illustrate how to validate a form in PHP Script.	CO12
3	Explain the MVC architecture in PHP with a neat diagram?	Understand	This would require the learner to recall the concept of MVC. Then Show how to MVC is used in PHP.	CO12
4	Explain the following terms? a)DCL b)Schema c)Query And list the features of MySQL?	Understand	This would require the learner to recall the concept of databases. Then explain the terms related to database with features	CO10
5	Define the database? What are the operations used in database with syntaxes?	Remember	-	CO10
6	Explain the DDL and DML statements with example commands.	Understand	This would require the learner to recall the concept of databases. Then illustrate how to perform DDL and DML operations on database	CO10

7	Explain types of errors in PHP?	Understand	This would require the learner to recall the concept of PHP. Then illustrate the difference types of errors in PHP.	CO11
8	Compare and contrast PHP and AJAX with suitable examples.	Understand	This would require the learner to recall the concept of AJAX. Then relate how AJAX supports in PHP.	CO11
9	Explain and show how PHP is useful in defining data for web applications.	Understand	This would require the learner to recall the concept of PHP. Then relate the significance how to define data in web application.	CO11
10	Write the step by step procedure how to execute PHP program? Write a sample PHP code to display a message?	Understand	This would require the learner to recall the concept of php. Then illustrate the steps involved in executing PHP	CO12
11	Explain the various terms of modifying, updating and deleting data in PHP	Understand	This would require the learner to recall and relate the different methods of modification in PHP databases.	CO11
12	Define AJAX and mention its features, explain its structure with an example.	Understand	This would require the learner to recall the concept of AJAX. Then illustrate its structure.	CO11
13	Build an application to create college time table using PHP.	Apply	This would require the learner to recall and relate concepts in PHP and its functions. Make use of them appropriately to design the timetable of college.	CO12

14	Write a PHP program to print out the multiplication table up to 8*8	Apply	This would require the learner to recall and relate concepts in PHP and its functions. Make use of them appropriately to print the multiplication table	CO12
15	Build a PHP to convert word to digit by reading string from html form.	Apply	This would require the learner to recall concepts in PHP and relate its functions. Make use of them appropriately to print the multiplication table	CO12
16	Build an application to calculate square of a number.	Apply	This would require the learner to recall and relate concepts in PHP and its functions. Make use of them appropriately to calculate a square of given number	CO12
17	Explain Cookie. Using PHP perform Create, retrieve, delete and modify operations of a cookie?	Understand	This would require the learner to recall the concept of PHP Then relate to create the cookie and perform the operations on cookie.	CO11
18	Explain about PHP and XML with an example.	Understand	This would require the learner to recall the concept of PHP and XML Then illustrate the how PHP and XL is used with example..	CO11

19	Build a simple calculator web application that takes two numbers and an operators addition, subtraction, multiplication, division and modulus from html page and returns the result page with the operation performed on the operands.	Apply	This would require the learner to recall and relate the concepts in PHP and its functions. Make use of them appropriately to generate simple calculator	CO12
20	Explain difference between JavaScript and AJAX with an example.	understand	This would require the learner to recall the concept of javascript and XML Then illustrate importance of AJAX comparing with Javascript.	CO11
PART-C SHORT ANSWER QUESTIONS				
1	Define database in Web services?	Remember	-	CO10
2	How can we create a database using PHP and MySQL?	Remember	-	CO10
3	Show the example of header () function in PHP?	Understand	Recall the concept of PHP functions and relate the header () function in PHP.	CO11
4	How can we get second of the current time using date function?	Remember	-	CO12
5	List predefined classes available in PHP?	Remember	-	CO11
6	What is the difference between PHP and XML?	Remember	-	CO11
7	Classify the type of inheritance that PHP supports?	Understand	Recall object oriented programming language concepts and relate inheritance in PHP	CO11
8	What are the Advantages/ disadvantages of MySQL and PHP?	Understand	-	CO11
9	Define XML parser?	Remember	-	CO10
10	What is data retrieving and displaying the results in PHP	Remember	-	CO10
11	Define the term AJAX in web technologies	Understand	-	CO11

12	Show how PHP is considered compared to XML?	Understand	Recall concepts called PHP, XML and relate the difference between them	CO12
13	What are the different types of methods available in HTTP Protocol?	Remember	-	CO11
14	List different types of JDBC drivers.	Remember	-	CO11
15	Define MVC architecture in application development.	Understand	-	CO11
16	Define query to delete a record from MySQL database.	Understand	-	CO11
17	Define MySQL and its default port number.	Remember	-	CO12
18	Define the query to update a record in MySQL database.	Remember	-	CO11
19	Show differences between delete, drop and truncate command in MySQL database.	Understand	This would require the learner to recall the concept of database commands. Then relate to mention the difference between them.	CO12
20	List features of MySQL database.	Remember	-	CO12

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HOD CSE