Practical PHP Questions: Functions, Loops, and Array

# Loop-Based Questions

1. Write a PHP script to print the first 10 even numbers using a while loop.
2. Create a program to print a multiplication table of a number using for loop.
3. Write a script that uses a do...while loop to calculate the factorial of a number.
4. Use a loop to calculate the sum of digits of a given number in PHP.
5. Create a pyramid pattern using nested for loops in PHP.
6. Write a PHP program to reverse a number using a loop.
7. Display the Fibonacci series up to n terms using a for loop.
8. Create a program that finds all prime numbers between 1 and 100 using a loop.
9. Write a PHP script to find the largest number in an array using a foreach loop.
10. Use a loop to count the number of vowels in a string.

# Function-Based Questions

1. Write a PHP function to check whether a number is even or odd.
2. Create a function that accepts a string and returns it in reverse order.
3. Write a function that takes an array of numbers and returns the average.
4. Create a function to check whether a string is a palindrome.
5. Write a function to count the number of words in a given sentence.
6. Build a function that converts temperature from Celsius to Fahrenheit.
7. Write a recursive function to calculate the factorial of a number.
8. Create a user-defined function to check whether a year is a leap year.
9. Write a function that calculates the sum of an array using foreach.
10. Create a function that returns the nth term of the Fibonacci sequence using recursion.

# Practical PHP Array Questions

1. Write a PHP script to find the second largest number in a numeric array.
2. Create a PHP function that reverses a numeric array without using built-in functions like array\_reverse().
3. Write a program to calculate the average of elements in a numeric array.
4. Merge two numeric arrays and remove duplicate values without using array\_unique().
5. Write a PHP program that sorts an array in descending order manually (without rsort()).
6. Accept five numbers from the user in a numeric array and display only the prime numbers.
7. Rotate a numeric array to the left by two positions. For example: [1, 2, 3, 4, 5] → [3, 4, 5, 1, 2].
8. Write a PHP script that stores student names as keys and their scores as values. Find the student with the highest score.
9. Create an associative array of countries and their capitals. Display them alphabetically by country name.
10. Create an associative array with product names as keys and prices as values. Apply a 10% discount to all products and print updated prices.
11. Write a program to search a value in an associative array and display the corresponding key.
12. Store employee names as keys and departments as values. Count how many employees are in each department.
13. Store user names and ages. Display users who are above 18 years.
14. Create a 2D array to store marks of 5 students in 3 subjects. Calculate total and average for each student.
15. Represent an inventory system using a multidimensional array (product name, quantity, price). Print stock value of each product.
16. Construct a multidimensional array to represent a monthly calendar. Display all dates of Sundays in the month.
17. Store employee records (ID, Name, Department) and display details of employees in the “Sales” department.
18. Create a library record system where each book has title, author, and available copies. Find books with less than 2 copies.
19. Write a script to transpose a 3x3 matrix stored in a multidimensional array.
20. Build a timetable array for a class. Each day has subjects scheduled. Print the timetable for Wednesday.