IDB-BISEW IT Scholarship Project

**WPSI Round -39**PHP Descriptive Question and Answer

# Chapter 1-3

1. **What is phpinfo() function?**

Ans: Executing the phpinfo() function is a great way to learn about your PHP installation, as it offers extensive  
information regarding the server, operating system environment, and available extensions.

1. **What are the general language features of php?**

Practicality: It requires minimum of knowledge of programming.

Power: It has the ability to interface with databases, from and create pages dynamically.

Possibility: It rarely bound to any single implementation solution.

Price: It is free of charge.

1. **Who is the developer of php and when it is fasts developed?**

Ans: Rasmus Lerdorf is the developer of php and it is fasts developed in 1995.

# **Write some of PHP benefits compare to other language?**

PHP runs on different platforms (Windows, Linux, Unix, etc.) - PHP is compatible with almost all servers used today (Apache, IIS, etc.) - PHP is FREE to download from the official PHP resource: www.php.net - PHP is easy to learn and runs efficiently on the server side

# **What is a PHP File?**

PHP files may contain text, HTML tags and scripts - PHP files are returned to the browser as plain HTML - PHP files have a file extension of ".php", ".php3", or ".phtml"

1. **What are the four configuration Directive scopes?**

Ans:PHP\_INI\_PERDIR, PHP\_INI\_USER, PHP\_INI\_SYSTEM, PHP\_INI\_ALL.

1. **What are the configurations files of php and apache?**

Ans:

PHP: php.ini.

Apache: apache.httpd.conf and .htaccess.

1. **Between echo () and print () functions which one is the faster and why?**

Between echo () and print () there are technical difference. Echo () function is a tad faster because it returns nothing, whereas print () will return 1 if the statement is successfully output.

1. **What are type casting and juggling?**

Type casting: Converting values from one data type to another is known as type casting.

Type Juggling: Automatic conversion is known as type juggling.

1. **What is constant? How can you declare a constant?**

A constant is a value that cannot be modified throughout the execution of a program. Constants are particularly useful when working with values that definitely will not require modification.

Constant are declared by using define () function.

1. **Difference between get and post method?**

get method is used for submitting small amount of data. Data shows in the URL, so it is not secure.

post method is used for submitting small amount of data. Data does not show URL, so it is secure.

1. **What is super global variable? Write name of some superglobal variable?**

PHP offers a number of useful predefined variables that are accessible from anywhere within the

executing script and provide us with a substantial amount of environment-specific information.

Some example: HTTP\_HOST, HTTP\_USER\_AGENT, HTTP\_ACCEPT, HTTP\_ACCEPT\_LANGUAGE.

1. **What is the difference between print and printf?**

print statement output data passed to it.

Print(“I like PHP”);

The printf() statement is ideal when we want to output a blend of static text and dynamic information stored within one or several variables.

printf("Bar inventory: %d bottles of tonic water.", 100);

1. **Write the name of 9 Superglobal Variables**
2. $\_GET[ ],
3. $\_POST[ ],
4. $\_REQUEST[ ],
5. $\_SERVER[ ],
6. $\_SESSION[ ],
7. $GLOBAL[ ],
8. $\_COOKE[ ],
9. $\_FILES[ ],
10. $\_ENV[ ]
11. **Which functions are used to add file in a script?**

The functions are used to add file in a script

i) include()

ii) include\_once()

iii) require()

iv) require\_once()

# Chapter 4: Functions

1. **What are passing arguments by reference and passing arguments by value?**

When the value of the function argument is passed by direct value or simple variable is called passing arguments by value and when the value of the function argument is passed by reference variable is called passing argument by reference.

**Passing arguments by value:** Means any changes made to those values within the scope of the function are ignored outside of the function.

**Passing arguments by reference:** Means any changes made to those values within the scope of the function are reflected outside of the function.

1. **What is recursive function?**

***Ans***: A recursive function is a function that calls itself during its execution. This enables the function to repeat itself several times, outputting the result and the end of each iteration. Below is an example of a recursive function.

Function Count (integer N)   
    if (N <= 0) return "Must be a Positive Integer";  
    if (N > 9) return "Counting Completed";  
    else return Count (N+1);  
end function

1. **What is nesting function and recursive function?**

**Ans : -** We define a function within another function it does not exist until the parent function is executed is known **nesting function**.

