

Guru Nanak Dev Engineering College, Ludhiana				
Department of Information Technology				
Program	B. Tech (IT)	Semester	5	
Subject Code	PEIT-102	Subject Title	Advanced Web Technologies	
Mid Semester Exam (MSE) No.	1	Course Coordinator(s)	Akshay Girdhar	
Max. Marks	24	Time Duration	1 hour 30 minutes	
Date of MSE	24 th September, 2023	Roll Number		

Note: Attempt all questions. All assumptions must be clearly stated.

Q. No.	Question	COs, RBT level	Marks
Q1/	Evaluate the following statement : "As a developer, I should use Bootstrap."	CO1, L5	2
Q2✓	Differentiate between git status and git diff command.	CO3, L2	2
Q3✓	How the grid system is effective for creating tables? Show with the help of an example.	CO1, L3	4
Q4	You have made several commits in your local GIT repository. Elaborate the process of pushing and pulling these changes to and from a remote repository. Include the necessary GIT commands and steps.	CO3, L4	4
Q5	Create a Bootstrap-based navigation bar for a website that includes dropdown menus.	CO1, L3	4
Q6✓	Imagine you are working on a collaborative web development project using Bootstrap 5 and GIT. Your team is facing challenges in maintaining consistent styling and layout across different web pages. Additionally, you need to address issues related to version control conflicts in GIT. a) Propose a strategy for ensuring consistent styling and layout across multiple web pages using Bootstrap 5. b) Outline a plan to manage version control conflicts effectively in GIT, considering the challenges faced by your team. Above 2 points must be addressed with the help of student registration for admission to any program.	CO1, CO3, L6	8

Course Outcomes (CO)

Students will be able to

1	Apply the knowledge of HTML 5 based Bootstrap framework for web page designing.
2	Create and design web applications using MVC approach and Bootstrap.
3	Demonstrate the understanding of version control and data repository maintenance using GIT.
4	Develop web applications using the PHP frameworks.
5	Identify, formulate and solve engineering problems in the area of dynamic web applications.

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

Guru Nanak Dev Engineering College, Ludhiana			
Department of Information Technology			
Program	B.Tech.(IT)	Semester	5
Subject Code	PEIT-102	Subject Title	Advanced Web Technologies
Mid Semester Exam (MSE) No.	1	Course Coordinator(s)	Akshay Girdhar
Max. Marks	24	Time Duration	1 hour 30 minutes
Date of MSE	9 th November, 2023	Roll Number	

Note: Attempt all questions. All assumptions must be clearly stated.

Q. No.	Question	COs, RBT level	Marks
Q1	Analyze the following statement with respect to any PHP framework: "URLs based on the requirement instead of using the predefined URLs."	CO5, L4	2
Q2	Differentiate between Laravel and CodeIgniter.	CO5, L2	2
Q3	In CodeIgniter, describe the directory structure and configurations.	CO5, L2	4
Q4	Discuss the concept of routing with example in the context of Laravel framework.	CO5, L2	4
Q5	Create a Laravel web application with route definition that can be redirected to the web application home page.	CO5, L6	4
Q6	Design a CodeIgniter/Laravel web application to demonstrate model, view, and controller for CURD operations for a 'user' table.	CO6, L6	8

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Guru Nanak Dev Engineering College, Ludhiana			
Department of Information Technology			
Program	B.Tech.(IT)	Semester	5
Subject Code	PEIT-102	Subject Title	Advanced Web Technologies
Mid Semester Examination (MSE) No.	1	Course Coordinator(s)	Akshay Girdhar
Max. Marks	24	Time Duration	1 hour 30 minutes
Date of MSE	19 th September, 2024	Roll Number	

Note: Attempt all questions. All assumptions must be clearly stated.

