



# Daffodil International University

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Final Examination Semester: Spring-2018

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. The biggest ICT carnival of the country is going to be held in the next semester at Daffodil International University. The organizers have built a website for the registration purpose of this mega event. The registration form includes various fields such as firstName, lastName, age, address, phone number etc. 5+3+2  
=10
  - a. Write appropriate code to build the form and connect the form with database. Also illustrate how you can update the firstName, address and age fields (previously stored) in the database.
  - b. If we want to create an identifier for a simple value which cannot be changed during the whole PHP script, what should we call the identifier?
  - c. Compare and contrast between GET & POST.
2. In PHP visitor information designated to be used across the site can be stored in a session or a cookie. There's no such thing as a simple login system. A login system needs to be designed with proper security in mind, and that takes some know-how. 4+3+3  
=10
  - a. What is a PHP session and cookies? Write the main difference between them with appropriate example.
  - b. Write the difference between php include() and require() function with example.
  - c. What do you mean by resource and object in PHP? Write short notes on static and global variables.
3. JavaScript (JS) is a lightweight, interpreted, programming language with first-class functions. Most well-known as the scripting language for Web pages. JS is a prototype-based, multi-paradigm, dynamic scripting language. 3+5+2  
=10
  - a. How can you define an object in JavaScript? What are the JS capabilities?
  - b. Write a JS code by using prompt box for finding the area of a trapezoid ( $\text{Area} = (.5) (a + b) * h$ ). Use appropriate variables which is needed only for the program.
  - c. Can you put a JS file inside a HTML file? If yes, then explain how?



4. Object-Oriented PHP helps your code stay flexible by allowing it to be only defined once but used in many places. Object-Oriented Programming (PHP OOP), is a type of programming language principle added to PHP that helps in building complex reusable web applications. 3+3+4  
=10

- Briefly describe different types of visibility of a method or data member with examples.
- What is difference between method overloading and overriding? Explain with codes. How can you declare a constructor?
- Create a class **Shows** by implementing an interface named **TV\_Programs**. Write a simple code to set name and number of episodes aired till now for three books by calling member functions. Print the name and number of episodes of those TV shows.

**Sample Output:**

Game of Thrones, 67  
That '70s Show, 200  
Breaking Bad, 62

5.
  - Explain what MVC stands for. Illustrate the architecture of MVC along with its drawbacks. 5+2+3  
=10
  - Write down outputs for the following codes. Do they differ? Give explanation for your answer.

```
<?php
$x = 4;
while($x >= 5) {
    echo "The number is: $x <br>";
    $x--;
}
?>
```

```
<?php
$x = 4;
do {
    echo "The number is: $x <br>";
    $x--;
} while ($x >= 5);
?>
```

- c. Answer the following:

- Write a function to find position of "Regards" in the following string: "Best Regards! Regards!", What will be the output?
- Why do we consider GET and POST as Superglobals?
- Consider the following script:

```
<button onclick="document.getElementById('demo').innerHTML=Date()">The time is?</button>
<p id="demo"></p>
```

The following output is obtained after clicking on "The time is" button:

The time is?

Wed Mar 28 2018 01:18:44 GMT+0600 (Bangladesh Standard Time)

Change the above script to obtain the following output (on the button, not separate):

Wed Mar 28 2018 01:15:06 GMT+0600 (Bangladesh Standard Time)