**Recursive functions**, or functions that call themselves, offer considerable practical value to the programmer and are used to divide an otherwise complex problem into a simple case, reiterating that case until the problem is resolved

# Chapter 5: Arrays

1. What Is an Array? How to output an array?

**Ans : -** An array is traditionally defined as a group of items that share certain characteristics.

Such as:-

$divisions = array (" Dhaka ", "Khulna " , "Rajshahi" );

1. **Discuss the list function.**

**Ans : -** The list() function is used to assign values to a list of variables in one operation.

<?php  
$my\_array = array("Dog","Cat","Horse");  
list($a, $b, $c) = $my\_array;  
echo $a, $b, $c;  
?>

1. Discuss array\_push, array\_pop, array\_shift, array\_unshift, array\_pad.

**Ans : -**

**array\_push ()** — Push one or more elements onto the end of array. Such as: -

$stack = array ("orange", "banana");  
 array\_push($stack, "apple", "raspberry");  
 print\_r($stack);

**array\_pop()** pops and returns the last value of the array.

**array\_shift()** shifts the first value of the array off and returns it. Such as : -

$states = array("Ohio", "New York", "California", "Texas"); $state = array\_shift($states);

**array\_unshift()** prepends passed elements to the front of the array .Such as : -

$queue = array("orange", "banana");  
array\_unshift($queue, "apple", "raspberry");  
print\_r($queue);

**array\_pad()** returns a copy of the array padded to size specified by size with value .

1. Discuss in\_array, array\_values, array\_search, count.

**Ans: The in\_array()** function searches an array for a specific value, returning TRUE if the value is found and FALSE otherwise

$state = "Ohio"; $states = array("California", "Hawaii", "Ohio", "New York"); if(in\_array($state, $states)) echo "Not to worry, $state is smoke-free!";

**array\_values()** returns all the values from the array and indexes the array numerically. Such as :-

$population = array("Ohio" => "11,421,267", "Iowa" => "2,936,760"); print\_r(array\_values($population)); // Array ( [0] => 11,421,267 [1] => 2,936,760 ) .

**array\_search ()** function searches an array for a specified value, returning its key if located and FALSE otherwise . such as :-

$array = array(0 => 'blue', 1 => 'red', 2 => 'green', 3 => 'red');  
$key = array\_search('green', $array); // $key = 2;.

**count** — The count() function returns the total number of values found in an array . Such as : -

$garden = array("cabbage", "peppers", "turnips", "carrots"); echo count($garden);   
This returns the following. // 4

1. **What are the types of key of array?**

Keys can be numerical or associative. Numerical key use numeric value and associative key use string value.

There are two types of key of array. It can be numerical and associative.

Numerical: It stores each array element with numeric index name.

Associative: It contains characteristic element or string index name.

1. **Which functions are used to add and remove array elements?**

There are four functions used to add to and remove from array elements. These are-

* 1. array\_unshift():function adds element to the front of the array.
  2. array\_push(): function adds element to the end of an array.
  3. array\_shift(): function removes and returns the first item found in an array.
  4. array\_pop():function removes and returns the last element from an array.

1. **What is the difference between sizeof($array) and count($array)?**

sizeof($array) - This function is an alias of count() count($array) - If you just pass a simple variable instead of an array it will return

1. **What are the different functions in sorting an array? Discuss them?**

array\_reverse(): reverses an array’s element order.

array\_flip(): reverses the roles of the keys and their corresponding values.

sort(): sorts an array, ordering elements from lowest to highest value.

rsort(): sorts array items in reverse (descending) order.

asort() : sorting an array in ascending order, except that the key/value correspondence is maintained.

arsort(): it sorts the array in reverse order maintained key/value co-relation.

1. **Why substr() is used?**

The substr() function returns the part of a string located between a predefined starting offset and length positions.

1. **Difference between array\_merge() and array\_slice()?**

Array\_merge():The array\_merge() function merges arrays together, returning a single, unified array.

Array\_slice(): The array\_slice() function returns a section of an array based on a starting and ending offset value.

# Chapter 6-7: Object Oriented PHP

1. **What is OOP?**

**Object-oriented programming is a style of coding that allows developers to group similar tasks into classes. This helps keep code following the tenet "don't repeat yourself" (DRY) and easy-to-maintain.**

1. **What are class and object?**

Class: Classes are intended to represent those real-life items that coder like to manipulate within an application.

Object: An instance of class is called object. Such as $employee = new Employee();

Classes are intended to represent those real-life items that coder like to manipulate within an application.

1. **What is property overloading?**

Property overloading continues to protect properties by forcing access and manipulation through public methods, yet allowing the data to be accessed as if it were a public property.

1. **What are constructor and destructor?**

**Ans. Constructor**: A constructor is defined as a block of codes that automatically executes at the time of objects instantiation.

**Destructors**: When the script is complete, PHP will destroy any object that resides in memory. Destructor modifies the object destruction process. If less volatile data is created as a result of the instantiation and should be destroyed at the time of object destruction. We will need to create a custom destructor.

