Creative Design and multimedia institute

Laravel interview Question

1. Differentiate between static and dynamic websites.

Static Website	Dynamic Website
The content cannot be manipulated after the script is executed	The content can be changed even at the runtime
No way to change the content as it is predefined	The content can be changed easily by manipulation and reloading

2. What is PHP most used for?

➢ PHP has a plethora of uses for developers. Following are some of the most widely used concepts that PHP offers:With PHP, it becomes very easy to provide restricted access to the required content of the website.

➢ It allows users to access individual cookies and set them as per requirement.

➢ Database manipulation operations, such as addition, deletion, and modification, can be done easily.

➢ Form handling, alongside features that involve file handling concepts and email integration, is used widely.

➢ The system module allows users to perform a variety of system functions such as open, read, write, etc.

3. Is PHP a case-sensitive scripting language?

➢ The answer to this is both yes and no. Variables and their declaration in PHP are completely case sensitive while function names are not.

➢ For example, user-defined functions in PHP can be defined in uppercase but later referred to in lowercase, and it would still function normally.

➢ Next up on these PHP interview questions for freshers, you need to understand what PEAR is.

4. What is the meaning of PEAR in PHP?

➢ PEAR stands for PHP Extension and Application Repository.

➢ It is one of the frameworks and acting repositories that host all of the reusable PHP components. Alongside containing some of the PHP libraries, it also provides you with a simple interface in PHP to automatically install packages.

5. How is a PHP script executed?

➢ PHP scripts can be easily executed from the command-line interface (CLI).

➢ The syntax is as follows:
  o php filename.php

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

6. What are the types of variables present in PHP?

➢ There are eight primary data types in PHP as shown below:
  o **Array**: A named and ordered collection of data

- o **Boolean**: A logical value (True or False)
- o **Double**: Floating point numbers such as 5.1525
- o **Integer**: Whole numbers without a floating point
- o **Object**: An instance of classes, containing data and functions
- o **NULL**: A special data type, supporting only the NULL data
- o **Resource**: Special variables that hold references to external resources
- o **String**: A sequence of characters such as, "Hello learners!"

7. 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.
  - o **They are as follows:**
    - ▪ Variables can only begin with letters or underscores.
    - ▪ Special characters such as +, %, -, &, etc. cannot be used.

8. What are the main characteristics of a PHP variable?

- ➢ Following are some of the most important aspects of the usage of variables in PHP:
- ➢ Variables can be declared before the value assignment.
- ➢ A variable value assignment happens using the '=' operator.
- ➢ Every variable in PHP is denoted with a $ (dollar) sign.
- ➢ The value of a variable depends on its latest assigned value.
- ➢ PHP variables are not intrinsic. There is no explicit declaration.

9. What is NULL in PHP?

- ➢ NULL is a special data type in PHP used to denote the presence of only one value, NULL. You cannot assign any other value to it.

10. How are constants defined in PHP?

- ➢ Constants can be defined easily in PHP by making use of the define() function.
- ➢ This function is used to define and pull out the values of the constants easily.
- ➢ Constants, as the name suggests, cannot be changed after definition. They do not require the PHP syntax of starting with the conventional $ sign.

11. What is the use of the constant() function in PHP?

- ➢ The constant() function is used to retrieve the values predefined in a constant variable.
- ➢ It is used especially when you do not know the name of the variable.

12. What are the various constants predefined in PHP?

- ➢ PHP consists of many constants, and following are some of the widely used ones:
  - o _METHOD_: Represents the class name
  - o _CLASS_: Returns the class name
  - o _FUNCTION_: Denotes the function name
  - o _LINE_: Denotes the working line number
  - o _FILE_: Represents the path and the file name

13. Differentiate between variables and constants in PHP.

Variable	Constant
Variables can have changed paths	Constants cannot be changed
The default scope is the current access scope	Constants can be accessed throughout without any scoping rules
The $ assignment is used for definition	Constants are defined using the define() function
Compulsory usage of the $ sign at the start	No need for the $ sign for constants

14. Differentiate between PHP4 and PHP5.

PHP4	PHP5
No support for static methods	Allows the usage of static methods
Abstract classes cannot be declared	Abstract classes can be declared
The method of call-by-value is used	The method of call-by-reference is used
Constructors can have class names	Constructors have separate names

15. How are two objects compared in PHP?

- PHP provides you with the '==' operator, which is used to compare two objects at a time.
- This is used to check if there is a common presence of attributes and values between the objects in comparison.
- The '===' operator is also used to compare if both objects in consideration are referencing to the same class.
- Next up on these PHP interview questions, you need to understand a fundamental concept.

