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   Duration: **50 Minutes**

QUESTION 1 (10 marks)

(a) For each of the following, choose the most correct answer and write its letter on the answer sheet (0.5 marks each)

(i) PHP configuration settings are maintained in
   - (A) pws-php5cgi.reg
   - (B) php.ini
   - (C) httpd.conf
   - (D) http-info.conf

(ii) Which operator is used to check if two values are equal and of same data type in PHP?
   - (A) = =
   - (B) ! =
   - (C) =
   - (D) = = =

(iii) 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

(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) The following are functions of a DBMS except _____.
   - (A) Creating and processing forms
   - (B) Creating databases
   - (C) Processing data
   - (D) Administrating databases

(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) 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 govemment agency buys computers from newegg.com

(ix) 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

(x) What is the advantage of Rivest, Shamir, Adelman (RSA) public key system over the Digital Signature Algorithm (DSA)?

    (A) It uses the secure hash algorithm to condense a message before signing.

    (B) It can be used for encryption.

    (C) It cannot be compromised through substitution.

    (D) It uses the function of escrowed encryption.

(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.

(vi) Function die never takes arguments.

(vii) Web servers and clients communicate with each other through the platform-independent HTTP.

(viii) A virtual directory is an alias for an existing directory on a remote machine.

(ix) The path in a URL normally specifies the location of an actual directory on the server.

(x) Cookies are stored on the server computer.

QUESTION 2 (10 Marks)

(a) With examples, differentiate between the following: (2 marks)

    (i)   GET method and POST method

    (ii) Local variable and global variable in PHP

(b) Outline four components that search engines cannot see when crawling on the web (2 marks)

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

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

(d) With an example of PHP statement, how can you declare a variable which are accessible in other functions of a PHP script? (1 mark)

(e) Write a PHP script that inserts a new item in an array in any position.(2 marks)

(f) Write a PHP function to check a number is prime or not.(2 marks)