Republic of Rwanda
City of Kigali

DISTRICT COMPREHENSIVE ASSESSMENT, RTQF LEVEL… 2023-2024

SECTOR: ICT & MULTIMEDIA

TRADE: SOFTWARE DEVELOPMENT

MODULE CODE: SWDPP401

MODULE NAME: PHP PROGRAMMING

DATE OF EXAM: 14/3/2024

DURATION: 3HOURS

SCHOOL YEAR: 2023-2024

TERM: 2

Instructions:

1. **Attempt all questions in section A**   **(55 Marks)**
2. **Attempt three questions in section B**   **(30 Marks)**
3. **Attempt one question in section C**   **(15 Marks)**

SECTION A: Mandatory

MUTLIPLE CHOICE /20MARKS

1. What does PHP stand for? **/1Marks**
    a) Personal Home Page
    b) Preprocessed Hypertext
    c) Hypertext Preprocessor
    d) Programmed HTML
2. Which of the following accurately describes the role of an interpreter? **/1Marks**
    a) Compiles code into machine language before execution
    b) Translates code line by line and executes it directly
    c) Converts code into bytecode for execution
    d) Optimizes code for faster execution
3. What does "open source" mean in the context of software development? **/1Marks**
    a) Software that is free to download
    b) Software that can only be viewed but not modified
    c) Software that is released with a license allowing viewing, modification, and distribution of its source code
    d) Software that is developed by a single company
4. Which of the following is a fundamental component of a web server? **/1Marks**
    a) Database
    b) Interpreter
    c) Apache
    d) Browser
5. MySQL is an example of which type of database management system? **/1Marks**

    a) Relational DBMS

    b) NoSQL DBMS

    c) NewSQL DBMS

    d) Hierarchical DBMS

6. Which characteristic of PHP allows it to generate dynamic web pages? **/1Marks**
    a) Cross-Platform Compatibility
    b) Server-Side Scripting
    c) Simple and Easy to Learn
    d) Strong Community
7. Which of the following is NOT a popular IDE or text editor for programming? **/1Marks**

a) Visual Studio Code

b) Eclipse

c) Apache

d) Sublime Text

8. What is the purpose of XAMPP in web development? **/1Marks**

a) Managing databases

b) Testing websites locally

c) Creating dynamic web pages

d) Writing server-side scripts

9. Which stack is specifically designed for macOS users in web development? **/1Marks**
   - **a)** WAMP
   - **b)** LAMP
   - **c)** XAMPP
   - **d)** MAMP

10. What is the primary function of a web browser? **/1Marks**
    - **a)** Process server-side scripts
    - **b)** Compile HTML files
    - **c)** Interact with information on the World Wide Web
    - **d)** Manage databases

11. Which PHP file extension indicates that the file contains PHP code? **/1Marks**
    - **a)** A) .html
    - **b)** B) .js
    - **c)** C) .css
    - **d)** D) .php

12. What is the purpose of the "date" function in PHP? **/1Marks**
    - **a)** A) To format and display dates and times
    - **b)** B) To create new date objects
    - **c)** C) To retrieve the current timestamp
    - **d)** D) To calculate time differences

13. How can you concatenate strings in PHP using the dot operator? **/1Marks**
    - **a)** A) By using the + operator
    - **b)** B) By using the & operator
    - **c)** C) By using the . operator
    - **d)** D) By using the ~ operator

14. Which operator in PHP is used as an alternative method of implementing if-else or nested if-else statements? **/1Marks**

a) Greater than operator (>)

b) Less than operator (<)

c) Ternary operator (? :)

d) Equal to operator (==)

15. What type of array in PHP uses named keys (strings) instead of numeric indices to access elements? **/1Marks**

a) Indexed array

b) Multidimensional array

c) Associative array

d) Double array

16. Which loop in PHP guarantees that the code block is executed at least once, as the condition is checked after the code is executed? **/1Marks**

a) for loop

b) while loop

c) do-while loop

d) foreach loop

17. Which keyword is used to exit the switch block when a matching case is found in PHP? **/1Marks**

a) return

b) break

c) continue

d) exit

18. What does the $_FILES variable contain in PHP? **/1Marks**

a) Uploaded files using HTTP POST method

b) Server information

c) Form data submitted using method="post"

d) Global variables

19. What PHP function is used to delete a file? **/1Marks**

a) file_remove()

b) file_delete()

c) file_unlink()

d) unlink()

20.   Which PHP function is used to read the entire contents of a file into a string? **/1Marks**

a) fread()

b) fgets()

c) file_get_contents()

d) readfile()

OPEN QUESTIONS /35Marks

1. Explain the if statement in PHP with an example. **/3Marks**
2. Differentiate between if-else and if-elseif-else statements in PHP. **/3Marks**
3. Explain indexed arrays in PHP with an example. **/3Marks**
4. What built-in functions does PHP provide for working with arrays? **/4Marks**
5. Explain the for loop in PHP with its syntax. **/5Marks**
6. What is the purpose of the foreach loop in PHP? **/3Marks**
7. Differentiate between the while and do-while loops in PHP. **/3Marks**
8. Explain how to define a user-defined function in PHP and give syntax. **/4Marks**
9. Explain the process of opening a file in PHP. **/2Marks**
10.   **How do you define a class in PHP? /2Marks**
11.   What are access modifiers in PHP, and how do they affect class members? **/3Marks**

SECTION B (Chose three questions only 10Marks each) /30MARKS

1. How can you perform form (name and email) validation in PHP, provide a basic structure for the PHP script?
2. Using the switch statement, write a php program do display a day from the days of week.
3. Create an array which will store multiple colors and display them using foreach.
4. Provide examples of three super global variables in PHP and explain their usage.
5. During the connection of php to database, we use different functions, give any four among them.

SECTION C: MANDATORY /15MARKS

1. a) After successful creating connection to the server where we have a
   database called **school,** using mysqli procedural, write php code to
   create a table called **student** with the following attributes:
   id INT(6) AUTO_INCREMENT PRIMARY KEY, firstname VARCHAR(40)
   NOT NULL, lastname VARCHAR(40) NOT NULL, class VARCHAR(10)).
   /6Marks

   b) Write php code to insert record in the student table created in
   question a). **/3Marks**

   c) Write php code to display information from student table. **/3Marks**

   d) Write php code to update information in the table student.
   /3Marks