

1. What does PHP stand for?

- A) Personal Home Page
- B) PHP: Hypertext Preprocessor
- C) Preprocessed Hypertext Page
- D) Preprocessor Home Page

Answer: B) PHP: Hypertext Preprocessor

2. PHP scripts are executed on the ____.

- A) Client
- B) Server
- C) Browser
- D) Compiler

Answer: B) Server

3. Which of the following is a valid way to start a PHP script?

- A) <php>
- B) <?php>
- C) php>
- D) <script>

Answer: B) <?php>

4. PHP is a ____ language.

- A) Compiled
- B) Interpreted
- C) Markup
- D) Declarative

Answer: B) Interpreted

5. Which of the following is the correct way to declare a variable in PHP?

- A) \$variable = "value";
- B) variable = "value";
- C) var variable = "value";
- D) let \$variable = "value";

Answer: A) \$variable = "value";

6. What is the correct way to end a PHP statement?

- A) .
- B) :
- C) ;
- D) ,

Answer: C) ;

7. Which of the following is NOT a data type in PHP?

- A) String
- B) Float
- C) Character
- D) Boolean

Answer: C) Character

8. PHP files have the extension:

- A) .php
- B) .ph
- C) .html
- D) .xml

Answer: A) .php

9. How do you output text in PHP?

- A) print("text");
- B) echo "text";
- C) write("text");
- D) Both A and B

Answer: D) Both A and B

10. What is the default file extension of PHP files?

- A) .ph
- B) .php
- C) .phpp
- D) .phtml

Answer: B) .php

11. Which of the following is a superglobal variable in PHP?

- A) \$GLOBALS
- B) \$_POST
- C) \$_SESSION
- D) All of the above

Answer: D) All of the above

12. How can you add a comment in PHP?

- A) # This is a comment
- B) // This is a comment
- C) /* This is a comment */
- D) All of the above

Answer: D) All of the above

13. Which function is used to get the length of a string in PHP?

- A) `strlen()`
- B) `strlength()`
- C) `len()`
- D) `string_length()`

Answer: A) `strlen()`

14. How do you define a constant in PHP?

- A) `const NAME = "value";`
- B) `define("NAME", "value");`
- C) `$NAME = "value";`
- D) Both A and B

Answer: D) Both A and B

15. PHP is ___ typed.

- A) Strongly
- B) Weakly
- C) Dynamically
- D) Both B and C

Answer: D) Both B and C

16. What is the correct way to start a session in PHP?

- A) `begin_session();`
- B) `session_start();`
- C) `start_session();`
- D) `session_begin();`

Answer: B) `session_start();`

17. What will `echo (5 == "5");` output?

- A) Error
- B) True
- C) False
- D) 1

Answer: D) 1

18. Which of the following is a PHP loop?

- A) for
- B) while
- C) do-while
- D) All of the above

Answer: D) All of the above

19. How do you terminate a PHP script execution?

- A) break;
- B) exit();
- C) die();
- D) Both B and C

Answer: D) Both B and C

1. Who is the creator of PHP?

- A) Dennis Ritchie
- B) Rasmus Lerdorf
- C) James Gosling
- D) Guido van Rossum

Answer: B) Rasmus Lerdorf

2. In which year was PHP created?

- A) 1990
- B) 1995
- C) 2000
- D) 1989

Answer: B) 1995

3. What was the original name of PHP?

- A) Personal Home Page
- B) PHP Script
- C) PHP Code
- D) Preprocessor Script

Answer: A) Personal Home Page

4. Which of the following best describes PHP in its early stages?

- A) A general-purpose programming language
- B) A tool for creating static HTML pages
- C) A simple set of Common Gateway Interface (CGI) binaries
- D) A database management system

Answer: C) A simple set of Common Gateway Interface (CGI) binaries

5. PHP is primarily used for ____.

- A) System programming
- B) Web development
- C) Game development
- D) Data analysis

Answer: B) Web development

6. When did PHP become an open-source project?

- A) 1995
- B) 1997
- C) 2000
- D) 1999

Answer: B) 1997

7. Which version of PHP introduced the Zend Engine?

- A) PHP 3
- B) PHP 4
- C) PHP 5
- D) PHP 6

Answer: B) PHP 4

8. What was the major contribution of PHP 3?

- A) Object-oriented programming
- B) Introduction of Zend Engine
- C) Cross-platform compatibility and a new parser
- D) Improved security

Answer: C) Cross-platform compatibility and a new parser

9. What does "PHP" stand for now?

- A) Personal Home Page
- B) PHP Hypertext Preprocessor
- C) Programming Home Page
- D) Preprocessor Hypertext Page

Answer: B) PHP Hypertext Preprocessor

10. Who developed the Zend Engine for PHP?

- A) Rasmus Lerdorf
- B) Zeev Suraski and Andi Gutmans
- C) Brendan Eich
- D) James Gosling

Answer: B) Zeev Suraski and Andi Gutmans

11. In which year was PHP 5 released?

- A) 2002
- B) 2004
- C) 2006
- D) 2008

Answer: B) 2004

12. Which of the following is a significant feature introduced in PHP 5?

- A) Namespaces
- B) Object-oriented programming
- C) Anonymous functions
- D) Support for multicore processors

Answer: B) Object-oriented programming

13. What was the major reason behind the development of PHP 3?

- A) To add database functionality
- B) To rewrite PHP as a fully object-oriented language
- C) To rewrite the parser for more robust and extensible language
- D) To improve execution speed

Answer: C) To rewrite the parser for more robust and extensible language

14. PHP originally started as a set of CGI binaries written in ____.

- A) C++
- B) Python
- C) Perl
- D) C

Answer: D) C

15. When was PHP 7 released?

- A) 2012
- B) 2014
- C) 2015
- D) 2016

Answer: C) 2015

16. What was the main improvement in PHP 7 over PHP 5?

- A) Introduction of namespaces
- B) Improved performance with the new Zend Engine (PHPNG)
- C) Support for multicore processors
- D) Built-in database support

Answer: B) Improved performance with the new Zend Engine (PHPNG)

17. What does Zend Engine do in PHP?

- A) Acts as a web server
- B) Compiles PHP code into bytecode
- C) Processes HTML files
- D) Provides database support

Answer: B) Compiles PHP code into bytecode

18. Which company was co-founded by the developers of the Zend Engine?

- A) Zend Technologies
- B) PHP Inc.
- C) Oracle
- D) MySQL

Answer: A) Zend Technologies

19. Which version of PHP discontinued support for PHP 4-style constructors?

- A) PHP 5.3
- B) PHP 5.4

- C) PHP 7.0
- D) PHP 8.0

Answer: C) PHP 7.0

20. Why was PHP 6 never officially released?

- A) Lack of funding
- B) Too many unresolved bugs
- C) Failure to properly implement Unicode support
- D) Disagreement among developers

Answer: C) Failure to properly implement Unicode support

1. Which version of PHP introduced object-oriented programming (OOP) features?

- A) PHP 2
- B) PHP 3
- C) PHP 4
- D) PHP 5

Answer: D) PHP 5

2. Which PHP version introduced the Zend Engine?

- A) PHP 3
- B) PHP 4
- C) PHP 5
- D) PHP 7

Answer: B) PHP 4

3. What was the main improvement in PHP 7 over PHP 5?

- A) Introduction of anonymous functions
- B) Improved performance with the PHPNG engine
- C) Deprecated MySQL extension
- D) Support for dynamic typing

Answer: B) Improved performance with the PHPNG engine

4. Which PHP version officially introduced namespaces?

- A) PHP 5.1
- B) PHP 5.3
- C) PHP 5.4
- D) PHP 7.0

Answer: B) PHP 5.3

5. In which year was PHP 5 released?

- A) 2000
- B) 2004
- C) 2006
- D) 2008

Answer: B) 2004

6. Which PHP version discontinued support for PHP 4-style constructors?

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.2
- D) PHP 8.0

Answer: B) PHP 7.0

7. PHP 6 was planned to introduce which of the following features?

- A) Multithreading support
- B) Unicode support
- C) Improved security mechanisms
- D) Anonymous functions

Answer: B) Unicode support

8. What was the reason PHP 6 was never officially released?

- A) Lack of funding
- B) Issues with Unicode implementation
- C) Failure of the Zend Engine
- D) Community disagreement

Answer: B) Issues with Unicode implementation

9. When was PHP 7 officially released?

- A) 2013
- B) 2014
- C) 2015
- D) 2016

Answer: C) 2015

10. Which PHP version introduced the `declare(strict_types=1)` directive?

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.2
- D) PHP 8.0

Answer: B) PHP 7.0

11. PHP 4 was officially released in ____.

- A) 1998
- B) 1999
- C) 2000
- D) 2001

Answer: C) 2000

12. Which feature was added in PHP 5.5?

- A) Generators and `yield`
- B) Type declarations
- C) JIT compilation
- D) Traits

Answer: A) Generators and `yield`

13. What is the default PHP version used in most modern environments as of 2025?

- A) PHP 7.4
- B) PHP 8.0
- C) PHP 8.2
- D) PHP 8.4

Answer: C) PHP 8.2

14. Which PHP version introduced the match expression?

- A) PHP 7.4
- B) PHP 8.0
- C) PHP 8.1
- D) PHP 8.2

Answer: B) PHP 8.0

15. What is one key feature introduced in PHP 8.0?

- A) Anonymous functions
- B) Named arguments
- C) Unicode support
- D) Traits

Answer: B) Named arguments

16. PHP 8.1 introduced which of the following features?

- A) JIT compilation
- B) Fibers
- C) Match expression
- D) Generators

Answer: B) Fibers

17. Which version of PHP introduced support for scalar type declarations?

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.1
- D) PHP 8.0

Answer: B) PHP 7.0

18. What was the major performance enhancement introduced in PHP 8.0?

- A) Match expressions
- B) JIT (Just-In-Time) compilation
- C) Error handling improvements
- D) Improved OOP model

Answer: B) JIT (Just-In-Time) compilation

19. Which PHP version deprecated the `magic_quotes` directive?

- A) PHP 5.2
- B) PHP 5.3
- C) PHP 5.4
- D) PHP 7.0

Answer: C) PHP 5.4

20. PHP 5.6 introduced which important feature?

- A) Variadic functions (...)
- B) Traits
- C) Anonymous functions
- D) Scalar type declarations

Answer: A) Variadic functions (...)

1. Which PHP version introduced support for anonymous classes?

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.1
- D) PHP 8.0

Answer: B) PHP 7.0

2. What feature was introduced in PHP 7.1?

- A) Null coalescing operator
- B) Nullable types
- C) Named arguments
- D) JIT compilation

Answer: B) Nullable types

3. When was PHP 8.0 officially released?

- A) November 2019
- B) December 2020
- C) October 2021
- D) January 2022

Answer: B) December 2020

4. Which PHP version introduced the spaceship operator (<=>)?

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.3
- D) PHP 8.0

Answer: B) PHP 7.0

5. What is the purpose of the JIT (Just-In-Time) compilation introduced in PHP 8.0?

- A) To improve error reporting
- B) To enhance runtime performance by compiling bytecode into machine code
- C) To add better debugging tools
- D) To allow multithreading in PHP scripts

Answer: B) To enhance runtime performance by compiling bytecode into machine code

6. Which PHP version removed support for the `ereg` functions?

- A) PHP 5.3
- B) PHP 5.5
- C) PHP 5.6
- D) PHP 7.0

Answer: A) PHP 5.3

7. Which of the following was introduced in PHP 7.2?

- A) Object type hinting
- B) Libsodium for cryptography
- C) Nullable types
- D) Match expressions

Answer: B) Libsodium for cryptography

8. Which PHP version introduced the `finally` keyword for exception handling?

- A) PHP 5.3
- B) PHP 5.5
- C) PHP 7.0
- D) PHP 8.0

Answer: B) PHP 5.5

9. Which PHP version introduced union types?

- A) PHP 7.4
- B) PHP 8.0
- C) PHP 7.1
- D) PHP 8.1

Answer: B) PHP 8.0

10. What feature was added in PHP 7.3?

- A) Array destructuring
- B) Trailing commas in function calls
- C) Match expressions
- D) Fibers

Answer: B) Trailing commas in function calls

1. PHP is a ____.

- A) Client-side scripting language
- B) Server-side scripting language
- C) Markup language
- D) Database

Answer: B) Server-side scripting language

2. Which of the following is true about PHP?

- A) PHP scripts are executed on the server.
- B) PHP can only run on Linux systems.
- C) PHP is a client-side language like JavaScript.
- D) PHP requires a compiler to execute scripts.

Answer: A) PHP scripts are executed on the server.

3. PHP is compatible with ____.

- A) Windows
- B) macOS
- C) Linux
- D) All of the above

Answer: D) All of the above

4. Which of the following features of PHP allows it to connect to databases?

- A) File handling
- B) Session handling
- C) Database integration
- D) Error handling

Answer: C) Database integration

5. What is the full form of PHP?

- A) Personal Hypertext Preprocessor
- B) PHP Hypertext Processor
- C) PHP Hypertext Preprocessor
- D) Programming Hypertext Processor

Answer: C) PHP Hypertext Preprocessor

6. PHP is a ____.

- A) Strongly typed language
- B) Loosely typed language
- C) Statically typed language
- D) High-level compiled language

Answer: B) Loosely typed language

7. PHP supports ____.

- A) Object-Oriented Programming
- B) Procedural Programming
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

8. PHP can be embedded into ____.

- A) Python
- B) HTML
- C) CSS
- D) Java

Answer: B) HTML

9. PHP code is enclosed within ____.

- A) <php></php>
- B) <?php ?>

- C) <code></code>
- D) <script></script>

Answer: B) <?php ?>

10. Which of the following extensions is used for PHP files?

- A) .html
- B) .php
- C) .txt
- D) .xml

Answer: B) .php

11. PHP can be used to handle ____.

- A) Forms
- B) Files
- C) Cookies
- D) All of the above

Answer: D) All of the above

12. PHP is an interpreted language, meaning ____.

- A) It needs to be compiled before running
- B) It is executed line by line by the server
- C) It runs directly on the browser
- D) It doesn't require a web server

Answer: B) It is executed line by line by the server

13. Which of the following is a valid PHP function for sending emails?

- A) mail()
- B) sendMail()

- C) `email()`
- D) `php_mail()`

Answer: A) `mail()`

14. PHP scripts can be executed with ____.

- A) Apache
- B) IIS
- C) Nginx
- D) All of the above

Answer: D) All of the above

15. Which PHP version introduced object-oriented programming (OOP) features?

- A) PHP 3
- B) PHP 4
- C) PHP 5
- D) PHP 7

Answer: C) PHP 5

16. PHP supports which type of databases?

- A) MySQL
- B) PostgreSQL
- C) SQLite
- D) All of the above

Answer: D) All of the above

17. The default port for PHP's built-in web server is ____.

- A) 80
- B) 8080

- C) 8888
- D) 9000

Answer: B) 8080

18. PHP supports file handling functions such as ____.

- A) fopen()
- B) fread()
- C) fwrite()
- D) All of the above

Answer: D) All of the above

19. PHP scripts must be executed on ____.

- A) A web browser
- B) A web server
- C) A text editor
- D) An IDE

Answer: B) A web server

20. PHP is open-source, which means ____.

- A) It is only available for Linux systems
- B) It is free and its source code is publicly available
- C) It is closed and proprietary
- D) It can only be modified by licensed developers

Answer: B) It is free and its source code is publicly available

21. Which superglobal variable is used to collect form data in PHP?

- A) \$_GET
- B) \$_POST
- C) Both A and B
- D) \$_FORM

Answer: C) Both A and B

22. PHP supports which type of loops?

- A) `for`
- B) `while`
- C) `foreach`
- D) All of the above

Answer: D) All of the above

23. PHP sessions are used for ____.

- A) Encrypting data
- B) Storing user data across multiple pages
- C) Validating user input
- D) None of the above

Answer: B) Storing user data across multiple pages

24. Which PHP function is used to check the data type of a variable?

- A) `gettype()`
- B) `is_type()`
- C) `checktype()`
- D) `variabletype()`

Answer: A) `gettype()`

25. PHP can generate ____.

- A) PDF files
- B) Images
- C) XML files
- D) All of the above

Answer: D) All of the above

26. Which PHP feature is used to restrict unauthorized access to web pages?

- A) Error handling
- B) Authentication and Authorization
- C) File handling
- D) Cookies

Answer: B) Authentication and Authorization

27. PHP uses which of the following encryption functions?

- A) md5()
- B) sha1()
- C) hash()
- D) All of the above

Answer: D) All of the above

28. PHP is case-sensitive for ____.

- A) Functions
- B) Variables
- C) Constants
- D) None of the above

Answer: B) Variables

29. Which PHP function is used to terminate script execution?

- A) stop()
- B) exit()
- C) terminate()
- D) end()

Answer: B) exit()

30. PHP supports which type of array?

- A) Indexed arrays
- B) Associative arrays
- C) Multidimensional arrays
- D) All of the above

Answer: D) All of the above

31. Which PHP feature provides error handling?

- A) try-catch blocks
- B) Error constants (E_WARNING, E_NOTICE)
- C) Custom error handlers
- D) All of the above

Answer: D) All of the above

32. What does `isset()` do in PHP?

- A) Checks if a variable is empty
- B) Checks if a variable is defined
- C) Checks if a variable is set and is not null
- D) Checks if a variable is numeric

Answer: C) Checks if a variable is set and is not null

1. What makes PHP more suitable for web development compared to other scripting languages?

- A) Its ability to create mobile applications
- B) Built-in support for web-specific tasks like handling forms and interacting with databases
- C) It is slower than other languages
- D) It cannot be embedded into HTML

Answer: B) Built-in support for web-specific tasks like handling forms and interacting with databases

2. Which of the following is an advantage of PHP over other server-side scripting languages like JSP or ASP.NET?

- A) PHP is platform-dependent
- B) PHP is open-source and free to use
- C) PHP has poor community support
- D) PHP does not support object-oriented programming

Answer: B) PHP is open-source and free to use

3. PHP is highly compatible with which of the following databases?

- A) MySQL
- B) Oracle
- C) PostgreSQL
- D) All of the above

Answer: D) All of the above

4. Which of the following is a key advantage of PHP over JavaScript?

- A) PHP can only run on the server
- B) PHP supports dynamic web page creation on the server side
- C) PHP runs on the browser
- D) PHP does not support databases

Answer: B) PHP supports dynamic web page creation on the server side

5. Why is PHP considered faster than other scripting languages like Python or Ruby?

- A) It is compiled rather than interpreted
- B) It uses the Zend Engine, which is optimized for web tasks
- C) It does not support complex operations
- D) It does not require any server to execute

Answer: B) It uses the Zend Engine, which is optimized for web tasks

6. Which of the following is a benefit of PHP's loose typing feature?

- A) PHP always requires variable declaration
- B) PHP automatically converts variable types based on context
- C) PHP only supports integers and strings
- D) PHP is harder to debug

Answer: B) PHP automatically converts variable types based on context

7. What makes PHP a preferred choice over ASP.NET for small businesses and startups?

- A) PHP is proprietary software
- B) PHP is cheaper to host and maintain
- C) PHP has no frameworks available
- D) PHP does not support databases

Answer: B) PHP is cheaper to host and maintain

8. Which of the following makes PHP more flexible compared to JSP?

- A) PHP only supports Windows
- B) PHP can be used with multiple web servers like Apache, Nginx, and IIS
- C) PHP lacks database integration
- D) PHP does not support error handling

Answer: B) PHP can be used with multiple web servers like Apache, Nginx, and IIS

9. Why is PHP considered easier to learn compared to other scripting languages like Python or Ruby?

- A) PHP has a simple and straightforward syntax
- B) PHP requires deep knowledge of computer science
- C) PHP only supports procedural programming
- D) PHP requires a special IDE to run

