PHP IMPOTANT QUESTIONS

1. Explain the difference b/w static and dynamic websites?

In **static websites**, *content can't be changed* after running the script. You can't change anything on the site. It is predefined.

In **dynamic websites**, *content of script can be changed at the run time*. Its content is regenerated every time a user visit or reload. Google, yahoo and every search engine is the example of dynamic website.

2. What is PHP?

PHP stands for *Hypertext Preprocessor*. It is an open source server-side scripting language which is widely used for web development. It supports many databases like MySQL, Oracle, Sybase, Solid, PostgreSQL, generic ODBC etc.

3. Is PHP a case-sensitive language?

PHP can be considered as a partial case-sensitive language. The variable names are completely case-sensitive but function names are not. Also, user-defined functions are not case-sensitive but the rest of the language is case-sensitive.

4. What is the difference between "echo" and "print" in PHP?

The main difference between echo and print in PHP are given below:

echo	print
echo can output one or more strings.	print can only output one string and it always returns 1.
echo is faster than print because it does not return any value.	print is slower compared to echo.
If you want to pass more than one parameter to echo, a parenthesis should be used.	Use of parenthesis is not required with the argument list.

5. How a variable is declared in PHP?

A PHP variable is the name of the memory location that holds data. It is temporary storage.

Example:-\$variableName=value;

6. How to do single and multi line comment in PHP?

PHP single line comment is made in two ways:

- Using //
- Using #

PHP multi-line comment is made by enclosing all lines within /* */.

7. How is a PHP script executed?

PHP scripts can be easily executed from the command-line interface (CLI). The syntax is as follows:

php filename.php

Here, **filename** refers to the file that contains scripts. The extension **.php** is needed alongside the filename.

8. What are the variable-naming rules you should follow in PHP?

There are two main rules that you have to follow when naming a variable in PHP. They are as follows:

- Variables can only begin with letters or underscores.
- Special characters such as +, %, -, &, etc. cannot be used.

What is the array in PHP?

An array is used to store multiple values in a single value. In PHP, it orders maps of pairs of keys and values. It saves the collection of the data type.

9. What are the types of arrays supported by PHP?

There are three main types of arrays that are used in PHP.

- **Indexed arrays**: These are arrays that contain numerical data. Data access and storage are linear.
- **Associative arrays**: There are arrays that contain strings for indexing elements.
- Multidimensional arrays: These are arrays that contain more than one index and dimension.

10. What are the uses of explode() and implode() functions?

explode() function is used to split a string into an array and implode() function is used to make a string by combining the array elements.

11. How to terminate or break a loop in PHP?

By using break keyword in the loop, we can terminate or break a loop anywhere in PHP.

12. What is the correct & common way to start and finish a PHP block of code?

The two most common ways to start and finish a PHP script are:

- 1. Using standard tags: <?php PHP Code here ?>
- 2. Using short tags: <? PHP Code here ?>

13. What is Open Source Software?

Open-source software is one type of software on which the original source code is made freely available to the public. This software can also be redistributed and modified by the public.

Examples:

PHP, MySQL, and WordPress are a few examples of popular Open Source Software.

14. What are the different data types in PHP?

PHP data type is an attribute that tells about the type of data needs to be stored. There are 8 data types in PHP:

- 1. Integers: are whole numbers, without a decimal point, like 2567
- 2. Doubles: are floating-point numbers, like 1.5 or 134.153
- 3. Booleans: have only two possible values either true or false
- 4. NULL: is a special type that only has one value: NULL
- 5. Strings: is a sequence of characters, like "Hello PHP!"
- 6. Arrays: stores multiple values in one single variable
- 7. Objects: instances of user-defined classes
- 8. Resources: are special variables that hold references to resources such as database calls

15. What is PHP Function?

PHP Function is a set of statements that perform a specific task. A function usually takes input arguments, perform a specific action on them and returns the result.

16. What are the form method Attribute available for submitting?

The method attribute specifies how to send form-data. "GET" and "POST" are two methods to send form data to another page.

17. How will you concatenate two strings in PHP?

To concatenate two string variables together, use the dot (.) operator.

18. PHP's numerically indexed array begins with which position?

PHP Indexed array begins with position 0.

For example: if \$array=array(15,80,67,33); Then these elements will have following positions:

\$array[0]=10 (This is beginning position 0 not 1)

\$array[1]=89

\$array[2]=34

\$array[3]=67

19. Which PHP function inserts an element to the end of an array?

PHP array push() function is used to insert one or more elements to the end of an array.

