

**Guru Nanak Dev Engineering College, Ludhiana**

**Department of Information Technology**

<b>Program</b>	B.Tech.(IT)	<b>Semester</b>	4
<b>Subject Code</b>	PCIT-107	<b>Subject Title</b>	Web Technologies
<b>Mid Semester Test (MST) No.</b>	1	<b>Course Coordinator(s)</b>	Er. Hanit Karwal
<b>Max. Marks</b>	24	<b>Time Duration</b>	1 hour 30 minutes
<b>Date of MST</b>	21 March 2022	<b>Roll Number</b>	2021022

**Note:** 1. Attempt all the questions in serial order.

<b>Q. No.</b>	<b>Question</b>	<b>COs, RBT level</b>	<b>Marks</b>
Q1	What is the difference between HTML & XHTML?	CO1, L1	2
Q2	Differentiate between GET and POST methods	CO1, L3	2
Q3	How tables are created in HTML? What are the various tags used during table?	CO1, L6	4
Q4	List the applications of AJAX.	CO3, L2	4
Q5	What is HTML DOM? Support your answer with a Flowchart.	CO2, L6	4
Q6	Discuss various selectors in jQuery with examples.	CO4, L5	8

**Course Outcomes (CO) Students will be able to:**

1	Understand the basic tools required for Web designing and applications
2	Build HTML5 and CSS3 for designing interactive web pages.
3	Analyze the basic operations of an AJAX application
4	Develop an interactive website using jQuery.
5	Acquire the basic usage of PHP construct and its integration with database for developing web modules like, login module, session authentication
6	Create and design dynamic web application using contemporary development tools like, MVC framework.

<b>RBT Classification</b>	<b>Lower Order Thinking Levels (LOTS)</b>			<b>Higher Order Thinking Levels (HOTS)</b>		
<b>RBT Level No.</b>	L1	L2	L3	L4	L5	L6
<b>RBT Level Name</b>	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

Guru Nanak Dev Engineering College, Ludhiana							
Department of Information Technology							
Program	B.Tech.(IT)	Semester	4				
Subject Code	PCIT-107	Subject Title	Web Technologies				
Mid Semester Examination (MSE) No.	1	Course Coordinator(s)	Er. Navdeep Kaur Deol				
Max. Marks	24	Time Duration	1 hour 30 minutes				
Date of MSE	24 <sup>th</sup> March, 2023	Roll Number	2121056				
<b>Note:</b> Attempt all questions							
Q. No.	Question			COS, RBT level Marks			
Q1	Differentiate between HTML and XHTML.			CO1, L2 2			
Q2	What are the empty elements in HTML? Briefly explain it with an example.			CO1, L4 2			
Q3	In how many ways can you integrate CSS on a web page? Discuss with the help of programming examples.			CO1, L2 4			
Q4	Explain the various event handling methods in jQuery.			CO4, L2 4			
Q5	Briefly explain the ordered and unordered lists in HTML with suitable example. Also, explain how can you change the type of list and control the list counting?			CO1, L4 4			
Q6	Create a feedback form in HTML and demonstrate the use of various form elements like text fields, radio buttons, checkboxes, text area and submit button. Also apply form validation on any two fields using JavaScript.			CO4, L6 8			
<b>Course Outcomes (CO)</b>							
<i>Students will be able to</i>							
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6	Create and design dynamic web application using contemporary development tools like, MVC framework.						

RBT Classification	Lower Order Thinking Levels (LOTS)			Higher Order Thinking Levels (HOTS)		
RBT Level Number	L1	L2	L3	L4	L5	L6
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

15pm

2004899

Guru Nanak Dev Engineering College, Ludhiana Department of Information Technology			
Program	B.Tech.(IT)	Semester	4
Subject Code	PCIT-107	Subject Title	Web Technologies
Mid Semester Test (MST) No.	2	Course Coordinator(s)	Er. Hanit Karwal
Max. Marks	24	Time Duration	1 hour 30 minutes
Date of MST	1 June, 2022	Roll Number	2004899

Note: 1. Attempt all the questions in serial order.

Q. No.	Question	COs, RBT level	Marks
Q1	Explain the concept of web storage in HTML5	C02, L2	2
Q2	Explain 3D Transforms in CSS3	C02, L3	2
Q3	How to deploy HTML5 and CSS3 using Bootstrap Framework?	C02, L4	4
Q4	List the features of Code Igniter Framework.	C06, L4	4
Q5	Elaborate CSS3 Borders and Multicolumn Layout	C02, L3	4
Q6	Write code snippets to demonstrate asort, ksort, arsort and, krsort PHP functions.	C05, L5	8

Course Outcomes (CO) Students will be able to:

1	Understand the basic tools required for Web designing and applications				
2	Build HTML5 and CSS3 for designing interactive web pages.				
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RBT Level No.	L1	L2	L3	L4	L5
RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating
					L6 Creating