Answer: A) PHP has a simple and straightforward syntax

10. Which advantage does PHP have over Perl for web development?

- A) PHP is slower than Perl
- B) PHP is designed specifically for web development, while Perl is more general-purpose
- C) PHP lacks built-in database support
- D) PHP does not support regular expressions

Answer: B) PHP is designed specifically for web development, while Perl is more general-purpose

11. PHP's compatibility with various operating systems is an advantage because _____.

- A) It can only run on Windows
- B) It can run on Linux, Windows, macOS, and more
- C) It is restricted to Linux servers
- D) It needs a specific environment to execute

Answer: B) It can run on Linux, Windows, macOS, and more

12. Which of the following is an advantage of PHP over Python in web development?

- A) PHP is not suitable for web development
- B) PHP has a larger number of web-specific libraries and tools
- C) PHP does not have any community support
- D) PHP is slower than Python

Answer: B) PHP has a larger number of web-specific libraries and tools

13. PHP's ability to embed directly into HTML provides which advantage?

- A) Easier integration with web pages
- B) Faster execution than compiled languages
- C) Higher memory consumption
- D) Requires additional software to run

Answer: A) Easier integration with web pages

14. What makes PHP cost-effective compared to other scripting languages?

- A) PHP is open-source and does not require licensing fees
- B) PHP is only available on premium servers
- C) PHP requires a special software to use
- D) PHP does not support open-source tools

Answer: A) PHP is open-source and does not require licensing fees

15. Why is PHP considered highly scalable?

- A) PHP cannot handle a large number of requests
- B) PHP supports frameworks like Laravel and CodeIgniter for building scalable applications
- C) PHP does not support advanced web development features
- D) PHP lacks integration with modern databases

Answer: B) PHP supports frameworks like Laravel and CodeIgniter for building scalable applications

16. Which of the following makes PHP advantageous for handling large projects?

- A) Built-in error handling
- B) Framework support like Laravel and Symfony
- C) Compatibility with various databases
- D) All of the above

Answer: D) All of the above

17. PHP is faster than languages like Python for web development because ____.

- A) PHP scripts are compiled into machine code
- B) PHP is optimized for web servers and dynamic content generation
- C) PHP lacks support for advanced programming features
- D) PHP does not interact with databases

Answer: B) PHP is optimized for web servers and dynamic content generation

18. PHP's wide adoption is supported by ____.

- A) A small developer community
- B) Extensive documentation and tutorials
- C) The lack of a framework ecosystem
- D) No open-source tools

Answer: B) Extensive documentation and tutorials

19. PHP supports cross-platform development because ____.

- A) It is limited to one platform
- B) It runs on all major operating systems and servers
- C) It is only compatible with proprietary software
- D) It does not integrate with modern tools

Answer: B) It runs on all major operating systems and servers

20. Why is PHP preferred for CMS development?

- A) PHP does not support CMS development
- B) Most popular CMSs like WordPress, Drupal, and Joomla are written in PHP
- C) PHP lacks dynamic content features
- D) PHP does not integrate with web servers

Answer: B) Most popular CMSs like WordPress, Drupal, and Joomla are written in PHP

21. Why is PHP highly compatible with cloud services?

- A) PHP can only run on local servers
- B) PHP can interact with cloud APIs and services like AWS, Google Cloud, and Azure
- C) PHP requires proprietary software for cloud integration
- D) PHP does not support modern cloud features

Answer: B) PHP can interact with cloud APIs and services like AWS, Google Cloud, and Azure

22. What makes PHP a good choice for e-commerce platforms?

- A) Lack of security features
- B) Support for payment gateways, shopping carts, and dynamic content generation
- C) PHP is not suitable for e-commerce websites
- D) PHP requires additional tools for every feature

Answer: B) Support for payment gateways, shopping carts, and dynamic content generation

23. Which feature of PHP makes it faster in web development compared to Java?

- A) PHP does not require compilation
- B) PHP lacks advanced programming concepts
- C) PHP is limited to procedural programming
- D) PHP cannot handle complex applications

Answer: A) PHP does not require compilation

24. PHP is widely used for web development because ____.

- A) It has built-in functions for common web tasks like handling forms and cookies
- B) It lacks compatibility with databases
- C) It is only compatible with specific operating systems
- D) It is only suitable for small projects

Answer: A) It has built-in functions for common web tasks like handling forms and cookies

25. Which advantage does PHP offer for website hosting?

- A) PHP websites require expensive hosting services
- B) PHP websites can be hosted on nearly any web server, making it cost-effective
- C) PHP websites only run on IIS
- D) PHP hosting lacks scalability

Answer: B) PHP websites can be hosted on nearly any web server, making it cost-effective

26. Why is PHP considered a flexible language?

- A) PHP supports only one programming paradigm
- B) PHP can be written using both procedural and object-oriented programming styles
- C) PHP cannot interact with external APIs
- D) PHP does not allow dynamic content creation

Answer: B) PHP can be written using both procedural and object-oriented programming styles

27. Which of the following makes PHP easy to debug?

- A) PHP does not support error messages
- B) PHP has built-in error reporting functions like `error_reporting()` and `var_dump()`
- C) PHP cannot display runtime errors
- D) PHP errors require third-party debugging tools

Answer: B) PHP has built-in error reporting functions like `error_reporting()` and `var_dump()`

28. Why is PHP preferred for dynamic content creation compared to static HTML?

- A) PHP allows server-side content generation based on user input or database data
- B) PHP is not suitable for dynamic content
- C) PHP lacks integration with web servers
- D) PHP is slower than static HTML

Answer: A) PHP allows server-side content generation based on user input or database data

29. PHP provides better security features compared to other scripting languages because ____.

- A) It does not require any security implementation
- B) It has built-in functions for encryption, sanitization, and secure sessions
- C) PHP cannot handle user authentication
- D) PHP lacks modern security features

Answer: B) It has built-in functions for encryption, sanitization, and secure sessions

30. PHP's wide library and framework support, like Laravel and CodeIgniter, is advantageous because ____.

- A) It reduces development time by providing pre-built functionalities
- B) PHP lacks support for modern web development
- C) PHP frameworks are not open-source
- D) PHP frameworks increase the complexity of development

Answer: A) It reduces development time by providing pre-built functionalities

1. What is the minimum RAM requirement for running PHP on a server?

- A) 128 MB
- B) 256 MB
- C) 512 MB
- D) 1 GB

Answer: B) 256 MB

2. Which operating system is NOT supported by PHP?

- A) Windows
- B) Linux
- C) macOS
- D) None of the above

Answer: D) None of the above

3. Which of the following is required to run PHP scripts?

- A) A web server like Apache or Nginx
- B) A database management system
- C) A C++ compiler
- D) An FTP server

Answer: A) A web server like Apache or Nginx

4. What is the default port used by Apache web server for PHP?

- A) 22
- B) 443
- C) 80
- D) 3306

Answer: C) 80

5. What is the full form of WAMP?

- A) Windows, Apache, MySQL, PHP
- B) Windows, Apache, MongoDB, Python
- C) Windows, Angular, MySQL, PHP
- D) None of the above

Answer: A) Windows, Apache, MySQL, PHP

6. Which of the following packages is commonly used for PHP installation on macOS?

- A) WAMP
- B) LAMP
- C) XAMPP
- D) MAMP

Answer: D) MAMP

7. Which command is used to check the installed PHP version in the terminal?

- A) php --version
- B) phpinfo
- C) php -v
- D) php --v

Answer: C) php -v

8. PHP can be configured to work with which of the following web servers?

- A) Apache
- B) Nginx
- C) Microsoft IIS
- D) All of the above

Answer: D) All of the above

9. Which PHP configuration file is used to set default settings?

- A) php.ini
- B) php.conf
- C) httpd.conf
- D) config.php

Answer: A) php.ini

10. In which directory is the php.ini file usually located?

- A) /usr/local/bin
- B) /etc/php
- C) /var/www/html
- D) /home/php

Answer: B) /etc/php

11. Which software package includes PHP, MySQL, and Apache for all operating systems?

- A) XAMPP
- B) LAMP
- C) MAMP
- D) AMPPS

Answer: A) XAMPP

12. What does the "L" in LAMP stand for?

- A) Linux
- B) Light
- C) Localhost
- D) Library

Answer: A) Linux

13. What is the purpose of the `phpinfo()` function?

- A) To display PHP syntax errors
- B) To display the current PHP configuration
- C) To debug PHP code
- D) To manage PHP sessions

Answer: B) To display the current PHP configuration

14. Which database is most commonly used with PHP?

- A) PostgreSQL
- B) MySQL
- C) Oracle
- D) MongoDB

Answer: B) MySQL

15. What is the command to restart Apache on a Linux system?

- A) sudo service apache restart
- B) sudo systemctl restart apache2
- C) apache -r
- D) restart_apache

Answer: B) sudo systemctl restart apache2

16. PHP can be used with which of the following text editors for coding?

- A) Notepad++
- B) VS Code
- C) Sublime Text
- D) All of the above

Answer: D) All of the above

17. What is the default extension for PHP files?

- A) .phpx
- B) .php

- C) .phps
- D) .ph

Answer: B) .php

18. Which function is used to load the PHP configuration details?

- A) config_info()
- B) phpinfo()
- C) load_config()
- D) system_info()

Answer: B) phpinfo()

19. How can PHP be installed on Ubuntu Linux?

- A) Using the apt-get command
- B) Using the brew command
- C) Using the yum command
- D) None of the above

Answer: A) Using the apt-get command

20. What is the PHP configuration file responsible for?

- A) Managing server-side logic
- B) Setting PHP directives and runtime configuration
- C) Displaying user interface
- D) Handling database connections

Answer: B) Setting PHP directives and runtime configuration

MCQs on PHP Data Types

1. How many primary data types are there in PHP?

- A) 4
- B) 6
- C) 8
- D) 10

Answer: C) 8

2. Which of the following is NOT a scalar data type in PHP?

- A) Integer
- B) String
- C) Boolean
- D) Array

Answer: D) Array

3. What is the default data type of a variable in PHP if not explicitly assigned?

- A) Integer
- B) String
- C) NULL
- D) Undefined

Answer: C) NULL

4. What will be the output of the following PHP code?

```
$x = "10" + 20;  
echo $x;
```

- A) 30
- B) 1020
- C) Error
- D) NULL

Answer: A) 30

(PHP automatically converts the string "10" into an integer before performing addition.)

5. Which data type in PHP is used to store multiple values in a single variable?

- A) Boolean
- B) String

- C) Array
- D) Object

Answer: C) Array

6. Which of the following is NOT a valid PHP data type?

- A) Object
- B) Resource
- C) Float
- D) Character

Answer: D) Character

(PHP does not have a specific "Character" data type; it treats single characters as strings.)

7. What will be the output of the following PHP code?

```
$x = (bool) "false";
echo $x;
```

- A) false
- B) true
- C) 0
- D) NULL

Answer: B) true

(Any non-empty string is considered true in PHP when cast to a boolean.)

8. What function is used to determine the data type of a variable in PHP?

- A) datatype()
- B) gettype()
- C) typeof()
- D) var_type()

Answer: B) gettype()

9. What is the range of an Integer in a 32-bit PHP system?

- A) -2,147,483,648 to 2,147,483,647
- B) -32,768 to 32,767
- C) -128 to 127
- D) Unlimited

Answer: A) -2,147,483,648 to 2,147,483,647

10. What will be the output of the following PHP code?

```
$x = 5.6;  
echo gettype($x);
```

- A) integer
- B) double
- C) float
- D) string

Answer: B) double

(In PHP, float values are internally stored as "double".)

11. Which PHP function is used to check if a variable is of a specific type?

- A) is_type()
- B) gettype()
- C) is_numeric()
- D) type_check()

Answer: C) is_numeric()

12. What will be the data type of the variable \$x in the following PHP code?

```
$x = NULL;
```

- A) Integer
- B) Undefined
- C) Null
- D) Boolean

Answer: C) Null

13. Which of the following functions is used to convert a variable into an integer?

- A) intval()
- B) floatval()
- C) strval()
- D) toInt()

Answer: A) intval()

14. What does the `is_array()` function check in PHP?

- A) If the variable is an array
- B) If the array is empty
- C) If the array contains integers
- D) If the array has an even number of elements

Answer: A) If the variable is an array

15. What will be the output of the following PHP code?

```
$x = "100";
$y = (int) $x;
echo gettype($y);
```

- A) integer
- B) string
- C) float
- D) boolean

Answer: A) integer

(Explicit type casting converts the string "100" into an integer.)

16. What does the `is_object()` function do in PHP?

- A) Checks if a variable is an object
- B) Converts a variable into an object
- C) Deletes an object
- D) Checks if a variable is empty

Answer: A) Checks if a variable is an object

17. What is the data type of the following variable?

```
$x = array(1, 2, 3);
```

- A) Integer
- B) String
- C) Array
- D) Object

Answer: C) Array

18. What will be the output of the following PHP code?

```
$x = "10.5";
$y = (float) $x;
echo gettype($y);
```

- A) integer
- B) string
- C) float
- D) boolean

Answer: C) float

19. What is the use of the `is_resource()` function in PHP?

- A) To check if a variable is a resource type
- B) To release memory used by a variable
- C) To convert a variable into a resource
- D) To count the number of open files

Answer: A) To check if a variable is a resource type

20. Which function is used to check whether a variable is of the `NULL` type?

- A) `is_null()`
- B) `is_empty()`

- C) `is_void()`
- D) `is_none()`

Answer: A) `is_null()`

MCQs on PHP Variables

1. Which symbol is used to declare a variable in PHP?

- A) `@`
- B) `$`
- C) `&`
- D) `#`

Answer: B) `$`

2. What will be the output of the following PHP code?

```
$x = 10;  
$y = $x;  
$y = 20;  
echo $x;
```

- A) 10
- B) 20
- C) 30
- D) Error

Answer: A) 10

(In PHP, variables are assigned by value by default, so changing `$y` does not affect `$x`.)

3. How do you define a constant in PHP?

- A) `const NAME = "value";`
- B) `$NAME = "value";`
- C) `define("NAME", "value");`
- D) Both A and C

Answer: D) Both A and C

4. Which of the following is NOT a valid PHP variable name?

- A) \$myVar
- B) \$_var
- C) \$123var
- D) \$my_var

Answer: C) \$123var

(Variable names cannot start with a number in PHP.)

5. What is the scope of a variable declared inside a function in PHP?

- A) Global
- B) Local
- C) Static
- D) Public

Answer: B) Local

(Variables declared inside a function are only accessible within that function.)

6. What will be the output of the following PHP code?

```
$x = "Hello";
$y = &$x;
$y = "World";
echo $x;
```

- A) Hello
- B) World
- C) Error
- D) NULL

Answer: B) World

(Using & creates a reference, so changing \$y also changes \$x.)

7. How do you declare a global variable inside a function in PHP?

- A) global \$var;
- B) define("var", "value");
- C) const var = "value";
- D) static \$var;

Answer: A) global \$var;

8. What will be the output of the following PHP code?

```
$var = 5;
function test() {
    static $var = 0;
    $var++;
    echo $var;
}
test();
test();
```

- A) 1 1
- B) 1 2
- C) 6 6
- D) 6 7

Answer: B) 1 2

(Static variables retain their value between function calls.)

9. Which of the following statements about PHP variables is FALSE?

- A) PHP variables are case-sensitive
- B) Variable names can contain spaces
- C) PHP variables must start with a letter or underscore
- D) PHP variables do not need to be declared before assignment

Answer: B) Variable names can contain spaces

(Variable names cannot contain spaces in PHP.)

10. What will be the output of the following PHP code?

```
$var1 = "10";
$var2 = 10;
if ($var1 == $var2) {
    echo "Equal";
} else {
    echo "Not Equal";
}
```

- A) Equal
- B) Not Equal
- C) Error
- D) NULL

Answer: A) Equal

(The == operator checks for value equality, ignoring type differences.)

11. What will be the output of the following PHP code?

```
$var1 = "10";
$var2 = 10;
if ($var1 === $var2) {
    echo "Equal";
} else {
    echo "Not Equal";
}
```

- A) Equal
- B) Not Equal
- C) Error
- D) NULL

Answer: B) Not Equal

(The === operator checks for both value and type equality.)

12. Which of the following is the correct way to delete a variable in PHP?

- A) delete \$var;
- B) unset(\$var);
- C) remove(\$var);
- D) \$var = NULL;

Answer: B) unset(\$var);

13. What will be the output of the following PHP code?

```
$var = "PHP";
unset($var);
echo $var;
```

- A) PHP
- B) NULL
- C) Undefined variable error
- D) Empty string

Answer: C) Undefined variable error

14. What is the correct way to check if a variable is set in PHP?

- A) isset(\$var);
- B) check(\$var);
- C) exists(\$var);
- D) validate(\$var);

Answer: A) isset(\$var);

15. What will be the output of the following PHP code?

```
$var = NULL;
if (isset($var)) {
    echo "Set";
} else {
    echo "Not Set";
}
```

- A) Set
- B) Not Set
- C) Error
- D) NULL

Answer: B) Not Set

(*isset(\$var)* returns false for NULL values.)

16. What will be the output of the following PHP code?

```
define("PI", 3.14);
echo PI;
```

- A) 3.14
- B) PI
- C) Error
- D) NULL

Answer: A) 3.14

17. What will be the output of the following PHP code?

```
define("PI", 3.14);  
PI = 3.1415;  
echo PI;
```

- A) 3.1415
- B) 3.14
- C) Error
- D) NULL

Answer: C) Error

(Constants cannot be reassigned once defined.)

18. What function is used to check if a variable is an integer?

- A) is_int()
- B) is_integer()
- C) is_numeric()
- D) is_number()

Answer: A) is_int()

19. What will be the output of the following PHP code?

```
$name = "John";  
echo "Hello, $name!";
```

- A) Hello, John!
- B) Hello, \$name!
- C) Error
- D) NULL

Answer: A) Hello, John!

(Variables inside double quotes are interpolated.)

20. What will be the output of the following PHP code?

```
$name = 'John';
echo 'Hello, $name!';
```

- A) Hello, John!
- B) Hello, \$name!
- C) Error
- D) NULL

Answer: B) Hello, \$name!

MCQs on Scope of Variables in PHP

1. What are the types of variable scope in PHP?

- A) Local, Global, Static, and Function
- B) Local, Global, Static, and Parameter
- C) Public, Private, Protected, and Static
- D) Global, Static, Constant, and Local

Answer: B) Local, Global, Static, and Parameter

2. What is the default scope of a variable declared inside a function in PHP?

- A) Global
- B) Static
- C) Local
- D) Public

Answer: C) Local

(A variable declared inside a function is local to that function and cannot be accessed outside.)

3. What keyword is used to access a global variable inside a function?

- A) global
- B) public

- C) static
- D) var

Answer: A) global

4. What will be the output of the following PHP code?

```
$x = 10;  
function test() {  
    echo $x;  
}  
test();
```

- A) 10
- B) Error
- C) NULL
- D) Undefined

Answer: B) Error

(The variable \$x is global and cannot be accessed inside the function unless declared using global \$x.)

5. How can you access a global variable inside a function?

- A) global \$var;
- B) use \$var;
- C) function_var(\$var);
- D) access(\$var);

Answer: A) global \$var;

6. What will be the output of the following PHP code?

```
$x = 5;  
function test() {  
    global $x;  
    $x = 10;  
}  
test();  
echo $x;
```

- A) 5
- B) 10

- C) Error
- D) NULL

Answer: B) 10

(The `global` keyword allows the function to modify the global variable `$x`.)