20. Why we use PHP String functions trim(), ltrim() and rtrim()?

PHP trim related functions are used to remove white spaces or other given characters from the beginning and end of the strings.

- trim() removes space & predefined characters from both sides of given string.
- ltrim() removes space & predefined characters from the left side of the sting.
- rtrim() removes space & predefined characters from the right side of the sting.

These functions are helpful when we want to clean strings from unwanted spaces or characters.

21. What PHP Function is used to find position of a string?

PHP strpos() function is used to find the first occurrence of substring in the given string.

22. What is the use of in_array() function in PHP?

The in_array() function is used to search for the given string in an array. It returns TRUE if the given string is found in the array, and FALSE otherwise.

23. Difference Between Cookies and Session

Sr. No.	Cookies	Session
1.	Cookies are client-side files that can store some data on browsers	Sessions are server-side files that can store some data on servers.
2.	We have to set cookie life (or expiration time) using PHP function setcookie() setcookie("mobile", "123", time() + (86400 * 30), "/"); In this example, Cookie Name is "mobile", Cookie Value is "123" and expiration time is: I hour after the current time (1 Hour = 86400 Seconds)	Mostly, Session Max lifetime is 1440 Seconds (24 Minutes) as defined in php.ini file. You can change it.
3.	In PHP, \$_COOKIE superglobal variable is used to get cookie data.	In PHP, \$_SESSION superglobal variable is used to set or delete the session data.
4.	You don't need any function to start Cookie as It is stored in your local machine.	Before using \$_SESSION, you have to call session_start(); This function will start the session and then, you can access \$_SESSION data on that page.
5.	Most browser's maximum Cookie size is 4KB (4096 Bytes)	You can store as much data as you like within in sessions. The only limits you can reach is the maximum memory a script can consume at one time, which by default is 128MB.
6.	You can delete a cookie by providing any past date in expiration time parameter, It will automatically delete the cookie. There is no separate function to unset cookie.	PHP functionsession_destroy() is used to destroy all data stored to a session, and if you want to unset a particular session variable then you can use PHP unset() function. Example: unset(\$_SESSION["name"])
7.	Cookie ends depends on the lifetime you set for it.	Session ends when user close his browser.

24. How to find String Length in PHP?

The PHP strlen() function returns the length of a string. String length count will include space & special characters as well.

25. How can we create a session in php?

PHP session is a way to store information to be used across multiple pages. A session is started with the session_start() function. Session data is stored in the PHP global variable: \$_SESSION.

26. How can you pass a variable by reference in PHP?

By using an ampersand (&) sign in-front of the variable, we can pass the variable by reference.

27. Why or when to use variable by reference?

When PHP function arguments are passed by value, and value is changed within function, it does not change variable value outside the function. To allow a function to modify its argument value outside the function, they must be passed by reference.

28. What is the difference between == and === Operators in PHP?

PHP equal operator (==) and idential operator (===) are Relational or Comparison Operators in PHP language.

The only difference is that === operator matches the values along with Data types.

While == operator only match values but not Data types.

29. Is multiple inheritance supported in PHP?

PHP supports only single inheritance; it means that a class can be extended from only one single class using the keyword 'extended'.

30. What is the meaning of a final class and a final method?

'final' is introduced in PHP5. Final class means that this class cannot be extended and a final method cannot be overridden.

31. What is needed to be able to use image function?

GD library is needed to execute image functions. Image work includes rotating images, cropping an image, creating image thumbnail, etc.

32. What is the function file_get_contents() useful for?

file_get_contents() lets reading a file and storing it in a string variable.

33. How can we connect to a MySQL database from a PHP script?

To be able to connect to a MySQL database, we must use mysqli_connect() function as follows:

```
<?php
$database = mysqli_connect("HOST", "USER_NAME", "PASSWORD");
mysqli_select_db($database,"DATABASE_NAME");
?>
```

34. How be the result set of Mysql handled in PHP?

The result set can be handled using mysqli_fetch_array, mysqli_fetch_assoc, mysqli_fetch_object or mysqli_fetch_row.

35. How is it possible to know the number of rows returned in the result set?

The function mysqli_num_rows() returns the number of rows in a result set.

36. What is the difference between mysqli_fetch_object() and mysqli_fetch_array()?

The mysqli_fetch_object() function collects the first single matching record where mysqli_fetch_array() collects all matching records from the table in an array.

37. How can we access the data sent through the URL with the POST method?

To access the data sent this way, you use the \$_POST array.

Imagine you have a form field called 'var' on the form when the user clicks submit to the post form, you can then access the value like this:

\$_POST["var"];

38. How do I check if a given variable is empty?

If we want to check whether a variable has a value or not, it is possible to use the empty() function.