**Guru Nanak Dev Engineering College, Ludhiana**  
**Department of Information Technology**

<b>Program</b>	B.Tech.(IT)	<b>Semester</b>	4 <sup>th</sup>
<b>Subject Code</b>	PCIT-107	<b>Subject Title</b>	Web Technologies
<b>Mid Semester Examination (MSE) No.</b>	2	<b>Course Coordinator(s)</b>	Er. Navdeep Kaur Deol
<b>Max. Marks</b>	24	<b>Time Duration</b>	1 hour 30 minutes
<b>Date of MSE</b>	24 <sup>th</sup> May, 2023	<b>Roll Number</b>	

**Note:** Attempt all questions

<b>Q. No.</b>	<b>Question</b>	<b>COs, RBT level</b>	<b>Marks</b>																
Q1	Differentiate between localStorage and sessionStorage.	CO2, L2	2																
Q2	What are the different fade methods in jQuery?	CO2, L4	2																
Q3	How to set content with the jQuery text(), html(), val() and attr() methods. Explain with suitable examples.	CO4, L3	4																
Q4	Write code snippets to demonstrate asort, ksort, arsort and krsort PHP functions.	CO5, L3	4																
Q5	Create a multi-column layout in html using CSS3(just like newspaper with some headings, text and image). Also, diagrammatically represent the layout.	CO2, L6	4																
Q6	How to connect PHP with MySQL database. Also, write PHP script to update the Address and Dept. No. of Jack William to United States and 5 respectively in the following table:	CO5, L5	8																
<b>EmployeeDetails</b>																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>EmpID</th> <th>EmpName</th> <th>Address</th> <th>Dept. No.</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Mary Doe</td> <td>Germany</td> <td>2</td> </tr> <tr> <td>2</td> <td>Cindy Smith</td> <td>Mexico</td> <td>3</td> </tr> <tr> <td>3</td> <td>Jack William</td> <td>England</td> <td>4</td> </tr> </tbody> </table>				EmpID	EmpName	Address	Dept. No.	1	Mary Doe	Germany	2	2	Cindy Smith	Mexico	3	3	Jack William	England	4
EmpID	EmpName	Address	Dept. No.																
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**Course Outcomes (CO) Students will be able to:**

- 1 Understand the basic tools required for Web designing and applications
- 2 Build HTML5 and CSS3 for designing interactive web pages.
- 3 Analyse the basic operations of an AJAX application
- 4 Develop an interactive website using jQuery.
- 5 Acquire the basic usage of PHP construct and its integration with database for developing web modules like, login module, session authentication
- 6 Create and design dynamic web application using contemporary development tools like, MVC framework.

<b>RBT Classification</b>	<b>Lower Order Thinking Levels (LOTS)</b>			<b>Higher Order Thinking Levels (HOTS)</b>		
<b>RBT Level No.</b>	L1	L2	L3	L4	L5	L6
<b>RBT Level Name</b>	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

Final Exam  
Question Paper  
100

Date: 17/05/2023

**Please check that this question paper contains 9 questions and 2 printed pages within first ten minutes.**

[Total No. of Questions: 09]

Uni. Roll No. ....

[Total No. of Pages: 2]

Program: B.Tech. (Batch 2018 onward)

Semester: 4<sup>th</sup>

Name of Subject: Web Technologies

Subject Code: PCIT-107

Paper ID: 16236

Scientific calculator is Allowed/NotAllowed

MORNING

2 3 JUN 2023

**Time Allowed: 03 Hours**

**Max. Marks: 60**

**NOTE:**

- 1) Parts A and B are compulsory
- 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- 3) Any missing data may be assumed appropriately

**Part – A**

**[Marks: 02 each]**

Q1.

- a) Compare XML and HTML
- b) Is java and javascript differs? Reason.
- c) List the CMS used in companies.
- d) Write the code to hide the paragraph to use jQuery selector.
- e) CSS plays an important role in designing web pages. Elaborate.
- f) List the advantages of AJAX and where it is used?

**Part – B**

**[Marks: 04 each]**

Q2. How AJAX works? Explain Request and Response Method.

Q3. Explain the structure of DOM and levels of DOM.

Q4. Implement the following:-

a) Blink text      b) detect whether the user has pressed 'Enter Key' using jQuery.

Q5. a) With the transform property, rotate the <div> element 90deg around its Z-axis.  
<body> <div>This is a div</div> </body>

b) Set the color of all <p> <h1> elements to red for the following code:

```
<body>
<h1>This is a heading</h1>
<p>This is a paragraph</p>
</body>
```

Q6. List the different versions of bootstrap. Write a code to use canvas.

Q7. Write a code to show CSS Flexbox.

**Part – C**

**[Marks: 12 each]**

Q8. Write the code for the followings:

a) Create a database called testDB and delete a database named testDB in PHP.