7. What will be the output of the following PHP code?

```
function test() {  
    static $x = 0;  
    $x++;  
    echo $x;  
}  
test();  
test();  
test();
```

- A) 1 1 1
- B) 1 2 3
- C) 0 1 2
- D) Error

Answer: B) 1 2 3

(Static variables retain their values between function calls.)

8. What is the use of the `static` keyword in PHP?

- A) To make a variable retain its value between function calls
- B) To make a variable global
- C) To declare a constant
- D) To create an object

Answer: A) To make a variable retain its value between function calls

9. What will be the output of the following PHP code?

```
function test() {  
    static $x = 0;  
    echo $x;  
    $x++;  
}  
test();  
test();
```

```
test();
```

- A) 0 0 0
- B) 1 1 1
- C) 0 1 2
- D) Error

Answer: C) 0 1 2

(Static variables are initialized only once and retain their values between function calls.)

10. How can you access a global variable inside a function without using `global`?

- A) Using `$GLOBALS` array
- B) Using `this->var`
- C) Using `const` keyword
- D) Using `define()`

Answer: A) Using `$GLOBALS` array

11. What will be the output of the following PHP code?

```
$x = 10;
function test() {
    echo $GLOBALS['x'];
}
test();
```

- A) 10
- B) Error
- C) NULL
- D) Undefined

Answer: A) 10

(The `$GLOBALS` array allows access to global variables inside functions.)

12. What happens if you use a variable inside a function without declaring it as global?

- A) It will be treated as a local variable
- B) It will use the global value

- C) It will cause an error
- D) It will return NULL

Answer: A) It will be treated as a local variable

13. What is the difference between `global` and `$GLOBALS` in PHP?

- A) `global` creates a copy, `$GLOBALS` directly accesses the global variable
- B) Both work the same way
- C) `global` can be used inside and outside functions, `$GLOBALS` only inside
- D) `$GLOBALS` creates a new variable, `global` does not

Answer: A) `global` creates a copy, `$GLOBALS` directly accesses the global variable

14. What will be the output of the following PHP code?

```
$x = 10;  
function test() {  
    global $x;  
    $x = 20;  
}  
test();  
echo $x;
```

- A) 10
- B) 20
- C) Error
- D) NULL

Answer: B) 20

(Using `global $x;` allows the function to modify the global variable.)

15. What happens if a global variable is modified inside a function without using `global` or `$GLOBALS`?

- A) It remains unchanged
- B) It changes
- C) It throws an error
- D) It becomes NULL

Answer: A) It remains unchanged

16. What will be the output of the following PHP code?

```
function test() {  
    static $x = 5;  
    echo $x;  
    $x++;  
}  
test();  
test();  
test();
```

- A) 5 5 5
- B) 5 6 7
- C) 6 7 8
- D) Error

Answer: B) 5 6 7

(Static variables retain their values across function calls.)

17. What is the best way to make a variable available in multiple functions?

- A) Use `global` keyword
- B) Use `$GLOBALS` array
- C) Pass it as a function parameter
- D) All of the above

Answer: D) All of the above

18. What will be the output of the following PHP code?

```
$x = 10;  
function test() {  
    static $x = 20;  
    echo $x;  
}  
test();  
echo $x;
```

- A) 10 10
- B) 20 20
- C) 20 10
- D) Error

Answer: C) 20 10

(The static \$x inside test() is different from the global \$x.)

19. What will be the output of the following PHP code?

```
$y = 50;
function test() {
    global $y;
    $y = 100;
}
test();
echo $y;
```

- A) 50
- B) 100
- C) Error
- D) NULL

Answer: B) 100

(The global keyword allows modification of the global variable \$y.)

20. What is the correct way to create a variable that can be used only inside a function but retains its value between function calls?

- A) global \$var;
- B) static \$var;
- C) define("var", value);
- D) \$GLOBALS['var'] = value;

Answer: B) static \$var;

MCQs on PHP Arrays and Their Types

1. What is an array in PHP?

- A) A data structure that stores a single value
- B) A data structure that stores multiple values in a single variable
- C) A function in PHP
- D) A class in PHP

Answer: B) A data structure that stores multiple values in a single variable

2. How do you declare an array in PHP?

- A) \$arr = array(1, 2, 3);
- B) \$arr = [1, 2, 3];
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

(Both `array()` and `[]` can be used to declare an array in PHP.)

3. How many types of arrays are there in PHP?

- A) 2
- B) 3
- C) 4
- D) 5

Answer: B) 3

(PHP supports Indexed Arrays, Associative Arrays, and Multidimensional Arrays.)

4. What is an indexed array in PHP?

- A) An array with string keys
- B) An array with numeric keys
- C) An array that contains objects
- D) An array with duplicate values only

Answer: B) An array with numeric keys

5. What is an associative array in PHP?

- A) An array with numeric indexes
- B) An array with string keys
- C) An array that contains objects
- D) An array with no values

Answer: B) An array with string keys

6. What is a multidimensional array in PHP?

- A) An array inside another array
- B) A function that returns an array
- C) An array with keys as numbers
- D) A built-in PHP class

Answer: A) An array inside another array

7. How do you access an element of an indexed array?

- A) \$arr["key"];
- B) \$arr[0];
- C) array_get(\$arr, 0);
- D) \$arr->get(0);

Answer: B) \$arr[0];

(Indexed arrays use numeric keys starting from 0.)

8. How do you access an element of an associative array?

- A) \$arr[0];
- B) \$arr["name"];
- C) array_get(\$arr, "name");
- D) \$arr->get("name");

Answer: B) \$arr["name"];

9. How do you declare an associative array in PHP?

- A) \$arr = array("name" => "John", "age" => 25);
- B) \$arr = ["name" => "John", "age" => 25];
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

10. What will be the output of the following PHP code?

```
$arr = ["apple", "banana", "cherry"];
echo $arr[1];
```

- A) apple
- B) banana
- C) cherry
- D) Error

Answer: B) banana

(Arrays in PHP are zero-indexed, so index 1 refers to "banana".)

11. Which function is used to count the number of elements in an array?

- A) sizeof(\$arr);
- B) count(\$arr);
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

12. How do you add a new element to an existing array?

- A) \$arr[] = "new_value";
- B) array_push(\$arr, "new_value");
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

13. What will be the output of the following PHP code?

```
$arr = ["a" => "apple", "b" => "banana"];
echo $arr["b"];
```

- A) apple
- B) banana
- C) Error
- D) NULL

Answer: B) banana

(Associative arrays use string keys, so `$arr["b"]` gives "banana".)

14. How do you remove the last element from an array in PHP?

- A) `array_pop($arr);`
- B) `array_shift($arr);`
- C) `unset($arr);`
- D) `delete_last($arr);`

Answer: A) `array_pop($arr);`

15. What does the `array_keys()` function do in PHP?

- A) Returns an array of all keys from an array
- B) Returns an array of all values from an array
- C) Removes duplicate keys
- D) Sorts an array by keys

Answer: A) Returns an array of all keys from an array

16. What does the `array_values()` function do in PHP?

- A) Returns an array of all keys from an array
- B) Returns an array of all values from an array
- C) Removes duplicate values
- D) Sorts an array by values

Answer: B) Returns an array of all values from an array

17. How do you merge two arrays in PHP?

- A) `array_merge($arr1, $arr2);`
- B) `merge($arr1, $arr2);`
- C) `$arr1 + $arr2;`
- D) `combine($arr1, $arr2);`

Answer: A) `array_merge($arr1, $arr2);`

18. What will be the output of the following PHP code?

```
$arr1 = ["a" => "apple", "b" => "banana"];
$arr2 = ["b" => "blueberry", "c" => "cherry"];
$result = array_merge($arr1, $arr2);
print_r($result);
```

- A) ["a" => "apple", "b" => "banana", "b" => "blueberry", "c" => "cherry"]
- B) ["a" => "apple", "b" => "blueberry", "c" => "cherry"]
- C) ["a" => "apple", "b" => "banana", "c" => "cherry"]
- D) Error

Answer: B) ["a" => "apple", "b" => "blueberry", "c" => "cherry"]

(array_merge() replaces duplicate keys with values from the second array.)

19. Which function sorts an associative array by its values in ascending order?

- A) `sort($arr);`
- B) `asort($arr);`
- C) `ksort($arr);`
- D) `rsort($arr);`

Answer: B) `asort($arr);`

20. What will be the output of the following PHP code?

```
$arr = ["fruit" => "apple", "vegetable" => "carrot"];
unset($arr["fruit"]);
print_r($arr);
```

- A) ["fruit" => "apple"]
- B) ["vegetable" => "carrot"]
- C) ["fruit" => "apple", "vegetable" => "carrot"]
- D) NULL

Answer: B) ["vegetable" => "carrot"]

(The unset() function removes "fruit" from the array.)

MCQs on PHP Strings

1. What is a string in PHP?

- A) A sequence of characters
- B) A numeric data type
- C) A function in PHP
- D) An array

Answer: A) A sequence of characters

2. Which of the following is the correct way to declare a string in PHP?

- A) \$str = 'Hello World';
- B) \$str = "Hello World";
- C) \$str = <<<EOT Hello World EOT;
- D) All of the above

Answer: D) All of the above

(Strings in PHP can be declared using single quotes ('), double quotes ("), and heredoc syntax (<<<EOT).)

3. What is the difference between single-quoted and double-quoted strings in PHP?

- A) There is no difference
- B) Single-quoted strings do not process variables, but double-quoted strings do
- C) Double-quoted strings are faster than single-quoted strings
- D) Single-quoted strings are used for numbers, double-quoted for text

Answer: B) Single-quoted strings do not process variables, but double-quoted strings do

4. What will be the output of the following PHP code?

```
$name = "John";
echo 'Hello $name';
```

- A) Hello John
- B) Hello \$name
- C) Error
- D) Undefined

Answer: B) Hello \$name

(Single-quoted strings do not process variables, so \$name is treated as plain text.)

5. What will be the output of the following PHP code?

```
$name = "John";  
echo "Hello $name";
```

- A) Hello John
- B) Hello \$name
- C) Error
- D) Undefined

Answer: A) Hello John

(Double-quoted strings process variables, so \$name is replaced with "John".)

6. Which function is used to find the length of a string in PHP?

- A) strlen()
- B) length()
- C) count()
- D) strlength()

Answer: A) strlen()

7. What will be the output of `strlen("Hello")`?

- A) 5
- B) 6
- C) 4
- D) Error

Answer: A) 5

8. Which function is used to count the number of words in a string?

- A) str_count()
- B) word_count()

- C) `str_word_count()`
- D) `strlen()`

Answer: C) `str_word_count()`

9. What will be the output of `str_word_count("Hello World!")?`?

- A) 1
- B) 2
- C) 3
- D) Error

Answer: B) 2

10. Which function is used to reverse a string in PHP?

- A) `reverse()`
- B) `strrev()`
- C) `str_reverse()`
- D) `flip_string()`

Answer: B) `strrev()`

11. What will be the output of `strrev("Hello")?`?

- A) Hello
- B) olleH
- C) hElLo
- D) Error

Answer: B) olleH

12. Which function is used to convert a string to lowercase?

- A) `strtolower()`
- B) `toLowerCase()`
- C) `lower()`
- D) `str_lower()`

Answer: A) `strtolower()`

13. What will be the output of `strtolower("Hello WORLD")`?

- A) hello world
- B) HELLO WORLD
- C) Hello WORLD
- D) Error

Answer: A) hello world

14. Which function is used to convert a string to uppercase?

- A) `strtoupper()`
- B) `toUpperCase()`
- C) `upper()`
- D) `str_upper()`

Answer: A) `strtoupper()`

15. What will be the output of `strtoupper("hello world")`?

- A) hello world
- B) HELLO WORLD
- C) Hello WORLD
- D) Error

Answer: B) HELLO WORLD

16. Which function is used to extract a portion of a string?

- A) `substr()`
- B) `slice()`
- C) `substring()`
- D) `str_extract()`

Answer: A) `substr()`

17. What will be the output of `substr("Hello World", 6, 5)`?

- A) Hello
- B) World
- C) lo Wo
- D) Error

Answer: B) World

(Extracts 5 characters starting from index 6.)

18. How do you replace part of a string in PHP?

- A) `str_replace()`
- B) `replace()`
- C) `substr_replace()`
- D) `string_replace()`

Answer: A) `str_replace()`

19. What will be the output of `str_replace("world", "PHP", "Hello world")`?

- A) Hello world
- B) Hello PHP
- C) Hello
- D) PHP world

Answer: B) Hello PHP

(Replaces "world" with "PHP" in the given string.)

20. Which function removes whitespace from both ends of a string?

- A) `trim()`
- B) `strip()`
- C) `remove_space()`
- D) `clear_whitespace()`

Answer: A) `trim()`

MCQs on PHP Operators

1. *What are operators in PHP?*

- A) Special characters that perform operations on variables and values
- B) Functions in PHP
- C) Data types in PHP
- D) Keywords in PHP

Answer: A) Special characters that perform operations on variables and values

2. *Which of the following is an arithmetic operator in PHP?*

- A) +
- B) *
- C) %
- D) All of the above

Answer: D) All of the above

3. *What is the output of `echo 5 + 3;?`*

- A) 8
- B) 53
- C) 15
- D) Error

Answer: A) 8

4. *What does the % operator do in PHP?*

- A) Division
- B) Modulus (remainder)
- C) Multiplication
- D) Exponentiation

Answer: B) Modulus (remainder)

5. What will be the output of `echo 10 % 3;?`

- A) 3
- B) 1
- C) 0
- D) Error

Answer: B) 1

6. Which operator is used for exponentiation in PHP 5.6+?

- A) ^
- B) **
- C) ^^
- D) exp()

Answer: B) **

7. What will be the output of `echo 2 ** 3;?`

- A) 6
- B) 8
- C) 9
- D) Error

Answer: B) 8

8. Which of the following is an assignment operator in PHP?

- A) =
- B) +=
- C) -=
- D) All of the above

Answer: D) All of the above

9. What will be the output of the following code?

```
php
CopyEdit
$x = 5;
$x += 3;
echo $x;
```

- A) 8
- B) 5
- C) 3
- D) Error

Answer: A) 8

10. Which of the following is a comparison operator in PHP?

- A) ==
- B) !=
- C) <=
- D) All of the above

Answer: D) All of the above

11. What is the difference between == and === in PHP?

- A) == checks value, === checks both value and data type
- B) === is faster than ==
- C) == checks data type, === does not
- D) They are the same

Answer: A) == checks value, === checks both value and data type

12. What will be the output of echo (5 == "5");?

- A) 1
- B) 0
- C) Error
- D) NULL

Answer: A) 1

(Because == checks only value, not data type.)

13. What will be the output of echo (5 === "5") ;?

- A) 1
- B) 0
- C) Error
- D) NULL

Answer: B) 0

(Because === checks both value and type.)

14. What does the != operator mean?

- A) Not equal
- B) Greater than
- C) Less than
- D) Assignment

Answer: A) Not equal

15. What does the <=> (Spaceship) operator return when the left operand is greater than the right?

- A) -1
- B) 0
- C) 1
- D) NULL

Answer: C) 1

16. Which operator is used for logical AND in PHP?

- A) &&
- B) and
- C) Both A and B
- D) &

Answer: C) Both A and B

17. What will be the output of `echo (true && false);`?

- A) 1
- B) 0
- C) NULL
- D) Error

Answer: B) 0

18. What is the output of `echo (true || false);`?

- A) 1
- B) 0
- C) NULL
- D) Error

Answer: A) 1

19. What is the result of `! (true);`?

- A) 1
- B) 0
- C) NULL
- D) Error

Answer: B) 0

20. What is the ternary operator syntax in PHP?

- A) condition ? true_value : false_value;
- B) condition : true_value ? false_value;
- C) true_value ? condition : false_value;
- D) None of the above

Answer: A) condition ? true_value : false_value;

21. What will be the output of `echo (5 > 3) ? "Yes" : "No";`?

- A) Yes
- B) No
- C) 1
- D) 5

Answer: A) Yes

22. What is the null coalescing operator in PHP?

- A) ??
- B) ?:
- C) ::
- D) &&

Answer: A) ??

23. What does `$x ?? "Default";` return if `$x` is undefined?

- A) Default
- B) NULL
- C) Error
- D) 0

Answer: A) Default

24. What is the result of `echo 5 & 3;`?

- A) 1
- B) 5
- C) 3
- D) 2

Answer: D) 2

*(Bitwise AND operation: 5 (101) & 3 (011) = 001 (2))

25. What will be the result of `echo 5 | 3;?`

- A) 5
- B) 3
- C) 7
- D) 2

Answer: C) 7

*(Bitwise OR operation: $5 \text{ (101)} \mid 3 \text{ (011)} = 111 \text{ (7)}$)

26. Which of the following is a bitwise operator in PHP?

- A) &
- B) |
- C) ^
- D) All of the above

Answer: D) All of the above

27. What does the `^` (bitwise XOR) operator do?

- A) Flips all bits
- B) Returns 1 if only one of the bits is 1
- C) Performs logical XOR
- D) None of the above

Answer: B) Returns 1 if only one of the bits is 1

28. What will be the output of `echo 5 ^ 3;?`

- A) 6
- B) 2
- C) 1
- D) 7

Answer: A) 6

*(Bitwise XOR: $5 \text{ (101)} \wedge 3 \text{ (011)} = 110 \text{ (6)}$)

29. Which operator is used for bitwise NOT in PHP?

- A) !
- B) ~
- C) not
- D) -

Answer: B) ~

30. What is the result of `echo ~5;`?

- A) -6
- B) 4
- C) -5
- D) 6

Answer: A) -6

(Bitwise NOT flips all bits and adds -1.)

31. What will be the output of `echo 8 << 1;`?

- A) 16
- B) 4
- C) 8
- D) 0

Answer: A) 16

(Left shift moves bits left by 1 position, doubling the value.)

32. What is the output of `echo 8 >> 1;`?

- A) 4
- B) 8
- C) 16
- D) 0

Answer: A) 4

(Right shift moves bits right by 1 position, halving the value.)

33. What will `echo 10 <=> 5;` return?

- A) -1
- B) 0
- C) 1
- D) Error

Answer: C) 1

(10 is greater than 5, so <=> (spaceship operator) returns 1.)

34. What will `echo 5 <=> 10;` return?

- A) -1
- B) 0
- C) 1
- D) Error

Answer: A) -1

(5 is less than 10, so <=> returns -1.)

35. What is the purpose of the `?.` (null safe) operator in PHP 8?

- A) Checks if an object is null before calling a method
- B) Assigns null values
- C) Converts null to 0
- D) None of the above

Answer: A) Checks if an object is null before calling a method

36. What will be the result of `echo null ?? "Default";`?

- A) null
- B) Default
- C) Error
- D) Undefined

Answer: B) Default

(?? (null coalescing) returns "Default" if null is present.)

37. What will `echo 5 == "5"; return?`

- A) true
- B) false
- C) Error
- D) Undefined

Answer: A) true

(Loose comparison == ignores data type.)

38. What will `echo 5 === "5"; return?`

- A) true
- B) false
- C) Error
- D) Undefined

Answer: B) false

(Strict comparison === checks data type.)

39. Which operator is used to concatenate strings in PHP?

- A) +
- B) .
- C) &
- D) concat()

Answer: B) .

40. What will be the output of `echo "Hello" . " World";?`

- A) Hello World
- B) HelloWorld
- C) Error
- D) None

Answer: B) HelloWorld

41. What will `echo "5" + 5;` return?

- A) 55
- B) 10
- C) Error
- D) Undefined

Answer: B) 10

(PHP automatically converts "5" to integer 5.)

42. Which operator is used for string repetition?

- A) *
- B) .
- C) repeat()
- D) None of the above

Answer: D) None of the above

(PHP does not have a native repetition operator.)