16 What is the correct and the most two common way to start and finish a PHP block of code?

- <?php [--- PHP code----] ?> and <? [--- PHP code ---] ?>

17. What is the meaning of break and continue statements in PHP?

- Break: This statement is used in a looping construct to terminate the execution of the iteration and to immediately execute the next snippet of code outside the block of the looping construct.
- Continue: This statement is used to skip the current iteration of the loop and continue to execute the next iteration until the looping construct is exited.

18. What are some of the popular frameworks in PHP?

- There are many frameworks in PHP that are known for their usage. Following are some of them:
  - CodeIgniter
  - CakePHP
  - Laravel
  - Zend
  - Phalcon

19. What is the use of the final class and the final method in PHP?

➢ The 'final' keyword, if present in a declaration, denotes that the current method does not support overriding by other classes. This is used when there is a requirement to create an immutable class.

20. How does JavaScript interact with PHP?

➢ JavaScript is a client-side programming language, while PHP is a server-side scripting language.
➢ PHP has the ability to generate JavaScript variables, and this can be executed easily in the browser, thereby making it possible to pass variables to PHP using a simple URL.

21. Does PHP interact with HTML?

➢ Yes, HTML and PHP interaction is the core of what makes PHP what it is.
➢ PHP scripts have the ability to generate HTML mode and move around information very easily.
➢ PHP is a server-side scripting language, while HTML is a client-side language.
➢ This interaction helps bridge the gaps and use the best of both languages.

22. 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.

23. How does the 'foreach' loop work in PHP?

➢ The foreach statement is a looping construct used in PHP to iterate and loop through the array data type.
➢ The working of foreach is simple; with every single pass of the value, elements get assigned a value and pointers are incremented.
➢ This process is repeated until the end of the array.

24. Differentiate between require() and require_once() functions.

require()	require_once()
The inclusion and evaluation of files	Includes files if they are not included before
Preferred for files with fewer functions	Preferred when there are a lot of functions

25. What are the data types present in PHP?
PHP supports three types of data handling, and they are as shown in the following table:

Scalar Data Types	Compound Data Types	Special Data Types
● Boolean	● Array	● NULL
● Integer<>	● Object	● Resource
● Float		
● String		

26. How can a text be printed using PHP?

➢ A text can be output onto the working environment using the following methods:
  o **Echo " Statement"   Print(' statement ')**

27. Is it possible to set infinite execution time in PHP?

➢ Yes, it is possible to have an infinite execution time in PHP for a script by adding the set_time_limit(0) function to the beginning of a script.
➢ This can also be executed in the php.ini file if not at the beginning of the script.

28. What is the use of constructors and destructors in PHP?

➢ Constructors are used in PHP as they allow you to pass parameters when creating a new object easily. This is used to initialize the variables for the particular object in consideration.
➢ Destructors are methods used to destroy an object. Both of these are special methods provided in PHP for you to perform complex procedures using a single step.

29. What are some of the top Content Management Systems (CMS) used in PHP?

➢ There are many CMS that are used in PHP. The popular ones are as mentioned below:
  o WordPress
  o Joomla
  o Magneto
  o Drupal

30. How are comments used in PHP?

➢ There are two ways to use comments in PHP. They are single-line comments and multi-line comments.
➢ Single-line comments can be used using the conventional '#' sign.

31. What is the most used method for hashing passwords in PHP?

➢ The crypt() function is widely used for this functionality as it provides a large amount of hashing algorithms that can be used. These algorithms include md5 sha1 or sha256.

32. Differentiate between an indexed array and an associative array.

➢ Indexed arrays have elements that contain a numerical index value.
  o Example: $color=array("red","green","blue");
  o Here, red is at index 0, green at 1, and blue at 2.
  o Associative arrays, on the other hand, hold elements with string indices as shown below:
  o Example: $salary=array("Jacob"=>"20000","John"=>"44000","Josh"=>"60000");

33. What is the difference between ASP.NET and PHP?

ASP.NET	PHP
A programming framework	A scripting language
Compiled and executed	Interpreted mode of execution
Designed for use on Windows	Platform independent

34. What are sessions and cookies in PHP?

➢ Sessions are global variables that are stored on the server in the architecture. Every single session is tagged with a unique server ID that is later used to work with the storage and retrieval of values.