1. **What are the advantages of object-oriented programming?**

Ans: Object-oriented programming advantages are:

a) Simplicity, d) extensibility

b) Modifiability e) catch errors at compile time rather than at runtime

c) Re-usability f) reduce large problems to smaller.

1. **What is Encapsulation?**

Ans: The practice of separating the user from the true inner workings of an application through well-known interfaces is known as Encapsulation.

1. What is Polymorphism?

Ans: Polymorphism of the following term originates from the Greek language that means “having multiple forms,” defines OOP’s ability to redefine, a class’s characteristics.

1. **What is object cloning?**

**Ans. Clone**: O**bject cloning** means creating a copy of an object with fully replicated properties

$classA = new CloneableClass();

$classB = clone $classA;

1. **What type of inheritance that PHP supports?**

Inheritance is one of the popularly used Object Oriented Programming feature to have shared properties and functions between related classes. PHP generally supports single type of inheritance.

1. **What are the abstract class and interface?**

Abstract class: An abstract class is class that really isn’t supposed to ever be instantiated but instead serves as a base class to be inherited by other classes.

Interface: An interface defines a general specification for implementing a particular service, declaring the required functions and constants without specifying exactly how it must be implemented.

# Chapter 8: Error and Exception Handling

1. **Define exceptions?**

In programming, often involves unforeseen happenings that disrupt the flow of events. These unexpected happenings are known as exceptions. An Exception is 'thrown', when an exceptional event happens.

# Chapter 9: Strings and Regular Expressions

1. **What is regular expression?**

Regular expressions provide the foundation for describing or matching data according to defined syntax rules. A regular expression is nothing more than a pattern of characters itself, matched against a certain parcel of text.

1. **What are the two regular expression syntaxes?**

Ans: There are two regular expression syntaxes in php. These are

1. POSIX syntax and

2. Perl syntax.

1. **What is the functionality of the function strstr and stristr?**

strstr(): It returns the remainder of a string beginning with the first occurrence of a predefined string.

stristr(): same as strstr except the search of for the pattern is case insensitive.

1. **What is the difference between ereg\_replace() and eregi\_replace()?**

ereg\_replace(): it is used to find and replace a pattern with a replacement string.

eregi\_replace(): same as ereg\_replace() except the search of for the pattern is case insensitive.

1. **What are the different functions in sorting an array? Discuss them?**

sort(): sort array in ascending order.

rsort():sort array in descending order.

asort() : Sort array in ascending order with key/value.

arsort(): reverse of assort.

natsort (): sorting the in order we expect.

natcasesort(): case insensitive natsort.

ksort(): sorts an array by its keys.

krsort(): reverse of ksort

Usort(): sorting an array by using user defined comparison algorithm

# Chapter 10: Working with the File and Operating system

1. **What are the functions unlink and unset?**

**Ans:**  unlink(): delete/remove a file.

**unset():** destroy any specified variable or array from system.

1. Why php fopen/fclose is use ?

Ans: fopen(): Opens file or URL

fclose():Close file or URL

1. **Difference between w, r, a and a+ mode of file?**

w mode: Write on a new file or write on an existing file after deleting content.

r mode: Read content of an existing file.

A mode: Write on a new file or append on an existing file.

a+ mode: Write on a new file or append on an existing file and read from the file.

1. **How many ways you can read file?**

We can read file using the following mode and methods:-file(), file\_get\_contents(), fgetcsv(), fgetss(), fgetc(), fread(), readfile(), fscnaf().

Mode-R,r+,w+,a+,x+.

1. **How many way you can write into file?**

We can write into a file using the following mode and Methods:

Methods-fwrite() with fopen, file\_put\_contants().

Mode-r+,W,w+,A,a+,X,x+

1. **Why substr() is used?**

The substr() function used to returns the part of a string located between a predefined starting

offset and length positions.

<?php

echo substr("Hello World!"6,5);

?>

1. **Why explode() is used?**

The explode() function splits a string into a series of substrings, with each string boundary determined by a specific separator and convert a string to array.

$pizza = "piece1 piece2 piece3 piece4 piece5 piece6";

$pieces = explode(" ", $pizza);

1. **Difference between strpos() and strrpos()?**

The strpos() function finds the position of the first case-sensitive occurrence of a substring in a string whereas strrpos () function finds the last occurrence of a string returning the numerical position.

1. **Difference between array\_merge() and array\_slice()?**

The array\_merge () function merges array together returning a single, unified array whereas the array\_slice () function returns a section of an array based on a starting and ending offset value.

1. **What should we do to be able to export data into an Excel file?**

The most common and used way is to get data into a format supported by Excel. For example, it is possible to write a .csv file, to choose for example comma as separator between fields and then to open the file with Excel.