43. What will be the result of `echo 10 ?? "Default";?`

- A) 10
- B) Default
- C) NULL
- D) Error

Answer: A) 10

44. Which operator is used for object cloning in PHP?

- A) `clone`
- B) `new`
- C) `copy`
- D) `__clone()`

Answer: A) `clone`

45. What will `echo "5" === 5;` return?

- A) 1
- B) 0
- C) Error
- D) Undefined

Answer: B) 0

(Strict comparison returns `false`.)

46. What will be the output of `echo "5" + "10";`?

- A) 510
- B) 15
- C) Error
- D) Undefined

Answer: B) 15

(PHP converts strings to integers when using `+`.)

47. What is the precedence of `&&` compared to `and`?

- A) `&&` has higher precedence
- B) `and` has higher precedence

- C) Both are equal
- D) None of the above

Answer: A) `&&` has higher precedence

48. What will be the output of `echo true and false;`?

- A) 1
- B) 0
- C) Error
- D) Undefined

Answer: A) 1

(Because `=` has higher precedence than `and`.)

49. What will be the result of `echo false or true;`?

- A) 1
- B) 0
- C) Error
- D) Undefined

Answer: B) 0

(`echo false` executes first, ignoring `or true`.)

50. What is the correct syntax for using the ternary operator?

- A) `condition ? true_value : false_value;`
- B) `condition : true_value ? false_value;`
- C) `true_value ? condition : false_value;`
- D) None of the above

Answer: A) `condition ? true_value : false_value;`

1. What is operator precedence in PHP?

- A) The order in which operators are evaluated
- B) The number of operands an operator can take
- C) The associativity of an operator
- D) The priority of functions

Answer: A) The order in which operators are evaluated

2. Which operator has the highest precedence in PHP?

- A) () (Parentheses)
- B) ++ (Increment)
- C) * (Multiplication)
- D) = (Assignment)

Answer: A) () (Parentheses)

3. What is the purpose of parentheses () in operator precedence?

- A) To change the natural order of evaluation
- B) To define a function
- C) To assign values
- D) To compare values

Answer: A) To change the natural order of evaluation

4. What will be the output of `echo 5 + 3 * 2;`?

- A) 16
- B) 11
- C) 13
- D) 10

Answer: B) 11

(*Multiplication has higher precedence than addition: $5 + (3 * 2) = 5 + 6 = 11.$*)

5. What will be the output of `echo (5 + 3) * 2;`?

- A) 16
- B) 11
- C) 13
- D) 10

Answer: A) 16

(Parentheses change the order: $(5 + 3) * 2 = 8 * 2 = 16.$)

6. Which has higher precedence: `&&` or `and`?

- A) `&&`
- B) `and`
- C) Both are the same
- D) Depends on the context

Answer: A) `&&`

7. Which has higher precedence: `||` or `or`?

- A) `||`
- B) `or`
- C) Both are the same
- D) Depends on the context

Answer: A) `||`

8. What will be the output of `echo true && false || true;`?

- A) true
- B) false
- C) Error
- D) 1

Answer: A) true

(Since `&&` has higher precedence than `||`, the expression is evaluated as `(true && false) || true`, which results in `false || true = true`.)

9. What will be the output of `echo true and false;`?

- A) true
- B) false
- C) 1
- D) Error

Answer: C) 1

(Because `echo` has higher precedence than `and`, the expression is treated as `(echo true)` and `false`, so it prints 1 and does not evaluate `and false`.)

10. Which operator has the lowest precedence in PHP?

- A) +
- B) =
- C) or
- D) .

Answer: C) or

11. What will be the output of `echo 10 - 2 * 3;`?

- A) 24
- B) 4
- C) 8
- D) 10

Answer: B) 4

*(Multiplication has higher precedence: $10 - (2 * 3) = 10 - 6 = 4$.)*

12. Which has higher precedence: . (concatenation) or + (addition)?

- A) .
- B) +
- C) Both have the same precedence
- D) Depends on the context

Answer: B) +

13. What will be the output of `echo 5 . 2 + 3;?`

- A) 52 + 3
- B) 55
- C) 8
- D) 52

Answer: B) 55

(Addition has higher precedence than concatenation: ("5" . (2 + 3)) = "5" . "5" = "55".)

14. Which has higher precedence: == or &&?

- A) ==
- B) &&
- C) Both are the same
- D) Depends on the context

Answer: A) ==

15. What is the output of `echo 5 > 3 && 2 < 4;?`

- A) true
- B) false
- C) 1
- D) 0

Answer: C) 1

16. What is the associativity of the = operator?

- A) Left to right
- B) Right to left
- C) No associativity
- D) Depends on the operands

Answer: B) Right to left

17. What will be the output of `echo $x = 5 + 3 * 2;?`?

- A) 16
- B) 11
- C) 10
- D) Error

Answer: B) 11

(Assignment = has lower precedence than arithmetic operations.)

18. Which operator has the lowest precedence among these?

- A) +
- B) =
- C) and
- D) ||

Answer: C) and

19. What will be the output of `echo 10 - 3 + 2;?`?

- A) 5
- B) 9
- C) 10
- D) 15

Answer: B) 9

(Operators of the same precedence are evaluated left to right: $(10 - 3) + 2 = 7 + 2 = 9.$)

20. What is the associativity of . (concatenation) operator?

- A) Left to right
- B) Right to left

- C) No associativity
- D) None of the above

Answer: A) Left to right

21. What will be the output of `echo "Hello" . " World" . "!" ;?`?

- A) Hello World!
- B) HelloWorld!
- C) Error
- D) None

Answer: B) HelloWorld!

22. Which operator has higher precedence: + or %?

- A) +
- B) %
- C) Both are the same
- D) None of the above

Answer: B) %

23. What will be the output of `echo (10 % 3) * 2 ;?`?

- A) 1
- B) 2
- C) 4
- D) 6

Answer: C) 4

24. What is the precedence of ++ (increment) operator?

- A) Highest
- B) Lowest
- C) Medium
- D) Depends on the context

Answer: A) Highest

25. What will be the output of `echo 10 > 5 ? "Yes" : "No";?`?

- A) Yes
- B) No
- C) Error
- D) None

Answer: A) Yes

26. Which operator has lower precedence: `or` or `||`?

- A) `or`
- B) `||`
- C) Both are the same
- D) Depends on context

Answer: A) `or`

27. What is the associativity of `&&`?

- A) Left to right
- B) Right to left
- C) No associativity
- D) None

Answer: A) Left to right

28. Which has higher precedence: `*` or `/`?

- A) `*`
- B) `/`
- C) Both are equal
- D) Depends on context

Answer: C) Both are equal

29. Which of the following has the lowest precedence?

- A) +
- B) .
- C) =
- D) or

Answer: D) or

30. What will be the output of echo (5 + 2) * 3;?

- A) 21
- B) 17
- C) 15
- D) 23

Answer: A) 21

1. Which of the following is NOT a valid PHP conditional statement?

- a) if
- b) unless
- c) switch
- d) elseif

Answer: b) unless

2. Which keyword is used to check multiple conditions in PHP?

- a) switch
- b) if
- c) for
- d) while

Answer: a) switch

3. What will be the output of the following code?

```
$x = 10;  
if ($x > 5) {  
    echo "Greater";  
} else {  
    echo "Smaller";  
}
```

- a) Greater
- b) Smaller
- c) Error
- d) No output

Answer: a) Greater

4. Which of the following is the correct syntax for an if statement in PHP?

- a) if x > 5 { }
- b) if (\$x > 5) { }
- c) if \$x > 5 then { }
- d) if (\$x > 5) then { }

Answer: b) `if ($x > 5) { }`

5. What will be the output of the following code?

```
$x = 10;  
if ($x == "10") {  
    echo "Equal";  
} else {  
    echo "Not Equal";  
}
```

- a) Equal
- b) Not Equal
- c) Error
- d) No output

Answer: a) Equal

6. What will be the output of the following code?

```
$x = 10;  
if ($x === "10") {  
    echo "Identical";  
} else {  
    echo "Not Identical";  
}
```

- a) Identical
- b) Not Identical
- c) Error
- d) No output

Answer: b) Not Identical

7. The `else` statement in PHP is executed when the condition in `if` is:

- a) True
- b) False
- c) Always
- d) Never

Answer: b) False

8. What is the correct syntax of an `elseif` statement in PHP?

- a) `else if ($x > 10) { }`
- b) `elseif ($x > 10) { }`
- c) `else if { $x > 10 }`
- d) `elseif { $x > 10 }`

Answer: b) `elseif ($x > 10) { }`

9. The `switch` statement in PHP is similar to:

- a) for loop
- b) while loop
- c) if-else
- d) function

Answer: c) if-else

10. Which keyword is used to exit a switch case?

- a) stop
- b) exit
- c) break
- d) continue

Answer: c) break

11. What will be the output of the following code?

```
$color = "blue";
switch ($color) {
    case "red":
        echo "Red";
        break;
    case "blue":
        echo "Blue";
        break;
    default:
        echo "No match";
}
```

- a) Red
- b) Blue
- c) No match
- d) Error

Answer: b) Blue

12. The `default` case in a switch statement is executed when:

- a) No case matches
- b) Always
- c) First case is executed
- d) When `break` is not used

Answer: a) No case matches

13. What will be the output of the following code?

```
$x = 5;  
if ($x > 10)  
    echo "Greater";  
elseif ($x == 5)  
    echo "Equal";  
else  
    echo "Smaller";
```

- a) Greater
- b) Equal
- c) Smaller
- d) Error

Answer: b) Equal

14. The ternary operator in PHP is represented by:

- a) ??
- b) :
- c) ? :
- d) ->

Answer: c) ? :

15. What is the output of the following ternary operation?

```
$x = 10;  
echo ($x > 5) ? "Yes" : "No";
```

- a) Yes
- b) No
- c) Error
- d) 10

Answer: a) Yes

16. How many cases can be used inside a switch statement?

- a) Only 2
- b) Only 3
- c) Unlimited
- d) None

Answer: c) Unlimited

17. Which of the following is the correct syntax for a switch statement?

a)

```
switch {  
    case 1: echo "One";  
}
```

b)

```
switch ($var) {  
    case 1: echo "One"; break;  
}
```

c)

```
switch ($var) {  
    1: echo "One"; break;  
}
```

d)

```
switch ($var) {  
    case 1 echo "One"; break;  
}
```

Answer: b)

18. Which statement is used to terminate the execution of a loop or switch?

- a) stop
- b) exit
- c) break
- d) return

Answer: c) break

19. What will be the output of the following code?

```
$age = 18;  
echo ($age >= 18) ? "Adult" : "Minor";
```

- a) Adult
- b) Minor
- c) Error
- d) No output

Answer: a) Adult

20. Can a switch statement be nested in PHP?

- a) Yes
- b) No

Answer: a) Yes

21. Can we use multiple `case` values in a switch statement?

- a) Yes
- b) No

Answer: a) Yes

22. What happens if a `break` statement is omitted in a switch case?

- a) It exits the switch statement
- b) It throws an error
- c) It executes the next case(s) until a break is found
- d) It restarts the switch statement

Answer: c) It executes the next case(s) until a break is found

23. What will be the output of the following code?

```
$x = 3;
switch ($x) {
    case 1:
        echo "One";
    case 3:
        echo "Three";
    default:
        echo "None";
}
```

- a) One
- b) Three
- c) ThreeNone
- d) OneThreeNone

Answer: c) ThreeNone

24. What is the correct syntax for the ternary operator?

- a) `(condition) ? (true_statement) : (false_statement);`
- b) `if (condition) { true_statement; } else { false_statement; }`
- c) `(true_statement) : (false_statement) ? (condition);`
- d) None of the above

Answer: a) `(condition) ? (true_statement) : (false_statement);`

25. What is the output of the following code?

```
$y = 0;  
$result = ($y > 0) ? "Positive" : ($y < 0 ? "Negative" : "Zero");  
echo $result;
```

- a) Positive
- b) Negative
- c) Zero
- d) Error

Answer: c) Zero

26. Can an if statement be written without curly braces {}?

- a) Yes, if it has a single statement
- b) No, curly braces are mandatory
- c) Only inside loops
- d) Only in switch statements

Answer: a) Yes, if it has a single statement

27. What will be the output of the following code?

```
if (0) {  
    echo "True";  
} else {  
    echo "False";  
}
```

- a) True
- b) False
- c) Error
- d) No output

Answer: b) False

28. What does === operator check in PHP?

- a) Value only
- b) Type only
- c) Both value and type
- d) None of the above

Answer: c) Both value and type

29. What will be the output of the following code?

```
if ("0") {  
    echo "True";  
} else {  
    echo "False";  
}
```

- a) True
- b) False
- c) Error
- d) No output

Answer: a) True

30. Which of the following evaluates to `false` in PHP?

- a) 0
- b) ""
- c) null
- d) All of the above

Answer: d) All of the above

31. The `default` case in a switch statement is:

- a) Optional
- b) Mandatory
- c) Executed first
- d) Must be placed at the beginning

Answer: a) Optional

32. Can the `switch` statement be used with strings in PHP?

- a) Yes
- b) No

Answer: a) Yes

33. What will be the output of the following code?

```
if (true == "1") {  
    echo "Equal";  
} else {  
    echo "Not Equal";  
}
```

- a) Equal
- b) Not Equal
- c) Error
- d) No output

Answer: a) Equal

34. What is the purpose of the `continue` statement in PHP?

- a) Terminates loop execution
- b) Skips current iteration and continues to next one
- c) Stops script execution
- d) Restarts the script

Answer: b) Skips current iteration and continues to next one

35. What is the output of the following code?

```
if (true && false) {  
    echo "Yes";  
} else {  
    echo "No";  
}
```

- a) Yes
- b) No
- c) Error
- d) No output

Answer: b) No

36. How many `else if` conditions can be used in PHP?

- a) Only one
- b) Only two
- c) No limit
- d) Depends on PHP version

Answer: c) No limit

37. The `switch` statement can replace which conditional statement?

- a) if-else
- b) while
- c) for
- d) do-while

Answer: a) if-else

38. What will be the output of the following code?

```
$val = NULL;  
if ($val) {  
    echo "True";  
} else {  
    echo "False";  
}
```

- a) True
- b) False
- c) Error
- d) No output

Answer: b) False

39. What will be the output of the following code?

```
$num = 0;  
echo ($num ? "Yes" : "No");
```

- a) Yes
- b) No

- c) Error
- d) No output

Answer: b) No

40. The `elseif` keyword is equivalent to:

- a) `if-else`
- b) `else if`
- c) `switch`
- d) `while`

Answer: b) `else if`

41. Which statement is used to immediately stop script execution in PHP?

- a) `break`
- b) `exit`
- c) `continue`
- d) `return`

Answer: b) `exit`

42. Can we use an `if` statement inside another `if` statement?

- a) Yes
- b) No

Answer: a) Yes

43. Which PHP keyword is used to return a value from a function?

- a) `return`
- b) `exit`
- c) `break`
- d) `continue`

Answer: a) return

44. What will be the output of the following code?

```
$val = "10";
if ($val === 10) {
    echo "True";
} else {
    echo "False";
}
```

- a) True
- b) False
- c) Error
- d) No output

Answer: b) False

45. Which operator is used to check for inequality in PHP?

- a) !=
- b) <>
- c) !==
- d) All of the above

Answer: d) All of the above

46. What is the output of `var_dump((bool) "0")`?

- a) bool(true)
- b) bool(false)
- c) 0
- d) 1

Answer: b) bool(false)

47. Which statement is used to execute a block of code only when a condition is false?

- a) if
- b) else
- c) !if
- d) switch

Answer: b) else

48. How do you write an if statement that executes when \$x is NOT equal to 100?

- a) if (\$x <> 100) {}
- b) if (\$x != 100) {}
- c) if (\$x !== 100) {}
- d) All of the above

Answer: d) All of the above

49. What will be the output of echo 5 > 3 ? "Yes" : "No";?

- a) Yes
- b) No
- c) Error
- d) Nothing

Answer: a) Yes

50. Is the following syntax correct?

```
if ($x = 5) { echo "Yes"; }
```

- a) Yes, but it has an assignment mistake
- b) No, it's incorrect
- c) Only in PHP 8+
- d) Only in strict mode

Answer: a) Yes, but it has an assignment mistake

1. Which of the following is NOT a loop in PHP?

- a) for
- b) while

- c) switch
- d) foreach

Answer: c) switch

2. Which PHP loop is used when the number of iterations is known?

- a) while
- b) for
- c) do-while
- d) foreach

Answer: b) for

3. What is the correct syntax for a `for` loop in PHP?

- a) `for ($i = 0; $i < 10; $i++) { }`
- b) `for $i = 0 to 10 { }`
- c) `for $i = 0; $i < 10 { }`
- d) `for ($i < 10; $i++) { }`

Answer: a) `for ($i = 0; $i < 10; $i++) { }`

4. What is the correct syntax of a `while` loop?

- a) `while $x > 10 { }`
- b) `while ($x > 10) { }`
- c) `while x > 10 then { }`
- d) `while ($x > 10) then { }`

Answer: b) `while ($x > 10) { }`

5. Which loop always executes at least once?

- a) for
- b) while

- c) do-while
- d) foreach

Answer: c) do-while

6. What will be the output of the following code?

```
$x = 5;
while ($x > 0) {
    echo $x;
    $x--;
}
```

- a) 54321
- b) 12345
- c) Infinite loop
- d) Error

Answer: a) 54321

7. Which loop is used to iterate over an array in PHP?

- a) for
- b) while
- c) do-while
- d) foreach

Answer: d) foreach

8. What will be the output of the following code?

```
$i = 0;
do {
    echo $i;
    $i++;
} while ($i < 3);
```

- a) 012
- b) 123
- c) Infinite loop
- d) Error

Answer: a) 012

9. How do you exit a loop in PHP?

- a) exit
- b) stop
- c) break
- d) return

Answer: c) break

10. What will be the output of the following code?

```
for ($i = 0; $i < 3; $i++) {  
    if ($i == 2) break;  
    echo $i;  
}
```

- a) 01
- b) 012
- c) 02
- d) 1

Answer: a) 01

11. Which statement skips the current iteration of a loop and moves to the next iteration?

- a) break
- b) exit
- c) return
- d) continue

Answer: d) continue

12. What will be the output of the following code?

```
for ($i = 0; $i < 5; $i++) {
```

```
if ($i == 3) continue;  
echo $i;  
}
```

- a) 0124
- b) 01234
- c) 1234
- d) 0

Answer: a) 0124

13. What will be the output of the following code?

```
$x = 5;  
while ($x < 5) {  
    echo "Hello";  
}
```

- a) Hello
- b) Infinite loop
- c) No output
- d) Error

Answer: c) No output

14. How do you iterate over an associative array in PHP?

- a) Using `for` loop
- b) Using `foreach` loop
- c) Using `while` loop
- d) Both b and c

Answer: b) Using `foreach` loop

15. Which loop structure is best for iterating over an indexed array?

- a) `for`
- b) `while`
- c) `do-while`
- d) `switch`

Answer: a) for

16. Which loop is best for executing a block of code at least once?

- a) while
- b) do-while
- c) for
- d) foreach

Answer: b) do-while

17. What is the default step value in a for loop?

- a) 0
- b) 1
- c) -1
- d) 2

Answer: b) 1

18. Can a loop be nested inside another loop in PHP?

- a) Yes
- b) No

Answer: a) Yes

19. What is the output of the following code?

```
$arr = array("a", "b", "c");
foreach ($arr as $value) {
    echo $value;
}
```

- a) abc
- b) a b c
- c) "a""b""c"
- d) Error

Answer: a) abc

20. What will be the output of the following code?

```
for ($i = 0; $i < 3; $i++) {  
    for ($j = 0; $j < 2; $j++) {  
        echo "*";  
    }  
}
```

