

A. In these questions please circle the correct option. There is always only **one** correct option.
You have 10 minutes

A1.

What will be printed if we run the PHP code on the right ?

- a) true
- b) false
- c) There will be syntax error.

```
if ('4' == '04') {  
    echo 'true';  
} else {  
    echo 'false';  
}
```

A2.

What will be printed if we run the PHP code on the right ?

- a) true
- b) false
- c) There will be syntax error.

```
if (null === false) {  
    echo 'true';  
} else {  
    echo 'false';  
}
```

A3.

What will be printed if we run the PHP code on the right ?

- a) 3, 3
- b) 4, 3
- c) 5, 3
- d) 3, 5
- e) Other: _____
- f) There will be syntax error.

```
function process(&$arg) {  
    $return = $arg;  
    $arg += (1 + $c);  
    return $return;  
}  
$a = 3;  
$c = 1;  
$b = process($a);  
echo "$a, $b";
```

A4.

How are objects passed in current version of PHP?

- a) by value
- b) by reference

A5.

Which code would print the name of the brothel ?

- a) \$brothel = new brothel(); echo \$brothel->getName();
- b) echo brothel::getName();
- c) \$brothel = new brothel; echo \$brothel->getName();
- d) only options a) and b)
- e) only options a) and c)
- f) all of the options a), b), c)
- g) none of the options a), b), c)

```
class brothel {  
    public function getName() {  
        return "Horny Hoes";  
    }  
}
```

A6.

Which of these statements is false ?

- a) You can prevent SQL injection by using prepared statements
- b) You can prevent XSS attack by using function addslashes() or function mysql_real_escape_string()
- c) You can prevent CSRF attack by adding unique one-time token to every user-submitted form.
- d) You can not prevent Clickjacking in PHP, it is matter of presentation layer (HTML, Javascript, browser)

B.

Write a program in PHP (on this paper below) that prints the numbers from 1 to 100. But for multiples of three print "Foo" instead of the number and for the multiples of five print "Bar". For numbers which are multiples of both three and five print "FooBar".

You have 5 minutes.

```
<?php
//here goes your code...
```

```
?>
```

C.

Take a look at the following code in PHP:

```
function f($x) {  
    if ($x <= 1)  
        return 1;  
    else  
        return (f($x-1) + f($x-2));  
}  
  
$i = 0;  
while ($i < 10) {  
    echo f($i). " ";  
    $i = $i + 1;  
}
```

What would be the output if we run the code above? Choose from following options:

a) It wouldn't output anything, it would throw following PHP error (describe with your own words):

b) It would run successfully, but it wouldn't output anything

c) It would run successfully, and it would output following text:

You can use the space below or extra paper for your own computations, you have 10 minutes.

D. Write an absolutely trivial, but safe ‘Hello, \$username!’ PHP application, that also stores the user-input usernames to a database. For storing into database, imagine you have access to global object \$db, which is object of generic class db which allows running DB queries. You can imagine and use any method in class db (e.g. db class has public method “query()” which allows running queries, you can imagine any number of any methods with any parameters in class db)

Example screen before submission:

Enter your username:

Example screen after submission:

Hello, John !

Example create SQL code for database table for storing user names:

```
CREATE TABLE usernames (
  id int(11) NOT NULL AUTO_INCREMENT,
  username varchar(128) DEFAULT NULL,
  PRIMARY KEY (id)
);
```

Please fill the PHP code below (**do not** write any implementation of db class and its methods), you have 8 minutes:

```
<?php
//beginning of file

global $db;
//here goes your code...

?>
<form action="" method="POST">
Enter your username:
<input type="text" name="username" value="" />
<input type="submit" value="Submit" />
</form>
<!-- end of file -->
```