➢ Cookies are entities used to identify unique users in the architecture. It is a small file that the server plants into the client system. This is done to get useful information from the client for the development of various aspects of the server.

➢ Next up on this top PHP interview questions and answers blog, let us take a look at the advanced questions.

35. Is typecasting supported in PHP?

➢ Yes, typecasting is supported by PHP and can be done very easily. Following are the types that can be cast in PHP:

- o (int), (integer): Cast to integer
- o (bool), (boolean): Cast to boolean
- o (float), (double), (real): Cast to float
- o (string): Cast to string
- o (array): Cast to array
- o (object): Cast to object

36. Can a form be submitted in PHP without making use of a submit button?

➢ Yes, a form can be submitted without the explicit use of a button. This is done by making use of the JavaScript submit() function easily.

➢ Next up on this PHP developer interview questions, it is vital that you know about PHP in detail. Read on.

37. Does PHP support variable length argument functions?

➢ Yes, PHP supports the use of variable-length argument functions.

➢ This simply means that you can pass any number of arguments to a function.

➢ The syntax simply involves using three dots before the argument name as shown in the following **example:**

```php
<?php
function add(...$num)
{
$sum = 0;
    foreach ($num as $n)
    {
        $sum += $n;
    }
    return $sum;
}
echo add(5, 6, 7, 8);
?>
```

Output: 26

38. What is the use of session_start() and session_destroy() functions?

- ➤ In PHP, the session_start() function is used to start a new session.
- ➤ However, it can also resume an existing session if it is stopped.
- ➤ In this case, the return will be the current session if resumed.

Syntax:

session_start();

The session_destroy() function is mostly used to destroy all of the session variables as shown below:

```php
<?php
        session_start();
        session_destroy();
?>
```

39 What is the full form of PHP?

- ➤ The full form of PHP is Hypertext Preprocessor.
- ➤ It was abbreviated previously as Personal Home Page.
- ➤ It is a programming language widely used to build web applications or websites.
- ➤ It is the server-side scripting language encoded with HTML to develop Dynamic website, Static website or Web applications.

40. What are the different types of PHP errors?

- ➤ There are three main types of errors in PHP. They are as follows:
    - ○ Notice: A notice is a non-critical error that is not displayed to the user.
    - ○ Warning: A warning is an error that is displayed to the user while the script is running.
    - ○ Fatal error: This is the most critical type of error. A fatal error will cause immediate termination of the script.

41. How can you get the IP address of a client in PHP?

- ➤ The IP address of a client, who is connected, can be obtained easily in PHP by making use of the following syntax:
    - ○ $_SERVER["REMOTE_ADDR"];

42. What is the use of $message and $$message in PHP?

- ➤ Both $message and $$message are variables in PHP.
- ➤ The difference lies in the name. While $message is a variable with a fixed name, $$message is a variable with a name that is actually stored in $message.
    - ○ Consider the following example:
        - ▪ If $message consists of 'var', then $$message is nothing but '$var'.

43. Differentiate between GET and POST methods in PHP.

GET Method	POST Method
The GET method can only send a maximum of 1024 characters simultaneously	There is no restriction on the data size
GET does not support sending binary data	POST supports binary data as well as ASCII
QUERY_STRING env variable is used to access the data that is sent	The HTTP protocol and the header are used to push the data
The $_GET associative array is used to access the sent information	The $_POST associative array is used to access the sent information here

44. What is the use of lambda functions in PHP?

> Being an anonymous function, the lambda function is used to first store data into a variable and then to pass it as arguments for the usage in other methods or functions.
>> o   Consider the following example:
>>> ▪ $input = array(2, 5, 10);
>>> ▪ $output = array_filter($input, function ($x) { return $x > 2; });
>>> ▪   The lambda function definition here:
>>> ▪   function ($x) { return $x > 2; });

> This is used further to store data into a variable, and then you can use it when required without the requirement of defining it again.