- a) **
- b) ****
- c) *****
- d) ***

Answer: c) *****

21. What happens when a `break` statement is used in a nested loop?

- a) It exits both loops
- b) It exits only the innermost loop
- c) It throws an error
- d) None of the above

Answer: b) It exits only the innermost loop

22. What will be the output of the following code?

```
$count = 1;  
while ($count <= 3) {  
    echo $count;  
    $count++;  
}
```

- a) 123
- b) 0123
- c) 3
- d) Error

Answer: a) 123

23. What happens if the condition in a `while` loop is always `true`?

- a) Loop runs infinitely
- b) Loop executes only once
- c) Loop executes 10 times
- d) Syntax error

Answer: a) Loop runs infinitely

24. What will be the output of the following code?

```
for ($i = 0; $i < 3; $i++) {  
    echo "$i ";  
}
```

- a) 0 1 2
- b) 1 2 3
- c) 012
- d) 0 1 2 3

Answer: a) 0 1 2

25. Which loop structure is best when the number of iterations is unknown?

- a) for
- b) while
- c) do-while
- d) foreach

Answer: b) while

26. Can a loop be used inside a function in PHP?

- a) Yes
- b) No

Answer: a) Yes

27. What is an infinite loop?

- a) A loop that runs forever
- b) A loop with a fixed number of iterations
- c) A loop that never starts
- d) None of the above

Answer: a) A loop that runs forever

28. Can a `foreach` loop iterate over an object?

- a) Yes
- b) No

Answer: a) Yes

29. What is the output of `var_dump(5 > 3 ? "Yes" : "No")`?

- a) string(3) "Yes"
- b) Yes
- c) No
- d) Error

Answer: a) string(3) "Yes"

30. Can we use a `for` loop inside a `while` loop?

- a) Yes
- b) No

Answer: a) Yes

1. Which of the following loops executes at least once, even if the condition is false?

- a) `for`
- b) `while`
- c) `do-while`
- d) `foreach`

Answer: c) do-while

2. What is the correct syntax for a `while` loop?

- a) `while $x > 5 { }`
- b) `while ($x > 5) { }`
- c) `while x > 5 { }`
- d) `while ($x > 5) then { }`

Answer: b) `while ($x > 5) { }`

3. How many times does the following loop execute?

```
for ($i = 0; $i < 5; $i++) {  
    echo $i;  
}
```

- a) 4 times
- b) 5 times
- c) Infinite times
- d) 0 times

Answer: b) 5 times

4. Which loop is best when the number of iterations is known?

- a) `while`
- b) `for`
- c) `do-while`
- d) `foreach`

Answer: b) `for`

5. What will be the output of the following code?

```
$i = 5;  
while ($i < 5) {  
    echo "Hello";  
}
```

- a) Hello
- b) Infinite loop
- c) No output
- d) Error

Answer: c) No output

6. What is the output of the following code?

```
$i = 0;  
do {  
    echo $i;  
    $i++;  
} while ($i < 3);
```

- a) 012
- b) 123
- c) Infinite loop
- d) Error

Answer: a) 012

7. What will happen if the loop condition is always true?

- a) The loop runs infinitely
- b) The loop stops after 10 iterations
- c) The loop executes only once
- d) Syntax error

Answer: a) The loop runs infinitely

8. What is the output of the following code?

```
for ($i = 0; $i < 3; $i++) {  
    echo "$i ";  
}
```

- a) 0 1 2
- b) 1 2 3
- c) 012
- d) 0 1 2 3

Answer: a) 0 1 2

9. Which statement immediately terminates a loop?

- a) continue
- b) exit
- c) break
- d) return

Answer: c) break

10. What will be the output of the following code?

```
$i = 0;
while ($i < 3) {
    if ($i == 1) break;
    echo $i;
    $i++;
}
```

- a) 0
- b) 01
- c) 012
- d) 1

Answer: a) 0

11. What does the `continue` statement do?

- a) Exits the loop
- b) Skips the current iteration and continues to the next one
- c) Stops the script execution
- d) None of the above

Answer: b) Skips the current iteration and continues to the next one

12. How do you create an infinite loop using `while`?

- a) `while (true) { }`
- b) `while (1) { }`
- c) `while ("PHP") { }`
- d) All of the above

Answer: d) All of the above

13. Which loop structure is best for reading a file line by line?

- a) `for`
- b) `while`
- c) `do-while`
- d) `foreach`

Answer: b) `while`

14. What will be the output of the following code?

```
for ($i = 0; $i < 3; $i++) {
    for ($j = 0; $j < 2; $j++) {
        echo "**";
    }
}
```

- a) **
- b) ****
- c) *****
- d) ***

Answer: c) *****

15. What is the correct syntax for a `do-while` loop?

- a) `do { statements } while (condition);`
- b) `do while (condition) { statements };`
- c) `do { statements } while condition;`
- d) `do (statements) while (condition);`

Answer: a) `do { statements } while (condition);`

16. Can a `while` loop execute without a body?

- a) Yes
- b) No

Answer: a) Yes

17. Can you use multiple `for` loops inside each other?

- a) Yes
- b) No

Answer: a) Yes

18. Which loop is best suited for iterating over an array?

- a) `for`
- b) `while`
- c) `do-while`
- d) `foreach`

Answer: d) `foreach`

19. What happens if the loop condition in `for` is omitted?

- a) Compilation error
- b) Infinite loop
- c) No iterations
- d) Executes once

Answer: b) Infinite loop

20. How many times does this loop execute?

```
for ($i = 0; $i < 3; $i--) {  
    echo $i;
```

}

- a) 3 times
- b) Infinite loop
- c) No output
- d) Syntax error

Answer: b) Infinite loop

21. Which loop structure can iterate through database records?

- a) while
- b) for
- c) foreach
- d) All of the above

Answer: d) All of the above

22. What will be the output of `var_dump(5 > 3 ? "Yes" : "No")`?

- a) string(3) "Yes"
- b) Yes
- c) No
- d) Error

Answer: a) string(3) "Yes"

23. Can a `for` loop be used with a decrementing counter?

- a) Yes
- b) No

Answer: a) Yes

24. What will be the output of `echo 5 > 3 ? "Yes" : "No";`?

- a) Yes
- b) No

- c) Error
- d) Nothing

Answer: a) Yes

25. Which loop runs faster in PHP?

- a) `for`
- b) `while`
- c) `do-while`
- d) It depends on the scenario

Answer: d) It depends on the scenario

26. Can we use a `for` loop inside a `while` loop?

- a) Yes
- b) No

Answer: a) Yes

27. Can a `do-while` loop execute zero times?

- a) Yes
- b) No

Answer: b) No

28. What is the output of the following code?

```
$i = 0;  
while ($i++ < 3) {  
    echo $i;  
}
```

- a) 012
- b) 123

- c) 234
- d) Error

Answer: b) 123

29. Can a loop be written inside a function?

- a) Yes
- b) No

Answer: a) Yes

30. What is the default step value in a `for` loop?

- a) 0
- b) 1
- c) -1
- d) 2

Answer: b) 1

1. What is the purpose of the `break` statement in PHP?

- a) To exit a loop
- b) To continue to the next iteration of a loop
- c) To terminate the script
- d) To pause execution

Answer: a) To exit a loop

2. Which statement is used to skip the current iteration and move to the next one?

- a) `exit`
- b) `break`
- c) `continue`
- d) `return`

Answer: c) `continue`

3. What does the `exit()` function do?

- a) Terminates the current script
- b) Breaks out of a loop
- c) Skips the current iteration
- d) Restarts the script

Answer: a) Terminates the current script

4. What will be the output of the following code?

```
for ($i = 0; $i < 5; $i++) {  
    if ($i == 3) break;  
    echo $i;  
}
```

- a) 012
- b) 01234
- c) 1234
- d) 0123

Answer: a) 012

5. What happens when `break` is used inside a nested loop?

- a) It exits all loops
- b) It only exits the innermost loop
- c) It exits the outermost loop
- d) It throws an error

Answer: b) It only exits the innermost loop

6. What will be the output of the following code?

```
for ($i = 1; $i <= 5; $i++) {  
    if ($i == 3) continue;  
    echo $i;  
}
```

- a) 12345
- b) 1245
- c) 1345
- d) 012

Answer: b) 1245

7. What will happen if `exit()` is used in a loop?

- a) The loop will stop execution immediately
- b) The loop will continue to the next iteration
- c) The script will terminate completely
- d) The loop will break and continue after it

Answer: c) The script will terminate completely

8. What is the difference between `break` and `exit`?

- a) `break` stops execution of a script, `exit` stops execution of a loop
- b) `break` stops execution of a loop, `exit` stops execution of the script
- c) `break` and `exit` both stop script execution
- d) There is no difference

Answer: b) `break` stops execution of a loop, `exit` stops execution of the script

9. What will be the output of the following code?

```
$i = 1;
while ($i <= 5) {
    if ($i == 3) break;
    echo $i;
    $i++;
}
```

- a) 12345
- b) 12
- c) 1345
- d) 1245

Answer: b) 12

10. Can `continue` be used outside a loop?

- a) Yes
- b) No

Answer: b) No

11. What will happen if `break` is used outside a loop?

- a) It will break the program
- b) It will work normally
- c) It will throw an error
- d) It will do nothing

Answer: c) It will throw an error

12. What will be the output of the following code?

```
for ($i = 1; $i <= 5; $i++) {  
    if ($i == 4) exit;  
    echo $i;  
}
```

- a) 12345
- b) 1234
- c) 123
- d) No output

Answer: c) 123

13. What is the return type of the `exit()` function?

- a) String
- b) Integer
- c) Void
- d) Boolean

Answer: c) Void

14. What will be the output of the following code?

```
for ($i = 1; $i <= 5; $i++) {  
    echo $i;  
    exit;  
}
```

- a) 12345
- b) 1
- c) 5
- d) No output

Answer: b) 1

15. How can `exit()` be used to display a message?

- a) `exit("Error occurred!");`
- b) `exit = "Error occurred!"`;
- c) `exit; "Error occurred!"`;
- d) `exit -> "Error occurred!"`;

Answer: a) `exit("Error occurred!");`

16. Which of the following is true about `exit()`?

- a) It can accept an optional status code
- b) It can accept a string message
- c) It stops script execution immediately
- d) All of the above

Answer: d) All of the above

17. What will be the output of the following code?

```
$i = 0;  
while ($i < 5) {  
    if ($i == 2) continue;  
    echo $i;  
    $i++;
```

}

- a) 01234
- b) 0134
- c) 024
- d) Infinite loop

Answer: d) Infinite loop (since \$i is not incremented when \$i == 2)

18. Can `exit()` be used inside a function?

- a) Yes
- b) No

Answer: a) Yes

19. What is the difference between `die()` and `exit()`?

- a) `die()` can only stop a loop
- b) `exit()` can only be used in functions
- c) They are identical
- d) `die()` does not stop script execution

Answer: c) They are identical

20. Can `break` be used inside a switch case?

- a) Yes
- b) No

Answer: a) Yes

21. Can `continue` be used inside a `foreach` loop?

- a) Yes
- b) No

Answer: a) Yes

22. Can `break` be used inside a function?

- a) Yes
- b) No

Answer: b) No

23. Can `exit` take a numeric argument?

- a) Yes
- b) No

Answer: a) Yes

24. What happens when `exit(0)` is used?

- a) It stops execution normally
- b) It stops execution with an error
- c) It breaks a loop
- d) It does nothing

Answer: a) It stops execution normally

25. What will be the output of the following code?

```
for ($i = 1; $i <= 5; $i++) {  
    if ($i == 3) continue;  
    echo $i;  
    if ($i == 4) break;  
}
```

- a) 1245
- b) 1234
- c) 124
- d) 134

Answer: c) 124

26. Can `exit` be used in an `if` condition?

- a) Yes
- b) No

Answer: a) Yes

27. What happens if `exit(1)` ; is used?

- a) It stops execution with a failure status
- b) It continues execution
- c) It breaks a loop
- d) It does nothing

Answer: a) It stops execution with a failure status

28. Which statement is used to terminate the script?

- a) `break`
- b) `continue`
- c) `exit`
- d) `skip`

Answer: c) `exit`

29. What will `exit("Goodbye")` ; output?

- a) Goodbye
- b) 0
- c) Error
- d) Nothing

Answer: a) Goodbye

30. Can `exit()` be used without parentheses?

- a) Yes
- b) No

Answer: a) Yes

1. What is a function in PHP?

- a) A predefined code block
- b) A variable
- c) A database query
- d) A PHP class

Answer: a) A predefined code block

2. How do you declare a function in PHP?

- a) define myFunction() { }
- b) function myFunction() { }
- c) void myFunction() { }
- d) new function myFunction() { }

Answer: b) function myFunction() { }

3. How do you call a function in PHP?

- a) call myFunction();
- b) invoke myFunction();
- c) myFunction();
- d) execute myFunction();

Answer: c) myFunction();

4. What will be the output of the following code?

```
function sayHello() {  
    echo "Hello, World!";  
}  
sayHello();
```

- a) Nothing
- b) Hello, World!
- c) Error
- d) 0

Answer: b) Hello, World!

5. Which keyword is used to return a value from a function?

- a) exit
- b) return
- c) output
- d) send

Answer: b) return

6. What will be the output of this code?

```
function sum($a, $b) {  
    return $a + $b;  
}  
echo sum(3, 5);
```

- a) 8
- b) 3
- c) 5
- d) Error

Answer: a) 8

7. Can a function return multiple values in PHP?

- a) No
- b) Yes, using an array
- c) Yes, using multiple return statements
- d) Yes, using multiple echo statements

Answer: b) Yes, using an array

8. What is the default return type of a PHP function?

- a) int
- b) string
- c) void
- d) mixed

Answer: d) mixed

9. How can a function accept default parameters?

- a) function myFunction(\$a = 5) { }
- b) function myFunction(default \$a = 5) { }
- c) function myFunction(\$a -> default 5) { }
- d) function myFunction(\$a: 5) { }

Answer: a) function myFunction(\$a = 5) { }

10. What will be the output of this code?

```
function greet($name = "Guest") {
    echo "Hello, $name";
}
greet();
```

- a) Error
- b) Hello, Guest
- c) Hello,
- d) Guest

Answer: b) Hello, Guest

11. Which function is used to check if a function exists?

- a) function_exists()
- b) is_function()
- c) exists_function()
- d) isset()

Answer: a) function_exists()

12. What will be the output of the following?

```
function example() {  
    static $x = 0;  
    $x++;  
    echo $x;  
}  
example();  
example();  
example();
```

- a) 111
- b) 123
- c) 012
- d) Error

Answer: b) 123

13. What is the purpose of `static` variables in functions?

- a) They keep their value between function calls
- b) They are reset after function execution
- c) They are global variables
- d) They act as constants

Answer: a) They keep their value between function calls

14. How do you pass arguments by reference?

- a) `function test(&$var) { }`
- b) `function test(@$var) { }`
- c) `function test(*$var) { }`
- d) `function test(#$var) { }`

Answer: a) `function test(&$var) { }`

15. What will be the output?

```
function add(&$a) {
```

```
    $a += 5;  
}  
$x = 10;  
add($x);  
echo $x;
```

- a) 10
- b) 5
- c) 15
- d) Error

Answer: c) 15

16. Which PHP function is used to find the length of a string?

- a) strlen()
- b) count()
- c) str_length()
- d) length()

Answer: a) strlen()

17. How do you define a function with variable arguments?

- a) function myFunc(...\$args) { }
- b) function myFunc(\$args...) { }
- c) function myFunc(\$*args) { }
- d) function myFunc(\$args) { }

Answer: a) function myFunc(...\$args) { }

18. What does `array_map()` do?

- a) Applies a function to each element of an array
- b) Joins two arrays
- c) Removes duplicates from an array
- d) Creates a new array

Answer: a) Applies a function to each element of an array

19. How do you stop a function before it reaches the end?

- a) break
- b) exit
- c) return
- d) stop

Answer: c) return

20. What is the output?

```
function check() {  
    return true;  
}  
echo check() ? "Yes" : "No";
```

- a) Yes
- b) No
- c) Error
- d) 1

Answer: a) Yes

21. What does `str_replace()` do?

- a) Replaces a substring in a string
- b) Removes spaces from a string
- c) Converts a string to uppercase
- d) Splits a string into an array

Answer: a) Replaces a substring in a string

22. What is the purpose of `array_filter()`?

- a) Filters array elements based on a callback function
- b) Removes empty values
- c) Sorts an array
- d) Combines two arrays

Answer: a) Filters array elements based on a callback function

23. What does `is_callable()` do?

- a) Checks if a function can be called
- b) Calls a function
- c) Defines a function
- d) Declares a function

Answer: a) Checks if a function can be called

24. What does `max(10, 20, 30)` return?

- a) 10
- b) 20
- c) 30
- d) Error

Answer: c) 30

25. Which function is used to include a file?

- a) `include()`
- b) `require()`
- c) Both a and b
- d) None

Answer: c) Both a and b

26. What does `implode()` do?

- a) Joins array elements into a string
- b) Splits a string into an array
- c) Replaces array elements
- d) Sorts an array

Answer: a) Joins array elements into a string

1. How are function arguments passed in PHP by default?

- a) By reference
- b) By value
- c) By pointer
- d) By copy

Answer: b) By value

2. What is "call by value" in PHP?

- a) The original variable is modified
- b) A copy of the variable is passed
- c) A reference to the original variable is passed
- d) The function directly accesses global variables

Answer: b) A copy of the variable is passed

3. What is "call by reference" in PHP?

- a) A copy of the variable is passed
- b) A reference to the original variable is passed
- c) The function creates a new variable
- d) The function does not receive any value

Answer: b) A reference to the original variable is passed

4. How do you pass an argument by reference in PHP?

- a) `function example($var&)`
- b) `function example(ref $var)`
- c) `function example(&$var)`
- d) `function example(*$var)`

Answer: c) `function example(&$var)`

5. What happens when a function modifies a variable passed by value?

- a) The original variable remains unchanged
- b) The original variable is modified
- c) The function throws an error
- d) The function does not execute

Answer: a) The original variable remains unchanged

6. What happens when a function modifies a variable passed by reference?

- a) The original variable remains unchanged
- b) The original variable is modified
- c) A new variable is created
- d) The function throws an error

Answer: b) The original variable is modified

7. What will be the output of the following code?

```
function test($x) {  
    $x = $x * 2;  
}  
$val = 5;  
test($val);  
echo $val;
```

- a) 10
- b) 5
- c) Error
- d) 0

Answer: b) 5

8. What will be the output of the following code?

```
function test(&$x) {  
    $x = $x * 2;  
}  
$val = 5;  
test($val);  
echo $val;
```

- a) 10
- b) 5
- c) Error
- d) 0

Answer: a) 10

9. What is the correct syntax for passing multiple arguments by reference?

- a) function example(&\$x, &\$y)
- b) function example(*\$x, *\$y)
- c) function example(\$x&, \$y&)
- d) function example(ref \$x, ref \$y)

Answer: a) function example(&\$x, &\$y)

10. Can a function mix call by value and call by reference parameters?

- a) Yes
- b) No

Answer: a) Yes

11. What will be the output of the following?

```
function modify($num) {  
    $num += 10;  
}  
$a = 5;  
modify($a);  
echo $a;
```

- a) 5
- b) 10
- c) 15
- d) Error

Answer: a) 5

12. What will be the output of the following?

```
function modify(&$num) {  
    $num += 10;  
}  
$a = 5;  
modify($a);  
echo $a;
```

- a) 5
- b) 10
- c) 15
- d) Error

Answer: c) 15

13. What does & signify in function parameters?

- a) It indicates a global variable
- b) It passes the argument by reference
- c) It copies the value of the variable
- d) It converts the variable to a string