# Chapter 11: PEAR

1. **What are the benefits of using PEAR? Or, what is PEAR? What is the benefit of using pear?**

 Answer:

1. It's most effective for finding and reusing great PHP code.
2. Standard development guidelines are assured.
3. It offers more than 550 packages categorized under 37 different topics.

# Chapter 13: Working with HTML Forms

1. **What is the functionality of the function htmlentities and strip\_tags?**

**Ans:**

**htmlentities():** Convert all applicable characters to HTML entities. Such as <b> converts in to &lt;b&gt;

**strip\_tags():**Strip all HTML and PHP tags from a string.

1. **What is Sanitizing User Input in php? Which function we use usually used for Sanitizing User Input?**

# Chapter 14: Authenticating your Users

1. **What is HTTP Authentication?**

HTTP is able to use several authentication mechanisms to control access to specific websites and applications. There are three authentication systems available

* Hard-coded authentication
* File-based authentication
* Database-based authentication

1. **What are the PHP’s authentication variables?**

**Ans:** PHP uses two predefined variables to authenticate a user and those are $\_SERVER['PHP\_AUTH\_USER'] and $\_SERVER['PHP\_AUTH\_PW']. These variables store the username and password values, respectively.

1. **What is the purpose of header() function?**

The header() function sends a raw HTTP header to a client browser. Remember that this function must be called before sending the actual output. For example, You do not print any HTML element before using this function. It is most frequently used to redirect request to get other file.

Example:

The following code can be used for it,

header("Location:index.php");

# Chapter 15: Handling File Uploads

1. **What are the functions used for file upload?**

**Ans:** PHP’s built-in file-upload functions: is\_uploaded\_file() and move\_uploaded\_file().

1. **Which form attribute is used for file upload?**

**Ans:** enctype="multipart/form-data"

1. **Discuss five predefined subscript of of $\_FILES super global variable? Or, What are the five items of the $\_FILES Array?**

Five predefined subscripts of $\_FILES super global variable are discussed below:

1.$\_FILES['upload name']['name']: The name of the file as uploaded from the client to the server.

2.$\_FILES['upload name']['type']:The MIME type of the uploaded file. Whether this variable is assigned depends on the browser capabilities.

3.$\_FILES['upload name']['size']: The byte size of the uploaded file.

4.$\_FILES['upload name']['tmp\_name']: Once uploaded, the file will be assigned a temporary name before it is moved to its final location.

5.$\_FILES['upload name']['error']: An upload status code.Despite the name, this variable will be populated even in the case of success.

# Chapter 16: Networking

1. **What is DNS?**

Ans: DNS stands for the domain name system what allows you to use domain names in place if the corresponding IP address.

1. **Mention five Internet services?**
   1. HTTP - Hyper Text Transfer Protocol
   2. FTP - File Transfer Protocol
   3. POP3 - Post Office Protocol
   4. IMAP - Internet Message Access Protocol
   5. SSH - Secure SHell
2. **Explain the parameters of PHP’s mail function.**

$to      = 'someone@example.com';  
$subject = 'the subject';  
$message = 'hello';  
  
mail($to, $subject, $message);

$to: Receiver, or receivers of the mail.

$subject: Subject of the email to be sent.

$message: Message to be sent.

Optional parameter $header contains header information.

1. **Mention five configuration directives of PHP’s mail function ?**

Ans.: There are five configuration directives as below: SMTP, send\_from, sendmail\_path, smtp\_port, mail.force\_extra\_parameters.

1. **How to send E-mail using PHP script ?**

Ans: Email can be sent through a PHP script in amazingly easy fashion, using the mail() function.

# Chapter 18: Session Handlers

1. **Why HTTP is called stateless protocol?**

PHP is called statelessprotocol, meaning that each request is processed without any knowledge of prior or future requests.

1. **How many ways session handling can be done?**

Ans: Session handling can be done with two ways:

a. Cookies: When a user visits a web site, the server stores information about the user in a cookie and sends it to the browser, which saves it.

b. URL rewriting: SID is propagates automatically whenever the user clicks any local link.

1. **What is Session-Handling?**

Session handling is one of the key things which most of web applications and projects need.

Suppose building one E-commerce site, to allow anyone to buy the product application must ask them to log-in with their user name and until they log out your system must track the user in every step. As HTTP is state less protocol, and when you refresh the page, it lost everything, we need to remember user's states.

1. **What are encoding and decoding?**

session\_encode() offers a convenient method for manually encoding all session variables into a single string.

Its prototype follows: string session\_encode().

Encoded session data can be decoded with session\_decoded ().

Its prototype follows: boolean session\_decode(string session\_data).