39. What does the unlink() function mean?

The unlink() function is dedicated for file system handling. It simply deletes the file given as entry.

40. How is the ternary conditional operator used in PHP?

It is composed of three expressions: a condition, and two operands describing what instruction should be performed when the specified condition is true or false as follows:

Condition ? Expression_2 : Expression_3;

41. What does \$_FILES means?

\$_FILES is an associative array composed of items sent to the current script via the HTTP POST method

42. What does \$_COOKIE mean?

\$_COOKIE is an associative array of variables sent to the current PHP script using the HTTP Cookies.

43. what is the difference between for and foreach?

for is expressed as follows: for (expr1; expr2; expr3)

statement

The first expression is executed once at the beginning. In each iteration, expr2 is evaluated. If it is TRUE, the loop continues, and the statements inside for are executed. If it evaluates to FALSE, the execution of the loop ends. expr3 is tested at the end of each iteration.

However, foreach provides an easy way to iterate over arrays, and it is only used with arrays and objects.

44. Is it possible to destroy a cookie?

Yes, it is possible by setting the cookie with a past expiration time.

45. Explain how we handle exceptions in PHP?

When an exception is thrown, code following the statement will not be executed, and PHP will attempt to find the first matching catch block. If an exception is not caught, a PHP Fatal Error will be issued with an "Uncaught Exception". An exception can be thrown, and caught within PHP.

To handle exceptions, code may be surrounded in a try block. Each try must have at least one corresponding catch block. Multiple catch blocks can be used to catch different classes of exceptions. Exceptions can be thrown (or re-thrown) within a catch block.

46. Explain what the different PHP errors are

- A notice is a non-critical error saying something went wrong in execution, something minor like an undefined variable.
- A warning is given when a more critical error like if an include() command went to retrieve a non-existent file. In both this and the error above, the script would continue.
- A fatal error would terminate the code. Failure to satisfy a require() would generate this type of error, for example.

47. Differentiate between exception and error

- Recovering from Error is not possible. The only solution to errors is to terminate the execution. Where as you can recover from Exception by using either try-catch blocks or throwing exception back to caller.
- You will not be able to handle the Errors using try-catch blocks. Even if you handle them using try-catch blocks, your application will not recover if they happen. On the other hand, Exceptions can be handled using try-catch blocks and can make program flow normal if they happen.
- Exceptions are related to application where as Errors are related to environment in which application is running.

48. Differentiate between parameterised and non parameterised functions

- Non parameterised functions don't take any parameter at the time of calling.
- Parameterised functions take one or more arguments while calling. These are used at run time of the program when output depends on dynamic values given at run time There are two ways to access the parameterised function:
- 1. *call by value*: (here we pass the value directly)
- 2. *call by reference*: (here we pass the address location where the value is stored)

49. What is the use of count() function in PHP?

The PHP count() function is used to count total elements in the array, or something an object.

50. What is the difference between indexed and associative array?

The indexed array holds elements in an indexed form which is represented by number starting from 0 and incremented by 1. For example:

```
$season=array("summer","winter","spring","autumn");
```

The associative array holds elements with name. For example:

```
$salary=array("Sonoo"=>"350000","John"=>"450000","Kartik"=>"200000");
```

51. What are the ways to include file in PHP?

PHP allows you to include file so that page content can be reused again. There are two ways to add the file in PHP.

- 1. include
- 2. require

52. Differentiate between require and include?

Require and include both are used to include a file, but if data is not found *include sends* warning whereas require sends Fatal error.

53. What is PHP session_start() and session_destroy() function?

PHP session_start() function is used to start the session. It starts new or resumes the current session. It returns the current session if the session is created already. If the session is not available, it creates and returns new sessions.

54. How to read a file in PHP?

PHP provides various functions to read data from the file. Different functions allow you to read all file data, read data line by line, and read data character by character.

PHP file read functions are given below:

- fread() is used to read data of the file. It requires two arguments: file resource and file size.
- fgets() is used to read single line from the file.
- fgetc() is used to read single character from the file.

55. How to write in a file in PHP?

PHP fwrite() and fputs() functions are used to write data into file. To write data into a file, you need to use w, r+, w+, x, x+, c or c+ mode.

56. How can we create a database using PHP and MySQL?

The necessary steps to create a MySQL database using PHP are:

- Establish a connection to MySQL server from your PHP script.
- If the connection is successful, write a SQL query to create a database and store it in a string variable.
- Execute the query.