Answer: b) It passes the argument by reference

14. Which of the following function calls is correct for call by reference?

- a) myFunction(\$var&)
- b) myFunction(ref \$var)
- c) myFunction(&\$var)
- d) myFunction(*\$var)

Answer: c) myFunction(&\$var)

15. What will be the output of the following?

```
function change(&$x) {  
    $x = "PHP";  
}  
$y = "Java";  
change($y);  
echo $y;
```

- a) PHP
- b) Java
- c) Error
- d) Nothing

Answer: a) PHP

16. How does passing by reference affect performance?

- a) It makes function execution slower
- b) It improves performance by avoiding unnecessary copies
- c) It has no impact on performance
- d) It causes memory leaks

Answer: b) It improves performance by avoiding unnecessary copies

17. What will be the output of the following?

```
function increment (&$num) {  
    $num++;  
}  
$value = 10;  
increment($value);  
echo $value;
```

- a) 10
- b) 11
- c) 9
- d) Error

Answer: b) 11

18. Can an array be passed by reference in PHP?

- a) Yes
- b) No

Answer: a) Yes

19. What will be the output of the following?

```
php
CopyEdit
function modifyArray(&$arr) {
    $arr[0] = 100;
}
$numbers = [1, 2, 3];
modifyArray($numbers);
echo $numbers[0];
```

- a) 1
- b) 100
- c) 2
- d) Error

Answer: b) 100

20. What happens if a reference is passed to a function but not used as a reference?

- a) The function modifies the original variable
- b) The function works normally but does not modify the original variable
- c) The function throws an error
- d) The function does not execute

Answer: b) The function works normally but does not modify the original variable

21. Can an object be passed by reference in PHP?

- a) Yes
- b) No

Answer: a) Yes

22. Which is faster, call by value or call by reference?

- a) Call by value
- b) Call by reference
- c) Both are the same

Answer: b) Call by reference

23. What happens if you pass a constant by reference?

- a) It throws an error
- b) The function works normally
- c) The constant gets modified
- d) The function ignores it

Answer: a) It throws an error

24. Which function returns a reference to a global variable?

- a) global
- b) &\$GLOBALS
- c) return &\$var;
- d) global_return()

Answer: c) return &\$var;

25. What does the following function return?

```
php
CopyEdit
function &getValue() {
    static $val = 10;
    return $val;
}
$a = &getValue();
$a = 20;
echo getValue();
```

- a) 10
- b) 20
- c) 30
- d) Error

Answer: b) 20

String Manipulation Functions in PHP

1. Which function is used to get the length of a string in PHP?

- a) `strlen()`
- b) `length()`
- c) `strlength()`
- d) `count()`

Answer: a) `strlen()`

2. What will `strtolower("HELLO")` return?

- a) hello
- b) HELLO
- c) Hello
- d) Error

Answer: a) hello

3. Which function is used to convert the first character of a string to uppercase?

- a) `strtoupper()`
- b) `ucfirst()`
- c) `capitalize()`
- d) `strcapitalize()`

Answer: b) `ucfirst()`

4. What is the output of `substr("abcdef", 2, 3)`?

- a) abc
- b) cde
- c) cdef
- d) def

Answer: b) cde

5. Which function is used to replace a substring within a string?

- a) `replace()`
- b) `str_replace()`
- c) `substr_replace()`
- d) `change()`

Answer: b) `str_replace()`

6. What will `strrev("PHP")` return?

- a) PHP
- b) HPP
- c) PPH
- d) HPP

Answer: c) PPH

7. Which function removes whitespace from both sides of a string?

- a) `remove_spaces()`
- b) `trim()`
- c) `strim()`
- d) `strip()`

Answer: b) `trim()`

8. What does `explode(" ", "Hello World")` return?

- a) ["Hello", "World"]
- b) "Hello World"
- c) ["HelloWorld"]
- d) Error

Answer: a) ["Hello", "World"]

9. What is the output of `strcmp("apple", "banana")`?

- a) -1
- b) 0
- c) 1
- d) Error

Answer: a) -1

10. Which function joins an array into a string?

- a) `implode()`
- b) `join()`
- c) `concat()`
- d) `merge()`

Answer: a) `implode()`

Mathematical Functions in PHP

11. Which function returns the absolute value of a number?

- a) `abs()`
- b) `absolute()`
- c) `ceil()`
- d) `floor()`

Answer: a) `abs()`

12. What will `pow(2, 3)` return?

- a) 6
- b) 8
- c) 9
- d) 16

Answer: b) 8

13. What does `sqrt(16)` return?

- a) 2
- b) 4
- c) 8
- d) 16

Answer: b) 4

14. What is the result of `round(4.7)`?

- a) 4
- b) 5
- c) 4.7
- d) Error

Answer: b) 5

15. Which function generates a random number?

- a) `random()`
- b) `rand()`
- c) `randomize()`
- d) `generate_rand()`

Answer: b) `rand()`

16. What does `ceil(4.3)` return?

- a) 4
- b) 5
- c) 4.3
- d) Error

Answer: b) 5

17. What is the output of `floor(4.9)`?

- a) 4
- b) 5
- c) 4.9
- d) Error

Answer: a) 4

18. Which function returns the sine of an angle in radians?

- a) `sin()`
- b) `sine()`
- c) `cos()`
- d) `tan()`

Answer: a) `sin()`

19. What is the result of `log(1)`?

- a) 1
- b) 0
- c) -1
- d) Error

Answer: b) 0

20. What does `min(3, 5, 7, 1, 9)` return?

- a) 1
- b) 3
- c) 5
- d) 9

Answer: a) 1

Date and Time Functions in PHP

21. Which function returns the current timestamp?

- a) `date()`
- b) `time()`
- c) `now()`
- d) `timestamp()`

Answer: b) `time()`

22. What will `date("Y")` return?

- a) Full date
- b) Current year
- c) Current time
- d) Error

Answer: b) Current year

23. Which function formats a timestamp into a human-readable date?

- a) `format_date()`
- b) `strtotime()`
- c) `date()`
- d) `timestamp_format()`

Answer: c) `date()`

24. What does `mktime(0, 0, 0, 1, 1, 2024)` return?

- a) Timestamp for January 1, 2024
- b) 0

- c) Error
- d) January 1, 1970

Answer: a) Timestamp for January 1, 2024

25. What will `strtotime("next Sunday")` return?

- a) The timestamp of the next Sunday
- b) "Next Sunday"
- c) The first Sunday of the year
- d) Error

Answer: a) The timestamp of the next Sunday

26. Which function returns the number of days in a given month?

- a) `days_in_month()`
- b) `date_days()`
- c) `cal_days_in_month()`
- d) `month_days()`

Answer: c) `cal_days_in_month()`

27. What is the result of `date("d-m-Y", time())`?

- a) Current date in dd-mm-yyyy format
- b) Current timestamp
- c) Current day
- d) Error

Answer: a) Current date in dd-mm-yyyy format

28. What does `checkdate(2, 30, 2024)` return?

- a) true
- b) false

Answer: b) false

29. Which function adds a time interval to a timestamp?

- a) strtotime("+1 day")
- b) add_time("+1 day")
- c) time_add("+1 day")
- d) date_modify("+1 day")

Answer: a) strtotime("+1 day")

30. Which function returns the name of the day for a given date?

- a) date("l")
- b) date("d")
- c) day_name()
- d) get_day()

Answer: a) date("l")

31. What does `strtoupper("php")` return?

- a) php
- b) PHP
- c) PhP
- d) pHp

Answer: b) PHP

32. What does `strpos("Hello World", "World")` return?

- a) 5
- b) 6
- c) 7
- d) Error

Answer: b) 6

33. What does `str_repeat("abc", 3)` return?

- a) abcabc
- b) abcabcabc
- c) abc
- d) Error

Answer: b) abcabcabc

34. Which function converts a string to an array?

- a) `split()`
- b) `explode()`
- c) `string_to_array()`
- d) `str_split()`

Answer: d) `str_split()`

35. What will `substr("abcdef", -3)` return?

- a) abc
- b) def
- c) cdef
- d) Error

Answer: b) def

Mathematical Functions in PHP

36. What is the result of `round(3.5)`?

- a) 3
- b) 4
- c) 3.5
- d) Error

Answer: b) 4

37. What does `fmod(10, 3)` return?

- a) 1
- b) 2
- c) 3
- d) 0

Answer: b) 1

38. What is the output of `max(5, 10, 15, 3, 8)`?

- a) 3
- b) 5
- c) 10
- d) 15

Answer: d) 15

39. What is the return type of `is_nan(sqrt(-1))`?

- a) true
- b) false
- c) 1
- d) 0

Answer: a) true

40. What does `rand(1, 10)` return?

- a) A random number between 1 and 10
- b) A fixed number
- c) Always 10
- d) Always 1

Answer: a) A random number between 1 and 10

Date and Time Functions in PHP

41. What does `date("H:i:s")` return?

- a) Current date
- b) Current time in HH:MM:SS format
- c) Unix timestamp
- d) Time in YYYY-MM-DD format

Answer: b) Current time in HH:MM:SS format

42. What is the default time zone in PHP if not set?

- a) UTC
- b) GMT
- c) EST
- d) PST

Answer: a) UTC

43. What does `strtotime("last Monday")` return?

- a) The timestamp of the last Monday
- b) The next Monday's timestamp
- c) Today's timestamp
- d) Error

Answer: a) The timestamp of the last Monday

44. What does `date("t")` return?

- a) The current timestamp
- b) The number of days in the current month
- c) The current day
- d) The current month

Answer: b) The number of days in the current month

45. What is the output of `date("z")`?

- a) The current hour
- b) The current day of the year (0 to 365)
- c) The current minute
- d) The current second

Answer: b) The current day of the year (0 to 365)

46. What does `gmdate("Y-m-d")` return?

- a) The current date in the UTC timezone
- b) The current date in local time
- c) The current timestamp
- d) An error

Answer: a) The current date in the UTC timezone

47. What is the purpose of `set_time_limit()` function?

- a) Sets the maximum execution time for a script
- b) Sets the time zone
- c) Sets the system clock
- d) Sets the date format

Answer: a) Sets the maximum execution time for a script

48. What will `date_default_timezone_set("Asia/Kolkata")` do?

- a) Set the time zone to Kolkata
- b) Set the date format to Indian standard
- c) Set the system time
- d) Error

Answer: a) Set the time zone to Kolkata

49. What does `date("W")` return?

- a) The current day of the year
- b) The current week number of the year
- c) The current month number
- d) The current hour

Answer: b) The current week number of the year

50. What does `getdate()["month"]` return?

- a) The current month name
- b) The current month number
- c) The current timestamp
- d) The current year

Answer: a) The current month name

Unit – 3

1.Which of the following best describes a *web form*?

- A) A webpage that only displays static content.
- B) A graphical tool used for image editing on websites.
- C) An interface on a webpage that allows users to input and submit data.
- D) A scripting language used for backend development.

Answer:

C) An interface on a webpage that allows users to input and submit data.

2. Which HTML tag is used to create a web form?

- A) <input>
- B) <form>
- C) <data>
- D) <submit>

Answer: B

3. What attribute of the <form> tag specifies where to send the form data?

- A) method
- B) action
- C) submit
- D) target

Answer: B

4. Which of the following tags is used to create a text input field?

- A) <textarea>
- B) <text>
- C) <input type="text">
- D) <input type="textarea">

Answer: C

5. What does the method="post" attribute in a form do?

- A) Sends data via URL parameters
- B) Deletes form data
- C) Sends data in the body of the request
- D) Prevents data from being sent

Answer: C

6. Which element creates a multi-line text input?

- A) <input type="text">
- B) <textarea>

- C) <form>
- D) <text>

Answer: B

7. What input type is used to create a checkbox?

- A) <input type="checkbox">
- B) <input type="radio">
- C) <input type="check">
- D) <checkbox>

Answer: A

8. How do you create a drop-down menu in a form?

- A) <dropdown>
- B) <input type="dropdown">
- C) <select> with <option>
- D) <input type="menu">

Answer: C

9. What tag is used to create a submit button?

- A) <submit>
- B) <input type="button">
- C) <input type="submit">
- D) <button type="reset">

Answer: C

10. Which attribute is used to group form elements under a label or title?

- A) <legend>
- B) <fieldset>
- C) <label>
- D) <section>

Answer: B

11. What is a web form used for?

- A) To display images
- B) To play music
- C) To collect user input
- D) To create animations

Answer: C

12. What does the method="get" attribute do?

- A) Sends data via email
- B) Sends data in the request URL
- C) Encrypts the data

D) Prevents submission

Answer: B

13. Which input type allows the user to select one option from a group?

A) Checkbox

B) Text

C) Radio

D) Button

Answer: C

14. Which tag is used to label form inputs?

A) <title>

B) <caption>

C) <label>

D) <input>

Answer: C

15. What does the <textarea> tag create?

A) A checkbox

B) A button

C) A single-line input

D) A multi-line text area

Answer: D

16. Which attribute makes a form field mandatory?

A) checked

B) required

C) disabled

D) readonly

Answer: B

17. What does the <legend> tag provide?

A) A label for a single input

B) A title for a group of form elements

C) A caption for a table

D) A tooltip

Answer: B

18. What attribute is used to associate a <label> with a form input?

A) for

B) id

C) name

D) value

Answer: A

19. Which input type is used to upload a file?

- A) <input type="upload">
- B) <input type="file">
- C) <input type="media">
- D) <input type="attachment">

Answer: B

20. What does the placeholder attribute do?

- A) Fills the field with permanent data
- B) Adds a tooltip
- C) Displays temporary text inside the input
- D) Makes the input hidden

Answer: C

21. Which attribute disables a form element?

- A) readonly
- B) disabled
- C) inactive
- D) hidden

Answer: B

22. What happens when a form is submitted using the POST method?

- A) Data is appended to the URL
- B) Data is sent in the HTTP header
- C) Data is sent in the body of the HTTP request
- D) The page reloads without sending data

Answer: C

23. What is the correct way to retrieve a value from a form submitted using POST method?

- A. \$_POST['value']
- B. \$POST['value']
- C. POST.value
- D. \$_GET['value']

 **Answer:** A

24. Which superglobal is used to retrieve form data sent using the GET method?

- A. \$_DATA
- B. \$_REQUEST
- C. \$_GET
- D. \$_FORM

 **Answer:** C

25. Which method is more secure for submitting sensitive form data?

- A. GET
- B. POST
- C. PUT
- D. SESSION

Answer: B

26. What does htmlspecialchars() function do?

- A. Encrypts data
- B. Converts special characters to HTML entities
- C. Sends data to database
- D. Validates form fields

Answer: B

27. What does the action attribute in a <form> tag define?

- A. Style of form
- B. How data is processed
- C. The file or URL to send form data to
- D. Type of validation

Answer: C

28. What will \$_REQUEST contain?

- A. Only POST values
- B. Only GET values
- C. Only COOKIE values
- D. GET, POST, and COOKIE values

Answer: D

29. Which PHP global variable is used to collect data sent via HTTP forms?

- A. \$_FORM
- B. \$_SUBMIT
- C. \$_POST and \$_GET
- D. \$_DATA

Answer: C

30. What method is used to send data that is visible in the URL?

- A. POST
- B. COOKIE
- C. GET
- D. REQUEST

Answer: C

31. How do you prevent Cross-site Scripting (XSS) when displaying form input?

- A. Using addslashes()
- B. Using htmlspecialchars()
- C. Using encrypt()

D. Using strip_tags() only

Answer: B

32. What is the default form method if none is specified?

A. POST

B. GET

C. REQUEST

D. SESSION

Answer: B

33. What is the purpose of method="post" in an HTML form?

A. Encrypts form data

B. Appends data to URL

C. Sends data as HTTP request body

D. Validates form automatically

Answer: C

34. How do you check if a form was submitted?

A. isset(\$_POST)

B. \$_SERVER['REQUEST_METHOD'] == 'POST'

C. \$_REQUEST['submit']

D. \$_FORM['submitted']

Answer: B

35. Which PHP function is best for removing leading and trailing whitespaces from input?

A. strip_tags()

B. htmlspecialchars()

C. trim()

D. sanitize()

Answer: C

36. Which tag attribute determines the HTTP method used when submitting a form?

A. method

B. action

C. type

D. target

Answer: A

37. When using method="get", where can the form data be seen?

A. In HTTP headers

B. In browser console

C. In the URL

D. It is hidden

Answer: C

38. What is the major downside of using GET for form submissions?

- A. Slower performance
- B. Cannot be used with forms
- C. Limited to URL length and less secure
- D. Works only in Chrome

Answer: C

39. What PHP global can retrieve cookie values?

- A. \$_COOKIE
- B. \$_REQUEST
- C. \$_POST
- D. \$_SESSION

Answer: A

40. Which method should be used when sending file uploads?

- A. GET
- B. POST with enctype="multipart/form-data"
- C. POST with enctype="text/plain"
- D. GET with enctype="application/json"

Answer: B

41. Which function is used to set a cookie in PHP?

- A. create_cookie()
- B. set_cookie()
- C. setcookie()
- D. make_cookie()

Answer: C

42. Which function is used to start a session in PHP?

- A. start_session()
- B. session_start()
- C. begin_session()
- D. create_session()

Answer: B

43. Where are cookies stored?

- A. On the server
- B. In PHP memory
- C. On the client (browser)
- D. In a PHP file

Answer: C

44. Which superglobal is used to access session variables in PHP?

- A. \$_SESSION
- B. \$_COOKIE
- C. \$_POST

D. \$_GET

Answer: A

45. Which of the following is true about sessions?

- A. They are stored on the client-side
- B. They are lost when the browser is closed
- C. They persist until manually destroyed or expired
- D. They cannot store arrays

Answer: C

46. How do you delete a cookie in PHP?

- A. unset(\$_COOKIE['name'])
- B. setcookie("name", "", time() - 3600);
- C. remove_cookie('name')
- D. delete_cookie('name')

Answer: B

47. What must be called before any HTML output when using sessions?

- A. session_destroy()
- B. session_create()
- C. session_start()
- D. session_header()

Answer: C

48. Which superglobal is used to access cookie data?

- A. \$_COOKIE
- B. \$_SESSION
- C. \$_REQUEST
- D. \$_DATA

Answer: A

49. What happens when session_destroy() is called?

- A. The session ends, and all data is cleared
- B. Session cookie is set to false
- C. Data remains available until logout
- D. PHP stops executing

Answer: A

50. Which of the following is a correct way to set a session variable?

- A. session['user'] = "John";
- B. \$_SESSION["user"] = "John";
- C. session_start("user", "John");
- D. session::set("user", "John");

Answer: B

51.What is the purpose of the try block in PHP?

- A. It prevents errors from occurring
- B. It handles errors
- C. It defines code that may throw an exception
- D. It logs all errors

Answer: C

51.Which PHP keyword is used to handle exceptions that are thrown?

- A. try
- B. throw
- C. error
- D. catch

Answer: D

52.What type of object is thrown using the throw keyword?

- A. String
- B. Array
- C. Exception object
- D. Function

Answer: C

53.What function is used to handle exceptions globally in PHP?

- A. handle_exceptions()
- B. set_exception_handler()
- C. global_exception()
- D. register_exception()

Answer: B

54.Which method in the Exception class returns the exception message?

- A. message()
- B. getText()
- C. getMessage()
- D. getDetails()

Answer: C

55.What will getCode() return when called on an Exception object?

- A. PHP error number
- B. File name
- C. Custom error code passed when exception was created
- D. HTTP status code

Answer: C

56.Which PHP error cannot be caught using a try-catch block (before PHP 7)?