- b) Create a new table called Persons and delete all data inside a table.  
c) Add a column of type DATE called Birthday and Delete the column Birthday from the Persons table.

OR

- a) Discuss absolute and relative links. Design a page to add a table row with two table headers named "Name" and "Age".  
b) Use the correct HTML attribute to make the first TH element span two columns and to make the second TH element span two rows. Use CSS styles to make the table 300 pixels wide.

- Q9. Create a simple web page showing the usage of following HTML tags  
a) `<a href>`      b) `<img src>`      c) `<hr><br>`  
d) ordered and unordered    e) colspan and rowspan  
f) Add background colour to your tables, with perhaps a different colour for the "header" cells (`<th>`)

OR

- a) Discuss the PHP basix syntax, variable declaration and expressions.  
b) Elaborate the implementation of inheritance and advantages of PHP framework.

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[Total No. of Questions: 09]  
Uni. Roll No. ....

[Total No. of Pages: 02]

EVENING  
18 JAN 2023

Program: B.Tech. (Batch 2018 onward)  
Semester: 4<sup>th</sup>  
Name of Subject: Web Technologies  
Subject Code: PCIT-107  
Paper ID: 16236

Detail of allowed codes/charts/tables etc. Nil

Time Allowed: 03 Hours

**Max. Marks: 60**

**NOTE:**

- 1) Parts A and B are compulsory
- 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- 3) Any missing data may be assumed appropriately

Part -- A

**[Marks: 02 each]**

**Q1.**

- a) Write HTML code to create a nested page.
- b) Distinguish between absolute and relative link.
- c) How does Document Object Model works?
- d) Is CodeIgniter loosely or hardly coupled? Justify your choice.
- e) Is flexbox better than a CSS grid? Comment.
- f) Why are PHP and MySql used together?

Part – B

**[Marks: 04 each]**

- Q2. Write a HTML code for creating a registration form by covering all the input elements of form.
- Q3. Explain how to insert CSS in an HTML Document.
- Q4. Write a Simple Java script program for login form validation.
- Q5. How HTML elements are used in jQuery? Explain with some example.
- Q6. Elaborate built-in string functions of PHP with example of each.
- Q7. Write the structure of PHP script. Design a PHP code to swap any two numbers.

Part - C

[Marks: 12 each]

- Q8. Write short notes on the following a) Customization of jQuery b) DOM. C) HTTP-  
GET and POST requests

OR

Define Frameset, Frame Tag. Write a HTML code that divide the web page into four  
equal parts each individual part that displays different web page.

- Q9. Explain the various Interactive elements in HTML5. Elaborate CSS selectors in  
HTML5.

OR

How can we embed PHP code in HTML file? Explain database connectivity in PHP  
with reference to MYSQL.

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Please check that this question paper contains 9 questions and 2 printed pages within first ten minutes.

[Total No. of Questions: 09]

[Total No. of Pages: .2]

Uni. Roll No. ....

Program: B.Tech. (Batch 2018 onward)

Semester: 4<sup>th</sup>

Name of Subject: Web Technologies

Subject Code: PCIT-107

Paper ID: 16236

**Max. Marks: 60**

**Time Allowed: 03 Hours**

**NOTE:**

- 1) Parts A and B are compulsory
- 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- 3) Any missing data may be assumed appropriately

**Part – A**

**[Marks: 02 each]**

**Q1.**

- a) Differentiate Local storage and session storage.
- b) Which two HTML element tags are used to insert audio and video files into an HTML5 document? Give Example.
- c) How can you import a file in PHP?
- d) Discuss new markup elements in HTML5 (at least any two elements).
- e) With the transform property, rotate the <div> element 90deg around its Z-axis.  

```
<body>
<div>This is a div</div>
</body>
```
- f) Set the color of all <p> <h1> elements to red for the follwong code:  

```
<body>
<h1>This is a heading</h1>
<p id="para1">This is a paragraph</p>
</body>
```

**[Marks: 04 each]**

**Part – B**

**Q2. What are the features of CodeIgniter Framework ?**

**Q3. Using MySQL with PHP, perform database related operations like create table, insert,**

delete, select and update.

- Q4. Use the selector to hide all odd table rows in a table. Use the selector to hide all elements with an href attribute.
- Q5. What is the role of Apache web server in web application? Explain the concept of accessing functions using objects in php with the help of an example.
- Q6. How can you perform text wrap using CSS3? Name the property used to apply multiple backgrounds in CSS3?
- Q7. Write jQuery for slider design. Why do we need jQuery.