45. Differentiate between compile-time exception and runtime exception in PHP.

> As the name suggests, if there is an occurrence of any sort of exception while the script is being compiled, it is called a compile-time exception. The FileNotFoundException is a good example of a compile-time exception.
> An exception that interrupts the script while running is called a runtime exception. The ArrayIndexOutOfBoundException is an example of a runtime exception.

46. What is the meaning of type hinting in PHP?

> Type hinting is used in PHP when there is a requirement to explicitly define the data type of an argument when passing it through a function.
> When this function is first called, PHP will run a quick check to analyze the presence of all the data types that are specified. If it is different, then the runtime will stop as an exception will be raised.
> Next up on these core PHP interview questions, you have to understand to connect a URL with PHP.

47. How is a URL connected to PHP?

> Any URL can be connected to PHP easily by making use of the library called cURL. This comes as a default library with the standard installation of PHP.
> The term 'cURL' stands for client-side URL, allowing users to connect to a URL and pick up information from that page to display.

48. What are the steps to create a new database using MySQL and PHP?

- There are four basic steps that are used to create a new MySQL database in PHP. They are as follows:
- First, a connection is established to the MySQL server using the PHP script.
- Second, the connection is validated. If the connection is successful, then you can write a sample query to verify.
- Queries that create the database are input and later stored into a string variable.
- Then, the created queries are executed one after the other.

49. How does string concatenation work in PHP?

- String concatenation is done easily in PHP by making use of the dot(.) operator. Consider the following example:

    <?php $string1="Welcome"; $string2="to Intellipaat"; echo $string1 . " " . $string2; ?>
    Output: **Welcome to Intellipaat**

50. How can we encrypt a password using PHP?

- The crypt () function is used to create one-way encryption. It takes one input string and one optional parameter. The function is defined as:

    crypt (input_string, salt)

- where input_string consists of the string that has to be encrypted and salt is an optional parameter. PHP uses DES for encryption. The format is as follows:

51. What is htaccess? Why do we use it and where?

- The .htaccess files are configuration files of Apache Server that provide a way to make configuration changes on a per-directory basis. A file, containing one or more configuration directives, is placed in a particular document directory; the directives apply to that directory and all subdirectories thereof.
- These .htaccess files are used to change the functionality and features of the Apache web server.
    - For instance:
        - The .htaccess file is used for URL rewrite.
        - It is used to make the site password-protected.
        - It can restrict some IP addresses so that on these restricted IP addresses, the site will not open.

52. What are magic methods?

- Magic methods are member functions that are available to all the instances of a class. Magic methods always start with '__', for example, __construct(). All magic methods need to be declared as public.
- To use a method, it should be defined within the class or the program scope. Various magic methods used in PHP5 are:
    - __construct()
    - __destruct()
    - __set()
    - __get()
    - __call()
    - __toString()
    - __sleep()

- ▪ __wakeup()
- ▪ __isset()
- ▪ __unset()
- ▪ __autoload()
- ▪ __clone()

53. What is meant by PEAR in PHP?

➢ PEAR is an acronym for PHP Extension and Application Repository. The purpose of PEAR is to provide:
- o A structured library of open-sourced code for PHP users
- o A system for code distribution and package maintenance
- o A standard style for writing code in PHP
- o PHP Foundation Classes (PFC)
- o PHP Extension Community Library (PECL)
- o A website, mailing lists, and download mirrors to support the PHP/PEAR community

54.How is it possible to set an infinite execution time for PHP script?

➢ The set_time_limit(0) added at the beginning of a script sets to infinite the time of execution to not have the PHP error 'maximum execution time exceeded.' It is also possible to specify this in the php.ini file.

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

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

56.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:
- o <!--?php $database = mysqli_connect("HOST", "USER_NAME", "PASSWORD"); mysqli_select_db($database,"DATABASE_NAME"); ?-->

57.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.

58.Which function gives us the number of affected entries by a query?

➢ mysqli_affected_rows() return the number of entries affected by an SQL query.

59.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.

60.How can we access the data sent through the URL with the GET method?

➢ To access the data sent via the GET method, we use $_GET array like this:
- o www.url.com?var=value
- o $variable = $_GET["var"]; this will now contain 'value'

61.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.
  o 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"];

62. How can we check the value of a given variable is a number?

➢ It is possible to use the dedicated function, is_numeric() to check whether it is a number or not.