- A. Warning
- B. Exception
- C. Notice
- D. Fatal error

Answer: D

57.What is the role of the finally block in PHP?

- A. It skips error handling
- B. It runs only when there's no error
- C. It runs always, after try and catch
- D. It stops the script

Answer: C

58.What base interface was introduced in PHP 7 to allow catching both Exception and Error?

- A. BaseThrowable
- B. Throwable
- C. Catchable
- D. ErrorException

Answer: B

59.What does set_error_handler() allow you to do?

- A. Handle thrown exceptions
- B. Ignore warnings
- C. Define custom function to handle runtime errors
- D. Stop errors from being displayed

Answer: C

60.Which PHP function is used to remove unnecessary characters like extra space, tab, or newline from input data?

- A. strip_tags()
- B. trim()
- C. htmlspecialchars()
- D. stripslashes()

Answer: B

61.Which of the following statements about the GET method is true?

- A. Data is sent in the body of the request
- B. GET can send large amounts of data securely
- C. Data is visible in the URL
- D. GET is used to upload files

Answer: C

62.Which superglobal in PHP is used to collect form data sent with the POST method?

- A. \$_GET
- B. \$_POST

C. \$_REQUEST

D. \$_FORM

Answer: B

1. Which PHP function is used to connect to a MySQL database?

- A. mysql_connect()
- B. mysqli_connect()
- C. connect_db()
- D. db_connect()

Answer: B. mysqli_connect()

2. What does the mysqli_connect() function return on success?

- A. Boolean True
- B. An object
- C. A string
- D. Nothing

Answer: B. An object

3. Which of the following is used to select a database in PHP (MySQLi)?

- A. mysqli_use()
- B. mysqli_select_db()
- C. mysqli_choose()
- D. mysqli_choose_db()

Answer: B. mysqli_select_db()

4. What is the correct order to connect and select a database in PHP?

- A. Select DB → Connect → Query
- B. Connect → Query → Select DB
- C. Connect → Select DB → Query
- D. Query → Connect → Select DB

Answer: C. Connect → Select DB → Query

5. Which of these is the correct syntax for mysqli_connect()?

- A. mysqli_connect(server, user, password)
- B. mysqli_connect(server, user, password, database)
- C. mysqli_connect(user, password, database)

D. `mysqli_connect(database, server, user, password)`

Answer: B. `mysqli_connect(server, user, password, database)`

6. Which function is used to run SQL queries in PHP using MySQLi?

A. `mysqli_query()`

B. `mysql_query()`

C. `mysqli_run()`

D. `mysqli_execute()`

Answer: A. `mysqli_query()`

7. What will `mysqli_connect_errno()` return if connection is successful?

A. 1

B. 0

C. null

D. false

Answer: B. 0

8. Which function is used to escape special characters in a string for use in an SQL statement?

A. `mysqli_escape_string()`

B. `mysql_escape()`

C. `mysqli_real_escape_string()`

D. `real_escape_string()`

Answer: C. `mysqli_real_escape_string()`

9. How do you fetch results from a query as an associative array in MySQLi?

A. `mysqli_fetch_array()`

B. `mysqli_fetch_assoc()`

C. `mysqli_fetch_row()`

D. `mysqli_fetch_result()`

Answer: B. `mysqli_fetch_assoc()`

10. What will the following code output?

```
php
CopyEdit
$mysqli = mysqli_connect("localhost", "root", "", "test");
if (!$mysqli) {
    die("Connection failed");
}
echo "Connected successfully";
```

- A. Nothing
- B. Connection failed
- C. Error
- D. Connected successfully

Answer: D. Connected successfully

11. Which of the following is true about MySQLi in PHP?

- A. It does not support object-oriented style
- B. It is deprecated
- C. It supports both procedural and object-oriented styles
- D. It only works with PostgreSQL

Answer: C. It supports both procedural and object-oriented styles

12. How do you close a MySQLi connection?

- A. mysqli_disconnect()
- B. mysqli_close()
- C. mysql_close()
- D. close_mysqli()

Answer: B. mysqli_close()

13. Which keyword is used to insert data into a MySQL table?

- A. ADD
- B. PUSH
- C. PUT
- D. INSERT

Answer: D. INSERT

14. What does `mysqli_num_rows()` do?

- A. Returns number of rows affected
- B. Returns number of rows in result set
- C. Returns number of columns
- D. None of the above

Answer: B. Returns number of rows in result set

15. What does this SQL query do?

```
sql
CopyEdit
SELECT * FROM users WHERE id = 1;
```

- A. Selects all users
- B. Updates user where id = 1
- C. Selects user with id 1
- D. Deletes user with id 1

Answer: C. Selects user with id 1

16. In PHP, what type of value does `mysqli_query()` return for SELECT queries?

- A. Boolean
- B. Array
- C. Result object
- D. Integer

Answer: C. Result object

17. What is the default MySQL port number?

- A. 80
- B. 21
- C. 3306
- D. 8080

Answer: C. 3306

18. Which method retrieves the ID generated by a query on a table with an auto-increment field?

- A. mysqli_get_id()
 - B. mysqli_insert_id()
 - C. mysqli_last_id()
 - D. mysqli_auto_id()
- Answer:** B. mysqli_insert_id()
-

19. What function is used to prepare SQL statements in MySQLi?

- A. mysqli_prepare()
 - B. prepare_query()
 - C. mysqli_statement()
 - D. mysqli_query_prepare()
- Answer:** A. mysqli_prepare()
-

20. Why should prepared statements be used in PHP database queries?

- A. To increase code complexity
 - B. To save memory
 - C. To prevent SQL injection
 - D. To reduce database size
- Answer:** C. To prevent SQL injection

1. Which of the following databases is natively supported by PHP?

- A. Oracle
 - B. PostgreSQL
 - C. MySQL
 - D. All of the above
- Answer:** D. All of the above
-

2. What PHP extension is used for interacting with MySQL databases?

- A. PDO
 - B. pg_connect
 - C. OCI8
 - D. sqlite_open
- Answer:** A. PDO
-

 **3. Which PHP function is used to connect to a PostgreSQL database?**

- A. pg_connect()
- B. pdo_pgsql_connect()
- C. pgsql_connect()
- D. psql_connect()

Answer: A. pg_connect()

 **4. What PHP extension allows for a unified database access layer?**

- A. PDO
- B. MySQLi
- C. pgSQL
- D. SQLite3

Answer: A. PDO

 **5. Which of the following PHP extensions is used to work with SQLite?**

- A. PDO
- B. SQLite3
- C. sqlite
- D. All of the above

Answer: D. All of the above

 **6. Which function opens a SQLite3 database using the object-oriented style?**

- A. sqlite3_open()
- B. new SQLite3()
- C. open_sqlite()
- D. SQLite3::connect()

Answer: B. new SQLite3()

 **7. Which database is best for lightweight and file-based usage in PHP?**

- A. MySQL
- B. PostgreSQL

- C. SQLite
 - D. Oracle
- Answer:** C. SQLite
-

 **8. Which driver does PHP use to connect to Microsoft SQL Server?**

- A. MSSQL
- B. SQLSRV
- C. ODBC
- D. All of the above

Answer: D. All of the above

 **9. What does PDO stand for in PHP?**

- A. PHP Database Operations
- B. PHP Data Options
- C. PHP Data Objects
- D. PHP Dynamic Objects

Answer: C. PHP Data Objects

 **10. What is the advantage of using PDO in PHP?**

- A. It only supports MySQL
- B. It provides a uniform interface for different databases
- C. It simplifies HTML code
- D. It limits SQL queries

Answer: B. It provides a uniform interface for different databases

 **11. Which of the following is NOT supported by PDO?**

- A. MySQL
- B. Oracle
- C. MongoDB
- D. SQLite

Answer: C. MongoDB

 **12. Which function is used to execute a query in PDO?**

- A. pdo_query()
- B. query()
- C. pdo_exec()
- D. PDO::query()

Answer: D. PDO::query()

 **13. What is the correct PDO DSN string for connecting to MySQL?**

- A. mysql:host=localhost;dbname=testdb
- B. pdo:mysql;dbname=testdb
- C. dsn:mysql;host=testdb
- D. pdo_mysql:host=localhost;db=testdb

Answer: A. mysql:host=localhost;dbname=testdb

 **14. Which function is used in PDO to prepare an SQL statement?**

- A. PDO::prepare()
- B. PDO::bind()
- C. PDO::stmt()
- D. PDO::queryPrepare()

Answer: A. PDO::prepare()

 **15. What PHP extension provides object-oriented and procedural interface to MySQL?**

- A. MySQLi
- B. SQLite
- C. PostgreSQL
- D. Oracle

Answer: A. MySQLi

 **16. Which of the following database types is NOT relational?**

- A. MongoDB
- B. MySQL
- C. PostgreSQL
- D. SQLite

Answer: A. MongoDB

 **17. Which extension is used for working with Oracle databases in PHP?**

- A. PDO
- B. OCI8
- C. oci_connect
- D. Both B and C

Answer: D. Both B and C

 **18. Which of the following PHP extensions support named placeholders in prepared statements?**

- A. MySQLi
- B. PDO
- C. SQLite
- D. pgSQL

Answer: B. PDO

 **19. What function is used to check if a PDO connection is successful?**

- A. isset(\$pdo)
- B. \$pdo->connect_status
- C. try...catch block
- D. PDO::connected()

Answer: C. try...catch block

 **20. Which one of these is a serverless database engine used in PHP?**

- A. MySQL
- B. SQLite
- C. PostgreSQL

D. Oracle

Answer: B. SQLite

 **21. How do you retrieve the last inserted ID in PDO?**

A. \$pdo->lastInsertId()

B. \$pdo->getLastId()

C. \$pdo->getInsertedId()

D. \$pdo->lastID()

Answer: A. \$pdo->lastInsertId()

 **22. What is the maximum size of a SQLite database?**

A. 100 MB

B. 2 GB

C. 140 TB

D. Unlimited

Answer: C. 140 TB

 **23. What is a common file extension for SQLite database files?**

A. .db

B. .sql

C. .sqlite3

D. Both A and C

Answer: D. Both A and C

 **24. Which PHP extension supports asynchronous queries with PostgreSQL?**

A. PDO

B. pgSQL

C. pg_connect

D. pg_send_query

Answer: D. pg_send_query

 **25. How can you enable PDO support for PostgreSQL?**

A. Enable pdo_pgsql in php.ini

B. Install SQLite

C. Set \$pdo_pgsql = true;

D. Use MySQLi instead

Answer: A. Enable pdo_pgsql in php.ini

 **26. What does PDO::setAttribute() do?**

A. Sets SQL password

B. Sets fetch mode or error mode

C. Sets database name

D. Sets table column

Answer: B. Sets fetch mode or error mode

 **27. Which fetch style returns rows as an object in PDO?**

A. PDO::FETCH_ASSOC

B. PDO::FETCH_NUM

C. PDO::FETCH_OBJ

D. PDO::FETCH_ARRAY

Answer: C. PDO::FETCH_OBJ

 **28. Which PHP extension is deprecated and should not be used with new MySQL development?**

A. MySQLi

B. PDO

C. MySQL

D. SQLite3

Answer: C. MySQL

 **29. How do you fetch all rows in PDO from a result set?**

- A. \$stmt->getAll()
- B. \$stmt->fetch()
- C. \$stmt->fetchAll()
- D. \$stmt->queryAll()

Answer: C. \$stmt->fetchAll()

 **30. Which of the following is a non-relational database commonly used with PHP via extensions like MongoDB?**

- A. MySQL
- B. SQLite
- C. MongoDB
- D. PostgreSQL

Answer: C. MongoDB

1. What is the default port number for MySQL on Windows?

- A. 80
- B. 3306
- C. 1433
- D. 1521

Answer: B. 3306

 **2. Which installer is commonly used to install MySQL on Windows?**

- A. XAMPP
- B. MySQL Installer for Windows
- C. WAMP
- D. All of the above

Answer: D. All of the above

 **3. What does XAMPP stand for?**

- A. X Operating System, Apache, MySQL, PHP, Perl
- B. Xtra Apache, MySQL, PHP, Python
- C. XML Apache MySQL PHP Python
- D. None of the above

Answer: A. X Operating System, Apache, MySQL, PHP, Perl

4. Which of the following is used to start MySQL as a Windows service?

- A. mysql.exe
- B. mysqld --install
- C. mysql_install
- D. mysqlstart

Answer: B. mysqld --install

5. What tool can you use to manage MySQL graphically on Windows?

- A. phpMyAdmin
- B. MySQL Workbench
- C. HeidiSQL
- D. All of the above

Answer: D. All of the above

6. What is the default username for MySQL after installation?

- A. user
- B. mysql
- C. root
- D. admin

Answer: C. root

7. What command is used to verify the version of MySQL installed?

- A. mysql -ver
- B. mysql --version
- C. version
- D. mysql_check

Answer: B. mysql --version

8. Where is the main MySQL configuration file typically located on Windows (using default installation)?

- A. C:\mysql.ini
- B. C:\ProgramData\MySQL\MySQL Server 8.0\my.ini
- C. C:\Program Files\mysql\mysql.cnf
- D. C:\my_config.cnf

Answer: B. C:\ProgramData\MySQL\MySQL Server 8.0\my.ini

 **9. Which PHP file displays MySQL and PHP configurations in the browser?**

- A. server.php
- B. info.php
- C. config.php
- D. mysqlinfo.php

Answer: B. info.php

 **10. What is the correct content of info.php to check PHP-MySQL configuration?**

- A. echo "MySQL Version";
- B. phpinfo();
- C. mysql_info();
- D. php_mysql();

Answer: B. phpinfo();

 **11. Which directive in php.ini must be enabled to use MySQLi?**

- A. extension=mysqli
- B. enable_mysql
- C. use_mysql=true
- D. php_mysql=on

Answer: A. extension=mysqli

 **12. How do you restart MySQL service from the command line on Windows?**

- A. mysql -restart
- B. net start mysql
- C. mysqlservice start

D. restart mysql

Answer: B. net start mysql

 **13. What software bundle includes Apache, MySQL, PHP, and Perl?**

A. WordPress

B. phpMyAdmin

C. XAMPP

D. phpLiteAdmin

Answer: C. XAMPP

 **14. To connect PHP with MySQL, which extension should you prefer for modern applications?**

A. MySQL

B. PDO or MySQLi

C. MSSQL

D. SQLite

Answer: B. PDO or MySQLi

 **15. Which of the following file extensions is used for PHP files?**

A. .html

B. .js

C. .php

D. .sql

Answer: C. .php

 **16. What role does Apache play in PHP and MySQL integration?**

A. It stores databases

B. It is the database engine

C. It acts as the web server

D. It compiles PHP code

Answer: C. It acts as the web server

 **17. What does phpMyAdmin help you do?**

- A. Write PHP code
- B. Manage databases via GUI
- C. Run JavaScript
- D. Configure Windows firewall

Answer: B. Manage databases via GUI

 **18. Which TCP/IP port must be open to allow remote access to MySQL server?**

- A. 8080
- B. 3306
- C. 80
- D. 443

Answer: B. 3306

 **19. If you receive "Access denied for user 'root'@'localhost'", what is likely the issue?**

- A. PHP error
- B. Apache misconfiguration
- C. Incorrect MySQL password
- D. Browser cache

Answer: C. Incorrect MySQL password

 **20. To see all running services in XAMPP, which tab do you use?**

- A. Apache tab
- B. Status tab
- C. Services tab
- D. Admin tab

Answer: B. Status tab

 **21. Which function in PHP checks for connection errors using MySQLi?**

- A. mysqli_error()
- B. mysqli_connect_error()
- C. mysql_error()
- D. mysql_connect_error()

Answer: B. mysqli_connect_error()

 **22. What does localhost refer to in MySQL connection strings?**

- A. Remote server
- B. Another computer on LAN
- C. Current computer
- D. Database name

Answer: C. Current computer

 **23. Which line in php.ini should be uncommented to enable MySQLi?**

- A. ;extension=pdo_mysql
- B. extension=mysqli
- C. ;enable_mysql
- D. mysql_extension=true

Answer: B. extension=mysqli

 **24. Where can you find the MySQL service in the Windows Task Manager?**

- A. Under Apps
- B. Under Processes > Background processes
- C. Under Performance
- D. Under Startup

Answer: B. Under Processes > Background processes

 **25. How do you verify if MySQL is working using the command line?**

- A. mysql --test
- B. mysql -u root -p
- C. mysql /connect
- D. mysql -start

Answer: B. mysql -u root -p

26. What is the .sql file extension used for?

- A. PHP script
- B. CSS styles
- C. SQL script or dump
- D. HTML layout

Answer: C. SQL script or dump

27. If MySQL service fails to start, what is the first place to check?

- A. Apache logs
- B. MySQL Workbench
- C. my.ini configuration file
- D. Firewall rules

Answer: C. my.ini configuration file

28. Which environment variable should be set to run MySQL from the command line?

- A. MYSQL_VERSION
- B. PATH
- C. DB_PORT
- D. LOCALHOST

Answer: B. PATH

29. Which command is used to start MySQL manually if it's not set up as a service?

- A. mysql
- B. mysqld
- C. mysqladmin
- D. mysql-start

Answer: B. mysqld

 **30. To log into MySQL with root from CMD, which command is correct?**

- A. mysql -login root
- B. mysql -user root
- C. mysql -u root -p
- D. mysql --start root

Answer: C. mysql -u root -p

Database Connection and Selection

1. Which PHP function is used to connect to a MySQL database using MySQLi?
 - A. mysql_connect()
 - B. mysqli_connect()
 - C. connect_db()
 - D. pdo_connect()
- Answer:** B. mysqli_connect()
2. What does the mysqli_connect() function return on failure?
 - A. false
 - B. null
 - C. 0
 - D. true
- Answer:** A. false
3. Which of the following is required to connect to a MySQL database?
 - A. Hostname
 - B. Username
 - C. Password
 - D. All of the above
- Answer:** D. All of the above
4. What is the correct syntax to select a database after connecting using MySQLi?
 - A. mysqli_use_db(\$conn, "dbname")
 - B. mysqli_select_db(\$conn, "dbname")
 - C. use_database(\$conn, "dbname")
 - D. select_db("dbname", \$conn)
- Answer:** B. mysqli_select_db(\$conn, "dbname")
5. What PHP function is used to close a MySQLi database connection?
 - A. mysql_close()
 - B. mysqli_close()
 - C. db_close()
 - D. close_connection()
- Answer:** B. mysqli_close()

 **Creating and Altering Tables**

6. Which SQL command is used to create a new table?
- A. MAKE TABLE
 - B. NEW TABLE
 - C. CREATE TABLE
 - D. TABLE CREATE
- Answer:** C. CREATE TABLE
7. What SQL command is used to add a new column to an existing table?
- A. MODIFY TABLE
 - B. ALTER TABLE
 - C. ADD COLUMN
 - D. INSERT COLUMN
- Answer:** B. ALTER TABLE
8. How do you add a new column called `email` to a table `users`?
- A. ALTER users ADD email VARCHAR(255);
 - B. ALTER TABLE users ADD email VARCHAR(255);
 - C. MODIFY TABLE users ADD email;
 - D. UPDATE TABLE users ADD email VARCHAR(255);
- Answer:** B. ALTER TABLE users ADD email VARCHAR(255);
9. What SQL clause is used to change a column name in a table?
- A. RENAME COLUMN
 - B. ALTER COLUMN
 - C. MODIFY COLUMN
 - D. CHANGE
- Answer:** D. CHANGE
10. Which PHP function is used to execute SQL queries?
- A. mysqli_query()
 - B. sql_query()
 - C. execute_sql()
 - D. mysql_query()
- Answer:** A. mysqli_query()
-

⊕ Inserting Data

11. Which SQL statement is used to insert new data into a table?
- A. ADD
 - B. INSERT
 - C. UPDATE
 - D. PUT
- Answer:** B. INSERT
12. What is the correct SQL syntax to insert a new row into `students` table?
- A. INSERT INTO students VALUES ('John', 18);
 - B. ADD INTO students ('John', 18);
 - C. INSERT IN students ('John', 18);
 - D. PUT students VALUES ('John', 18);
- Answer:** A. INSERT INTO students VALUES ('John', 18);

13. What does `mysqli_affected_rows()` return?
- A. Number of rows fetched
 - B. Number of rows updated/inserted/deleted
 - C. Number of columns
 - D. Result set

Answer: B. Number of rows updated/inserted/deleted

14. Which PHP function escapes special characters in a string before SQL execution?
- A. `mysqli_real_escape_string()`
 - B. `htmlspecialchars()`
 - C. `escape_sql()`
 - D. `sql_safe()`

Answer: A. `mysqli_real_escape_string()`

15. What is a placeholder used in prepared statements?
- A. ?
 - B. &
 - C. \$
 - D. @

Answer: A. ?

