

POKHARA UNIVERSITY

Level: Bachelor

Semester: Fall

Year: 2024

Programme: BCSIT

Full Marks: 100

Course: Internet Technology II (Programming)

Pass Marks: 45

Time: 3 hrs.

Candidates are required to answer in their own words as far as practicable. The figures in the margin indicate full marks.

Section “A”

Very Short Answer Questions

Attempt all the questions. [10×2]

1. Define server-side scripting and mention its advantages in web development.
2. Explain the purpose of the ternary operator with an example.
3. What is an indexed array in PHP? Provide an example of how to declare and iterate through it.
4. Define GET and POST.
5. List different types of file opening modes used in file handling.
6. Write a PHP code snippet to fetch records from a MySQL database.
7. Discuss one benefit of using PHP frameworks in web development.
8. Explain the concept of object-oriented programming (OOP) in PHP.
9. Explain the difference between **local** and **global** variables in PHP.
10. What is the purpose of HTTPS?

Section “B”

Descriptive Answer Questions

Attempt **any five** questions. [5×10]

11. Define conditional statement and loop. Write a program to demonstrate the use of if-else, for loop and switch statements in PHP. Compare their usage.
12. Explain the concept of multi-dimensional arrays in PHP. Write a PHP program to store and display a 2D array of student marks.
13. How do you handle form submissions in PHP? Illustrate with example.
14. Define Database Management system? Write a PHP script to perform CRUD (Create, Read, Update, Delete) operations on a MySQL database. Include examples of each operation.
15. Explain the MVC architecture and its implementation in a PHP framework like Laravel. Discuss the benefits of using such a framework.
16. Discuss the steps involved in setting up a PHP development environment using XAMPP. Explain different types of operators with suitable examples.

Section “C”

Long Answer Questions

Attempt **any two** questions. [2×15]

17. Write PHP code to design the following requirements.
 - a. Create Insert form to insert details of a customer and insert the records in database. (assume database name “PU”, table name “record” and fields as required)
 - b. Display the records of the table “record” in proper order
 - c. Delete the records from database and display in proper format
 - d. Edit the records of the table “record” as per the users requirements.
(Assume remote server: <http://172.1.2.3:8080/Login> also assume your own database and form)
- Note: All module should contain the layout design*
18. Describe the process of implementing session-based authentication and authorization in PHP. Include code examples and explain how to manage user sessions securely.
19. Discuss the principles of object-oriented programming in PHP, focusing on encapsulation and inheritance. Write a program to demonstrate these principles.