63. How can we check the value of a given variable is alphanumeric?

➢ It is possible to use the dedicated function, ctype_alnum to check whether it is an alphanumeric value or not.

64. 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.

65. What does the unlink() function mean?

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

66. What does the unset() function mean?

➢ The unset() function is dedicated for variable management. It will make a variable undefined.

67. What is the function func_num_args() used for?

➢ The function func_num_args() is used to give the number of parameters passed into a function.

68. what is the definition of a session?

➢ A session is a logical object enabling us to preserve temporary data across multiple PHP pages.

69. What is the difference between session_unregister() and session_unset()?

➢ The session_unregister() function unregister a global variable from the current session and the session_unset() function frees all session variables.

70. What does $GLOBALS mean?

➢ $GLOBALS is associative array including references to all variables which are currently defined in the global scope of the script.

71. What does $_SERVER mean?

➢ $_SERVER is an array including information created by the web server such as paths, headers, and script locations

72. What does $_FILES means?

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

73. What is the difference between $_FILES['userfile']['name'] and $_FILES['userfile']['tmp_name']?

➢ $_FILES['userfile']['name'] represents the original name of the file on the client machine,
➢ $_FILES['userfile']['tmp_name'] represents the temporary filename of the file stored on the server.

74. What does the array operator '===' means?

> $a === $b TRUE if $a and $b have the same key/value pairs in the same order and of the same types.

75.What is the differences between $a != $b and $a !== $b?

> != means inequality (TRUE if $a is not equal to $b) and !== means non-identity (TRUE if $a is not identical to $b).

76.What is the goto statement useful for?

> The goto statement can be placed to enable jumping inside the PHP program. The target is pointed by a label followed by a colon, and the instruction is specified as a goto statement followed by the desired target label.

77.How can we determine whether a variable is set?

> The boolean function isset determines if a variable is set and is not NULL.

78.What is the difference between the functions strstr() and stristr()?

> The string function strstr(string allString, string occ) returns part of allString from the first occurrence of occ to the end of allString. This function is case-sensitive. stristr() is identical to strstr() except that it is case insensitive.

79.Is it possible to extend the execution time of a PHP script?

> The use of the set_time_limit(int seconds) enables us to extend the execution time of a PHP script. The default limit is 30 seconds.

80.Is it possible to destroy a cookie?

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

81.What is the default session time in PHP?

> The default session time in php is until the closing of the browser

82.What are the common uses of PHP?

> It performs system functions, i.e. from files on a system it can create, open, read, write, and close them.
> It can handle forms, i.e. gather data from files, save data to a file, through email you can send data, return data to the user.
> You can add, delete, modify elements within your database with the help of PHP.
> Access cookies variables and set cookies.
> Using PHP, you can restrict users to access some pages of your website and also encrypt data.

83.What are constructor and destructor in PHP?

> PHP constructor and destructor are special type functions which are automatically called when a PHP class object is created and destroyed.
> The constructor is the most useful of the two because it allows you to send parameters along when creating a new object, which can then be used to initialize variables on the object.

84.What is the main difference between require() and require_once()?

➢ The require() includes and evaluates a specific file, while require_once() does that only if it has not been included before.

➢ The require_once() statement can be used to include a php file in another one, when you may need to include the called file more than once. So, require_once() is recommended to use when you want to include a file where you have a lot of functions.

85. What is the difference between single quoted string and double quoted string?

➢ Singly quoted strings are treated almost literally, whereas doubly quoted strings replace variables with their values as well as specially interpreting certain character sequences. For example –

```php
<?php
$variable = "name";
$statement = 'My $variable will not print!n';
print($statement);
print " ";
$statement = "My $variable will print!n"
print($statement);
?>
```
It will give the following output–
My $variable will not print!
My name will print

86. How is it possible to set an infinite execution time for PHP script?

➢ The set_time_limit(0) added at the beginning of a script sets to infinite the time of execution to not have the PHP error 'maximum execution time exceeded.' It is also possible to specify this in the php.ini file.

87. What is overloading and overriding in PHP?

➢ Overloading is defining functions that have similar signatures, yet have different parameters. Overriding is only pertinent to derived classes, where the parent class has defined a method and the derived class wishes to override that method. In PHP, you can only overload methods using the magic method __call.