**Part – C**

[Marks: 12 each]

- Q8. a) Write a program using AJAX to send and receive data using GET and POST methods.  
b) Explain the request and response method of web server and web browser with an example. (both static and dynamic)

OR

- a) State the various features of wordpress. Explain how themes and modules can be installed in wordpress?
  - b) What is the difference between require and include in php? Write their syntax.
- Q9. a) Using concept of DOM in jQuery, Design validation for Sign-In form for registration.  
b) List the various event handling events in jQuery.

OR

- a) Discuss HTML, XML and XHTML.
- b) Discuss absolute and relative links, and design a page to show ordered and unordered lists.

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Please check that this question paper contains 09 questions and 02 printed pages within first ten minutes.

[Total No. of Questions: 09]  
Uni. Roll No. ....

EVENING

[Total No. of Pages: 2.]

27 JUN 2022

Program: B.Tech. (Batch 2018 onward)  
Semester: 4<sup>th</sup>  
Name of Subject: Web Technologies  
Subject Code: PCIT-107  
Paper ID: 16236

Time Allowed: 03 Hours

Max. Marks: 60

**NOTE:**

- 1) Parts A and B are compulsory
- 2) Part-C has Two Questions Q8 and Q9. Both are compulsory, but with internal choice
- 3) Any missing data may be assumed appropriately

**Part – A**

[Marks: 02 each]

**Q1.**

- a) Define CELLPADDING and CELLSPACING attributes of <table>.
- b) Differentiate between XML and HTML.
- c) List Features of Codeigniter framework .
- d) What method can you use to extract data from a canvas into an image?
- e) How will you embed images in a web document?
- f) Compare and contrast .empty() , .remove() and .detach() in jQuery.

**Part – B**

[Marks: 04 each]

- Q2.** Explain working mechanism of AJAX with suitable example.
- Q3.** Discuss in detail different methods of creating style sheets with the help of suitable examples.
- Q4.** Design a jQuery to get the selected value and currently selected text of a dropdown box.
- Q5.** Create a HTML document that displays a table of basketball scores at national games in which the team names have their respective team colors. The score of the leading/winning team should appear larger and in a different font than the losing team. Use CSS
- Q6.** Create a PHP program to find whether a given number is Armstrong Number or not.

**EVENING**

**27 JUN 2022**

- Q7.** Design a Tagline "Welcome To You" of Red and Blue linear gradient in  $200 \times 200$  HTML5 canvas using fill method.

**Part – C**

**[Marks: 12 each]**

- Q8.** Explain events handling in jQuery along with jQuery syntax and selectors in detail.

**OR**

Explain the following in detail with example:

- a) Geolocation and GPS services
- b) Cascading Style Sheets in HTML5

- Q9.** Write class declarations and member function definitions for following  
employee(code, name, designation). Design derived classes as  
emp\_account(account\_no, joining\_date) from employee and  
emp\_sal(basic\_pay, earnings, deduction) from emp\_account.

Write a PHP Script to create 5 objects (pass details using parameterized constructor)  
and Display details of Employees who having Maximum and Minimum Salary.

**OR**

Create a sample form that collects the first name, last name, email, user id, password and confirms password from the user. All the inputs are mandatory and email address entered should be in correct format. Also, the values entered in the password and confirm password textboxes should be the same. Design a javascript code to validate and output display proper error messages in red color just next to the textbox where there is an error.

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MORNING  
16 MAY 2018

[Total No. of Questions: 09]

[Total No. of Pages: 02]

Uni. Roll No. ....

Program/ Course: B.Tech. (Sem. 4th)  
Name of Subject: Web Technologies  
Subject Code: IT-14404  
Paper ID: 15335

Time Allowed: 03 Hours

Max. Marks: 60

**NOTE:**

- 1) Section-A is compulsory
- 2) Attempt any four questions from Section-B and any two questions from Section-C
- 3) Any missing data may be assumed appropriately

**Section – A**

[Marks: 02 each]

**Q1.**

- a) What are the applications of Web technology in day to day life?
- b) Write about jQuery syntax.
- c) What are various control flow statements in PHP?
- d) Define ISP and WWW.
- e) How will you embed images in a web document?
- f) List down basic advantages of PHP framework.
- g) What is the purpose of namespace?
- h) Why client side scripting is important? Explain
- i) Define Java script DOM.
- j) Differentiate between AJAX and JavaScript.

**Section – B**

[Marks: 05 each]

**Q2.** What are various components of Apache server configuration file?

**Q3.** Write a short note on AJAX server script.

**Q4.** How sessions are created in PHP? How to set a value in session?

**Q5.** How tables are created in HTML? What are the various tags used during table?

**Q6.** Write a short note on tools for Website creation.

**Section – C** [Marks: 10 each (05 for each sub-part, if any)]

**Q7.** Write a short note on the following:

- a) PHP & MySQL.
- b) Advanced features of CSS3

**Q8.** How Form handling is done in Java script? Explain. Also create and validate registration form using Java script.

**Q9.** Explain about the setup of Word press CMS. Also write about various CMS variants.