



Daffodil International University

Department of Computer Science and Engineering
Faculty of Science & Information Technology

Final Examination Semester: Fall-2017

Course Code: CSE 417 (DAY) Course Title: Web Engineering

Course Teacher: ALL

Time: 2.0 Hours

Full Marks: 40

You have to answer any four (4) of the following questions. Figures in the right-hand margin indicate full marks.

1. FIFA World Cup 2018 is going to be held in June 2018. For this mega event, the organizing committee have opened up a registration process for the spectators coming from all over the world. People must register using this procedure to get their tickets. The registration form includes various fields such as firstName, lastName, age etc. 5+3+2
=10
 - a. Design a registration form based on the above scenario and validate the form with appropriate code using PHP or JavaScript and connect the form with database.
 - b. How can you handle errors in PHP? Briefly describe appropriate keywords related to exception handling.
 - c. What is a cookie? How can you create cookies with PHP?
2. Suppose, you are creating a website for a car shop. You have a list containing 500 cars. Now your client wants you to build a program which can loop through the cars and find a specific one. 4+3+3
=10
 - a. What is the best solution for the above situation? Briefly describe each type of arrays in PHP with example.
 - b. Write the main difference between PHP include () and require () function with example.
 - c. Why PHP is called a loosely typed language? Define PHP variables with its scope.
3. JavaScript is a simple programming language built into Netscape 2.0 and greater. It is integrated with and embedded in HTML. It allows greater control of web page behavior than does HTML alone. Since the JavaScript interpreter is part of Netscape, it is platform-independent: JavaScript incorporated into HTML runs on Windows, Macintosh, and other Netscape-supported systems. 3+5+2
=10
 - a. Are Java & JavaScript same? How is JavaScript different from PHP?
 - b. Write a JS code by using prompt box for finding the area of a rectangle (rectangle area = width x length). You need to take input for both length and width. Inputs should be taken using prompt boxes. Use appropriate variables which is needed only for the program.
 - c. "JavaScript can change HTML elements"- explain with appropriate code.

4. PHP is a server-side scripting language, mainly used for web development but also used as a general-purpose programming language. Object-Oriented Programming (PHP OOP), is a type of programming language principle added to PHP that helps in building complex reusable web applications. OOP does this by putting information inside objects. These objects can communicate with each other and perform various tasks. 3+3+4=10

- What is inheritance? Give an example code of inheritance in PHP.
- What are the difference between abstract class and interface? Create an interface **student** with two functions: set name (\$name) and set age (\$age).
- Create a class **newStudent** by implementing the interface **student**. Write a simple code to set name and age for two students by calling member functions. Print the name and age of the students.

Sample Output:

John, 20
Jessica, 30

5. 4+6=10
- Explain what MVC stands for. Illustrate the architecture of MVC along with its benefits.
 - Write the appropriate HTML and CSS code for the following figure.


Header Bar		
Left Block Menu <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Home</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Registration</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">About</div> <div style="border: 1px solid black; padding: 2px;">Contact Us</div>	Registration Form Username: <input style="width: 80%;" type="text"/> Password: <input style="width: 80%;" type="password"/> <div style="border: 1px solid black; padding: 5px; display: inline-block;">Submit</div>	Image  Links <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Facebook</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Twitter</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 2px;">Instagram</div> <div style="border: 1px solid black; padding: 2px;">LinkedIn</div>
Footer		

Fig: HTML Layout