Q. No.	Question	COs, RBT level	Marks
Q1	Can using Bootstrap speed up development time? Why or why not?	CO1, L5	2
Q2	Differentiate between git status and git diff command.	CO3, L2	2
Q3	How does a grid system improve flexibility in table design? Provide a demonstration.	CO1, L3	4
Q4	Outline the step-by-step procedures involved in both pushing local changes to the remote repository and pulling updates from the remote. Include an in-depth explanation of the associated GIT commands, their purpose, and how they interact with the repository to ensure a smooth workflow.	CO3, L4	4
Q5	Create a fully responsive Bootstrap-based navigation bar for a website that includes dropdown menus. Provide a detailed explanation of the structure	CO1, L3	4
Q6	Imagine you are working on a collaborative web development project using Bootstrap 5 and GIT. Your team is facing challenges in maintaining consistent styling and layout across different web pages. Additionally, you need to address issues related to version control conflicts in GIT. a) Propose a strategy for ensuring consistent styling and layout across multiple web pages using Bootstrap 5. b) Outline a plan to manage version control conflicts effectively in GIT, considering the challenges faced by your team. Above 2 points must be addressed with the help of student registration for admission to any program.	CO1, CO3, L6	8

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RBT Level Name	Remembering	Understanding	Applying	Analyzing	Evaluating	Creating

Guru Nanak Dev Engineering College, Ludhiana			
Department of Information Technology			
Program	B.Tech.(IT)	Semester	5
Subject Code	PEIT-102	Subject Title	Advanced Web Technologies
Mid Semester Exam (MSE) No.	2	Course Coordinator(s)	Akshay Girdhar
Max. Marks	24	Time Duration	1 hour 30 minutes
Date of MSE	22 nd November, 2024	Roll Number	2102711

Note: Attempt all questions. All assumptions must be clearly stated.

Q. No.	Question	COs, RBT level	Marks
Q1	What could be the reasons for the quoted statement w.r.t. a Software Developer's point of view: "I will use Laravel for my Next-Project!"	CO5, L4	2
Q2	Differentiate between Laravel and CodeIgniter.	CO5, L2	2
Q3	In Laravel, describe the directory structure and configurations.	CO5, L2	4
Q4	Discuss benefits of database migration in Laravel.	CO5, L2	4
Q5	In Laravel, how can you define a route that redirects users to another route or URL? Create a sample implementation for redirecting to the home page.	CO5, L6	4
Q6	Design and implement a web application using CodeIgniter or Laravel that demonstrates the Model-View-Controller (MVC) pattern for CRUD operations on assumed table(s). Include the relevant code and explanations for each component.	CO6, L6	8

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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. 9203751

Program: B.Tech. (Batch 2018 onward)

Semester: 5th

Name of Subject: Advanced Web Technologies

Subject Code: PEIT-102

Paper ID: 16445

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) Can using Bootstrap speed up development time? Why or why not?
- b) Define the role of Typography in Bootstrap.
- c) Differentiate between **git status** and **git diff** command.
- d) How do you establish a database connection in any PHP framework.
- e) Explain the concept of responsive design and its importance in web development.
- f) Discuss the advantages of using Laravel over other PHP frameworks.

Part – B

[Marks: 04 each]

- Q2. Describe how the “Grid System” and “Responsive Classes” in Bootstrap facilitate web design.
- Q3. Explain the process of creating a new branch in Git and merging it with the main branch.
- Q4. With the help of example illustrate the working of MVC pattern.
- Q5. Compare and contrast the features of CodeIgniter and Laravel frameworks.
- Q6. Discuss benefits of database migration in Laravel/Codeigniter frameworks.
- Q7. In Laravel, how can you define a route that redirects users to another route or URL?
Create a sample implementation for redirecting to the home page.

Part – C

{Marks: 12 each}

- Q8.** Design a responsive web page layout using Bootstrap's grid system, incorporating navigation bars and modals.

OR



Create and explain a dynamic form using CodeIgniter/Laravel framework that performs CRUD operations on a database.

- Q9.** Develop a Laravel/CodeIgniter application for any type of user creation/registration process.

OR



You are part of a collaborative web development project using Bootstrap 5 for frontend design and GIT for version control. The team is developing a user creation/registration process, but challenges arise in maintaining a consistent design across all pages and resolving frequent version control conflicts.

Tasks:

1. Evaluate the challenges your team faces in maintaining consistent styling and layout during the development of the user registration process. Devise a comprehensive strategy using Bootstrap 5 to ensure design uniformity across all related web pages.
2. Considering the issues with version control conflicts in GIT, propose an actionable plan that includes workflows and tools to effectively manage these conflicts. Justify how this plan would improve the team's collaboration during the development of the user registration process.
