University of Dhaka
Institute of Information Technology
Bachelor of Science in Software Engineering
Final Examination, 2020
CSE 502: Web Technology
Marks: 30 Time: 1 Hour 15 Mins

Professionalism	Excellence	Respect

Answer all the questions. The weight of each question is mentioned at the right side. When answering a question, please answer all the subsections of it at once

1. i. What will be the output of the following PHP code? **10**

```php
<?php
$i=0;
for(++$i; ++$i; ++$i)
{
    print $i;
    if ($i == 4)
        break;
}
?>
```

ii. What will be the output of the following PHP code?

```php
<?php
$names = array("Sam", "Bob", "Jack");
echo $names[0]."is the brother of ".$names[1]." and ".$names[1].".".$brother;
?>
```

iii. What will be the output of the following PHP code?

```php
<?php
$a = "clue";
$a .= "get";
echo "$a";
?>
```

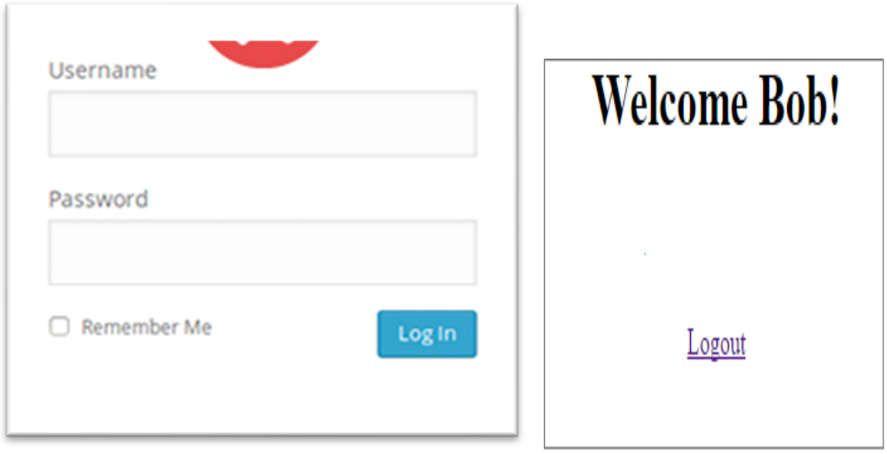
iv. What will be the output of the following PHP code?

```php
<?php
$team = "arsenal";
switch ($team) {
case "manu":
    echo "I love man u";
case "arsenal":
    echo "I love arsenal";
case "manc":
    echo "I love manc"; }
?>
```

v. Find the output of the following PHP code?

```php
<?php
$num  = "1";
$num1 = "2";
print $num+$num1;
?>
```

2. a. Assume, in a system **login.php, index.php, logout.php** are the three php pages. Username and password will be asked in **login.php**. **Id, username** and **password** are three attributes of a table "**user**" in a database "**userinfo**". The username and password should be checked for the authentication of any user in the system. If the username is found in the database then you have to redirect to the **index.php** by setting the session variable by user id. Implement the appropriate logout by destroying session variables and associated session data. When any user checks the remember me option, set the cookies expiration time to one day. A simple scenario is given in Figure 1 for more clarification. **5**



login.php index.php

Figure: 1

Design a proper PHP login-logout scheme with PHP **session, cookies and** the specification given above.

b. Suppose you have a database named "FruitDB" in MongoDB. The collection name in the database is "fruit". The collection "fruit" contains documents as the following JSON structure. **5**


```
[{"name":"apple","quantity":100,"tags":["import","export"],"unitPrice":50,"reviews":[
  {"id":1,"text":"very good","name":"John","address":{"country":"UK","zipCode":1000},"rating":40},
  {"id":2,"text":"excellent","name":"Tom","address":{"country":"USA","zipCode":1000},"rating":80}],
  "origin":{"country":"Africa","address":"101 TelFord","postCode":1000}},
{"name":"orange","quantity":200,"tags":["import"],"unitPrice":10,"reviews":[
  {"id":1,"text":"average","name":"James","address":{"country":"Australia","zipCode":100},"rating":25},
  {"id":2,"text":"excellent","name":"Leonard","address":{"country":"USA","zipCode":1000},"rating":60}],
  "origin":{"country":"India","address":"200 Katialu","postCode":200}}]
```


Figure-3

i. **Write** a MongoDB query to find the name and origin country of the fruits
ii. **Write** a MongoDB query to find the fruits having unit price within 10 to 100 and quantity at least 1000
iii. **Write** a MongoDB query to find the fruits which got at least one review from USA
iv. **Write** a MongoDB query to find the fruits which got ratings at least 40 from UK
v. **Write** a MongoDB query to find the fruits that origins in Bangladesh and have one of the following tags – “import”, “export”, “high”, “low”, “moderate”, “standard”, “quality”, “extra-import”, “daily”, “mid”, “top graded”, “mid graded”.

3. **a.** What do you mean by MVC? Explain the advantages and disadvantages of Code First Approach and DB First Approach. **5**

b. What is two-way binding in Angular? Explain with an example. **5**