

Instructions

1. This test consists of two (2) questions. Attempt all questions
2. Write your name and registration number on each of your answer sheet
3. This Test carries 20 marks
4. Duration: **50 Minutes**

QUESTION 1 (7.5 marks)

- (a) For each of the following, choose the most correct answer and write its letter on the answer sheet (0.5 mark each)
- (i) Pretty Good Privacy (PGP) provides...?
- (A) Confidentiality, integrity, and authenticity.
 - (B) Integrity, availability, and authentication.
 - (C) Availability, authentication, and non-repudiation.
 - (D) Authorization, non-repudiation, and confidentiality
- (ii) Select the incorrect statement about PHP Programming language
- (A) Classes are case-insensitive
 - (B) Functions are case-insensitive
 - (C) Variable are case-insensitive
 - (D) Constants are case-sensitive
- (iii) PHP configuration settings are maintained in
- (A) pws-php5cgi.reg
 - (B) php.ini
 - (C) httpd.conf
 - (D) http-info.conf
- (iv) What is the correct way to create a function in PHP?
- (A) new_function myFunction()
 - (B) function myFunction()
 - (C) create myFunction()
 - (D) new myFunction()
- (v) Which operator is used to check if two values are equal and of same data type?
- (A) ==
 - (B) !=
 - (C) =
 - (D) ===

(vi) Which of the following mechanism is used to achieve non-repudiation of a message delivery?

- (A) Sender encrypts the message with the recipients' public key and signs it with their own private key.
- (B) Sender computes a digest of the message and sends it to a Trusted Third Party (TTP) who signs it and stores it for later reference.
- (C) Sender sends the message to a TTP who signs it together with a time stamp and sends it on to the recipient.
- (D) Sender gets a digitally signed acknowledgment from the recipient containing a copy or digest of the message.

(vii) Which super global variable holds information about headers, paths, and script locations?

- (A) \$_SESSION
- (B) \$_GLOBALS
- (C) \$_GET
- (D) \$_SERVER

(viii) The following are functions of a DBMS except _____.

- (A) Creating and processing forms
- (B) Creating databases
- (C) Processing data
- (D) Administrating databases

(ix) Which of these is an example of a B2B transaction?

- (A) A consumer buys a computer from Amazon.com
- (B) Amazon.com buys computers from Lenovo
- (C) Amazon.com buys computers an individual made himself
- (D) A government agency buys computers from newegg.com

(x) Under what circumstance might a certification authority (CA) revoke a certificate?

- (A) The certificate owner has not utilized the certificate for an extended period
- (B) The certificate owner public key has been compromised
- (C) The certificate owner' private key has been compromised
- (D) The certificate owner has upgraded his/her web browser

(b) State whether each of the following is **TRUE** or **FALSE**. If false, Explain why. (0.5 marks each)

- (i) PHP script is never in the same file as XHTML script.
- (ii) The settype function only temporarily changes the type of a variable.

- (iii) Conversion between data types happens automatically when a variable is used in a context that requires a different data type.
- (iv) The foreach statement is designed specifically for iterating over arrays.
- (v) Relational operators can only be used for numeric comparison.

QUESTION 2 (12.5 marks)

(a) In relation to PHP, briefly explain the following: (1 mark each)

- (i) Global Variable ^{Super Global Variable} - access global variable from anywhere in PHP script
- (ii) Function overloading -
- (iii) \$_SERVER

(b) With an example of PHP statement, how can you declare a variable which are accessible in other functions of a PHP script? (2 marks)

(c) Identify and correct the error in each of the following PHP code segments: (1 mark)

(i) `<?php print("Hello World"); >`

(ii) `<?php
$name = "Paul";
print (" $Name");
?>`

(d) Briefly describe the concept of Client-Side Caching. Give one advantage and one disadvantage of using it. (1.5 marks)

(e) Outline four ranking criteria used by search engines for ranking search results (2 marks)

(f) With examples, differentiate between the following: (3 marks)

- (i) SSL and SSH
- (ii) Session and Cookie
- (iii) Privacy and Security

`<? PHP`

`$GLOBAL`

`?>`

SSL - Secure Socket Layer

SSH - Secure Shell

data values used in

in users disk

multid. pages

not in users disk