✖ Deleting and Updating Data

16. What SQL statement is used to delete data from a table?
- A. REMOVE
 - B. DELETE
 - C. DROP
 - D. ERASE

Answer: B. DELETE

17. What SQL statement is used to modify existing data in a table?
- A. CHANGE
 - B. EDIT
 - C. MODIFY
 - D. UPDATE

Answer: D. UPDATE

18. How do you delete all rows from a table without deleting the table itself?
- A. REMOVE * FROM tablename;
 - B. DROP TABLE tablename;
 - C. DELETE FROM tablename;
 - D. CLEAR TABLE tablename;

Answer: C. DELETE FROM tablename;

19. What clause is essential when using `UPDATE` to avoid changing all rows?
- A. WHERE
 - B. HAVING
 - C. SET
 - D. FROM

Answer: A. WHERE

20. Which SQL statement will update the name of a student with id 5 to "Alice"?

- A. MODIFY students SET name='Alice' WHERE id=5;
- B. UPDATE students SET name='Alice' WHERE id=5;
- C. SET name='Alice' WHERE id=5;
- D. ALTER students SET name='Alice' WHERE id=5;

Answer: B. UPDATE students SET name='Alice' WHERE id=5;

Retrieving and Processing Data

21. What SQL command is used to retrieve data from a table?

- A. GET
- B. SHOW
- C. SELECT
- D. FETCH

Answer: C. SELECT

22. What does mysqli_fetch_assoc() return?

- A. A numeric array
- B. An object
- C. An associative array
- D. Boolean

Answer: C. An associative array

23. Which function fetches all rows as an associative array?

- A. mysqli_fetch_all()
- B. mysqli_get_all()
- C. fetch_assoc()
- D. get_assoc()

Answer: A. mysqli_fetch_all()

24. What is the default fetch type of PDO::fetch()?

- A. PDO::FETCH_OBJ
- B. PDO::FETCH_BOTH
- C. PDO::FETCH_ASSOC
- D. PDO::FETCH_NUM

Answer: C. PDO::FETCH_ASSOC

25. How do you count the number of rows returned by a SELECT query in MySQLi?

- A. mysqli_count()
- B. mysqli_num_rows()
- C. num_rows()
- D. row_count()

Answer: B. mysqli_num_rows()

Performing Queries and Filtering

26. What SQL clause is used to filter records?

- A. WHERE
- B. SELECT
- C. FROM
- D. HAVING

Answer: A. WHERE

27. Which clause is used to sort results?

- A. SORT BY
- B. ORDER BY
- C. GROUP BY
- D. RANK BY

Answer: B. ORDER BY

28. Which clause is used to group rows with the same values?

- A. ORDER BY
- B. GROUP
- C. GROUP BY
- D. MERGE BY

Answer: C. GROUP BY

29. Which SQL keyword is used to combine rows from two or more tables?

- A. COMBINE
- B. JOIN
- C. MERGE
- D. BIND

Answer: B. JOIN

30. What clause is used to limit the number of returned rows?

- A. LIMIT
- B. ROWLIMIT
- C. TOP
- D. ROWS

Answer: A. LIMIT

❖ Advanced Operations and PHP Integration

31. What method is used to prepare a statement in MySQLi (OOP)?

- A. \$conn->query()
- B. \$conn->prepare()
- C. \$conn->execute()
- D. \$conn->statement()

Answer: B. \$conn->prepare()

32. Which function binds parameters to a prepared statement in MySQLi?

- A. bind()
- B. bind_param()
- C. bindValue()
- D. set_param()

Answer: B. bind_param()

33. Which function executes a prepared statement in MySQLi?

- A. exec()
- B. perform()
- C. run()
- D. execute()

Answer: D. execute()

34. Which of the following is not a valid MySQLi fetch function?

- A. mysqli_fetch_assoc()
- B. mysqli_fetch_array()
- C. mysqli_fetch_row()
- D. mysqli_get_result()

Answer: D. mysqli_get_result()

35. What PHP extension supports named placeholders?

- A. MySQL
- B. MySQLi
- C. PDO
- D. SQLite

Answer: C. PDO

Would you like the **remaining 15 MCQs** now or broken into a **printable format (PDF/Word)**?

4o

You said:

15 more mcq

ChatGPT said:

Here are the **remaining 15 MCQs** (36–50) on **PHP & MySQL: Connecting to databases, modifying and querying data, and processing result sets**, complete with **answers**:

Advanced Usage and Security

36. Which PHP extension allows object-oriented access to multiple types of databases including MySQL?

- A. MySQLi
- B. PDO
- C. ODBC
- D. OCI

Answer: B. PDO

37. What is the purpose of using prepared statements in PHP?

- A. To speed up SQL queries

- B. To simplify query syntax
- C. To prevent SQL injection
- D. To auto-generate tables

Answer: C. To prevent SQL injection

38. In PDO, what method is used to execute a prepared statement?

- A. run()
- B. exec()
- C. execute()
- D. perform()

Answer: C. execute()

39. How can you handle SQL query errors in PHP using MySQLi?

- A. Use mysqli_debug()
- B. Use mysqli_report()
- C. Use mysqli_error()
- D. Use mysqli_alert()

Answer: C. mysqli_error()

40. Which SQL statement removes a table from the database?

- A. DELETE TABLE
- B. REMOVE TABLE
- C. DROP TABLE
- D. ERASE TABLE

Answer: C. DROP TABLE

Data Handling and Manipulation

41. What will the TRUNCATE TABLE command do?

- A. Delete the entire table structure
- B. Delete all rows and reset auto-increment
- C. Delete only rows
- D. Delete one column

Answer: B. Delete all rows and reset auto-increment

42. Which SQL command is used to remove duplicate results?

- A. UNIQUE
- B. DISTINCT
- C. FILTER
- D. EXCLUDE

Answer: B. DISTINCT

43. How do you retrieve the current date in a SQL query?

- A. NOW()
- B. DATE()
- C. TODAY()
- D. CURRENT()

Answer: A. NOW()

44. Which clause is used with GROUP BY to filter grouped data?

- A. WHERE

- B. HAVING
- C. SELECT
- D. FILTER

Answer: B. HAVING

45. What SQL keyword is used to search for a pattern?

- A. MATCHES
- B. SEARCH
- C. LIKE
- D. PATTERN

Answer: C. LIKE

Which statement correctly includes header.php, halting script execution on failure?

- a) include 'header.php';
- b) require 'header.php'; (**✓**)
- c) require_once();
- d) import 'header.php';

Which keyword *does not* stop script execution when the file is missing?

- a) require
- b) include (**✓**)
- c) require_once
- d) All of the above

What happens if require_once 'config.php'; is executed after config.php was already required?

- a) Includes again
- b) Ignored (**✓**)
- c) Fatal error
- d) Warning only

Which construct returns true on success and false on failure while continuing execution?

- a) include (**✓**)
- b) require
- c) require_once
- d) None

include_path is configured by which php.ini directive?

- a) open_basedir
- b) auto_prepend_file
- c) include_path (**✓**)
- d) extension_dir

If require cannot find a file, PHP will:

- a) Notice and continue
- b) Warning and continue
- c) Fatal-error and exit (**✓**)
- d) Silently ignore

Which wrapper allows file inclusion over HTTP when allow_url_include is enabled?

- a) file://
- b) ftp://
- c) http:// (**✓**)
- d) php://input

How can you suppress include warnings?

- a) silent include 'x.php';

- b) !include 'x.php';
- c) @include 'x.php'; (✓)
- d) Impossible

□ Which superglobal is inherently modified by an include?

- a) \$GLOBALS
- b) \$_SERVER
- c) \$_POST
- d) None; include doesn't automatically alter them (✓)

□ Turning display_errors = Off primarily affects:

- a) Whether include/require messages appear in the browser (✓)
- b) Execution flow of require
- c) include-path order
- d) File encoding

□ Given include_path=".:/usr/share/php", search order is:

- a) /usr/share/php then .
- b) . (current dir) then /usr/share/php (✓)
- c) Alphabetical
- d) Random

□ Which function appends to the current include path at runtime?

- a) ini_alter()
- b) ini_set()
- c) set_include_path() (✓)
- d) alter_include_path()

□ Which magic constant reveals the absolute filename of the current script?

- a) __DIR__
- b) __FILE__ (✓)
- c) __LINE__
- d) __PATH__

□ require_once can speed things up mainly by:

- a) Avoiding re-reading already-included files (✓)
- b) Forcing opcode cache
- c) Shrinking bytecode
- d) Disabling GC

□ A path segment beginning with / inside include_path means:

- a) Absolute path (search stops here) (✓)
- b) Relative path
- c) URL stream wrapper
- d) NFS mount

- Two scripts in different dirs both run require_once 'lib.php';. lib.php executes:**
- a) 0 times
 - b) **1 time (✓)**
 - c) 2 times
 - d) Depends on OS

- Functions declared in an included file are:**

- a) Unavailable
- b) Tied to a special namespace
- c) **Globally available within the request (✓)**
- d) Scope-limited to the include

- Variables declared before include inside a function are:**

- a) **Local to that function (✓)**
- b) Automatically global
- c) Passed by ref
- d) Superglobals

- Keyword to modify a parent-scope variable from inside an include:**

- a) **global (✓)**
- b) static
- c) extern
- d) shared

- Best magic constant for portable, file-relative include paths:**

- a) __LINE__
- b) __FUNCTION__
- c) __FILE__
- d) __DIR__ (✓)

- Including a directory results in:**

- a) Directory listing
- b) **Warning + false (✓)**
- c) Exception
- d) Autoload

- PHP 8: including a bad URL with wrappers on triggers:**

- a) TypeError
- b) ErrorException
- c) **Warning (✓)**
- d) Shutdown handler

- Automatic class-file loading uses:**

- a) **spl_autoload_register() (✓)**
- b) autoload_classes()

- c) include_path
- d) PSR-0 only

Composer PSR-4 chiefly eliminates:

- a) Per-env include-path hacks
- b) **Manual require per class (✓)**
- c) Need for opcache
- d) Use of closures

Sensitive config files should live outside web-root because they might:

- a) Cache forever
- b) **Be downloaded as plain text if mis-served (✓)**
- c) Upsize DNS
- d) Disable buffering

include_once decides duplicates by comparing:

- a) file hashes
- b) **Resolved absolute paths (✓)**
- c) Original relative paths
- d) Timestamps

Inside a namespace, require 'foo.php'; executes foo.php:

- a) In that namespace
- b) **In global namespace (unless foo.php declares one) (✓)**
- c) As a trait
- d) Only via autoload

Modifying include_path with ini_set() affects:

- a) **Subsequent include/require in this request (✓)**
- b) All requests
- c) CLI only
- d) Ignored since PHP 8

Function listing all included/required files so far:

- a) LIST_INCLUDES
- b) **get_included_files() (✓)**
- c) __INCLUDED__
- d) debug_backtrace()

Guarantee a file is included exactly once and fatal on failure:

- a) require 'file.php';
- b) **require_once 'file.php'; (✓)**
- c) include 'file.php';
- d) include_once 'file.php';

1. Which PHP function is commonly used to change the permissions of an existing file or directory on the server?

- a) chmod()
- b) chown()
- c) fopen()
- d) umask()

Answer: a) chmod()

2. Given the statement `chmod("report.txt", 0644);`, what permission set is applied to report.txt on a typical UNIX-like system?

- a) Owner: read & write, Group: read, Others: read
- b) Owner: read, write & execute, Group: read & execute, Others: read & execute
- c) Owner: read & write, Group: write, Others: write
- d) Owner: read, Group: read & write, Others: execute

Answer: a) Owner: read & write, Group: read, Others: read

3. In a default Apache setup running as user www-data, which of the following permission octal values would normally prevent PHP from writing to upload/ while still allowing uploads if ownership is corrected?

- a) 0777
- b) 0755
- c) 0644
- d) 0700

Answer: b) 0755

(If ownership is `www-data:www-data`, 0755 grants write only to the owner, satisfying security best-practices.)

4. What does the leading zero in the octal literal 0750 signify in a chmod() call?

- a) It marks the value as hexadecimal.
- b) It is required for backward compatibility with PHP 4.
- c) It tells PHP to interpret the number as octal (base 8).
- d) It has no effect; it can be omitted.

Answer: c) It tells PHP to interpret the number as octal (base 8).

5. Which umask setting should you apply before creating a log file with fopen() so that the resulting file has permissions rw-r----- (0640)?

- a) umask(000)
- b) umask(022)
- c) umask(027)
- d) umask(002)

Answer: c) umask(027)

(Default creation 0666 minus 027 → 0640.)

6. Using fileperms() returns 16877 for a directory. What symbolic permission string does this represent?

- a) drwxr-xr-x
- b) drwxrwxrwx
- c) -rw-r--r--
- d) drwx-----

Answer: a) drwxr-xr-x

(16877 decimal = 040755 octal; leading 04 indicates directory.)

7. Which of these is NOT a valid reason for getting a “Permission denied” error in PHP when writing to a file?

- a) The directory is mounted read-only by the OS.
- b) SELinux or AppArmor policies restrict the script.
- c) The PHP open_basedir directive blocks the path.
- d) The script forgot to call clearstatcache() before writing.

Answer: d) The script forgot to call clearstatcache() before writing.

(clearstatcache() affects cached stat results, not permissions.)

8. On shared hosting, why is setting a file to 0777 generally discouraged even if it “fixes” permission errors?

- a) It disables PHP's memory limit.
- b) It grants write access to every user on the server, posing security risks.
- c) It causes PHP to treat the file as binary.
- d) It slows down file I/O operations.

Answer: b) It grants write access to every user on the server, posing security risks.

9. To ensure that newly uploaded images are not executable on an Nginx/PHP-FPM stack, which permission set is recommended?

- a) 0644
- b) 0755
- c) 0700
- d) 0775

Answer: a) 0644

(No execute bit for anyone, read for web server to serve the image.)

10. When you run PHP via CLI as your normal user, touch("notes.txt"); creates the file with rw-rw-r--. Which umask is most likely in effect?

- a) 0002
- b) 0022
- c) 0277
- d) 0777

Answer: a) 0002

1. Which PHP function is used to open a file?

- a) open_file()
- b) file_open()
- c) fopen()
- d) open()

Answer: c) fopen()

2. What is the purpose of the second argument in the fopen() function?

- a) The file size.
- b) The file path.
- c) The file access mode.
- d) The file permissions.

Answer: c) The file access mode.

3. Which file access mode in fopen() opens a file for writing only, placing the file pointer at the end of the file?

- a) w
- b) r+
- c) a
- d) x

Answer: c) a

4. Which file access mode in fopen() opens a file for reading and writing; creates a new file if it doesn't exist, otherwise overwrites the existing file?

- a) r+
- b) w+
- c) a+

d) x+

Answer: b) w+

5. What function is used to close an open file in PHP?

a) close_file()

b) file_close()

c) fclose()

d) close()

Answer: c) fclose()

6. Which PHP function reads the entire content of a file into a string?

a) readfile()

b) fread()

c) file_get_contents()

d) get_file()

Answer: c) file_get_contents()

7. What function reads a single line from a file pointer?

a) fgets()

b) fgetline()

c) freadln()

d) readline()

Answer: a) fgets()

8. Which PHP function reads a specified number of bytes from a file pointer?

a) fread()

b) freadbytes()

c) fgetbytes()

d) readbytes()

Answer: a) fread()

9. What function writes content to an open file?

a) fwrite()

b) file_write()

c) write_file()

d) fput()

Answer: a) fwrite()

10. Which PHP function writes the entire content of a string to a file?

a) fwrite_all()

b) file_put_contents()

c) put_file()

d) string_to_file()

Answer: b) file_put_contents()

11. What function checks if a file or directory exists?

a) file_exists()

b) is_exist()

c) exist_file()

d) check_file()

Answer: a) file_exists()

12. Which function is used to delete a file?

a) delete_file()

- b) remove_file()
- c) unlink()
- d) erase()

Answer: c) unlink()

13. What function renames a file or directory?

- a) change_name()
- b) rename_file()
- c) move_file()
- d) rename()

Answer: d) rename()

14. Which function copies a file?

- a) file_copy()
- b) copy_file()
- c) duplicate_file()
- d) copy()

Answer: d) copy()

15. What function returns the size of a file in bytes?

- a) filesize()
- b) size_file()
- c) get_file_size()
- d) file_length()

Answer: a) filesize()

16. Which function checks if a given path is a directory?

- a) is_dir()
- b) is_directory()
- c) check_dir()
- d) dir_exists()

Answer: a) is_dir()

17. What function creates a directory?

- a) make_dir()
- b) create_dir()
- c) mkdir()
- d) new_dir()

Answer: c) mkdir()

18. Which function removes a directory?

- a) remove_dir()
- b) delete_dir()
- c) rmdir()
- d) erase_dir()

Answer: c) rmdir()

19. What function returns an array of files and directories within a specified path?

- a) get_files()
- b) list_files()
- c) scandir()
- d) read_dir()

Answer: c) scandir()

20. Which function changes the permissions of a file or directory?

- a) change_perms()
- b) set_permissions()
- c) chmod()
- d) file_perms()

Answer: c) chmod()

21. What does the acronym CSV stand for in the context of file input/output?

- a) Comma Separated Value
- b) Character Separated Variable
- c) Common Standard Value
- d) Compiled System Variable

Answer: a) Comma Separated Value

22. Which PHP function can be used to parse a CSV file?

- a) readcsv()
- b) parse_csv()
- c) fgetcsv()
- d) getcsv()

Answer: c) fgetcsv()

23. When reading a CSV file with fgetcsv(), what is the default delimiter?

- a) Semicolon (;
- b) Tab (\t)
- c) Comma (,)
- d) Space ()

Answer: c) Comma (,)

24. What function is often used to output data in a structured format that can be easily read by other applications or stored in files?

- a) print_r()
- b) var_dump()
- c) json_encode()
- d) serialize()

Answer: c) json_encode()

25. Which function is used to decode a JSON string back into a PHP variable?

- a) json_decode()
- b) decode_json()
- c) unjson()
- d) parse_json()

Answer: a) json_decode()

26. What is the purpose of the flock() function in PHP?

- a) To format a file.
- b) To lock or release a file.
- c) To find a file.
- d) To flush the output buffer to a file.

Answer: b) To lock or release a file.

27. Which lock type in flock() acquires an exclusive lock for writing?

- a) LOCK_SH
- b) LOCK_EX
- c) LOCK_UN

d) LOCK_NB

Answer: b) LOCK_EX

28. What does LOCK_UN flag in flock() do?

- a) Locks the file shared.
- b) Locks the file exclusively.
- c) Releases a lock.
- d) Makes the lock non-blocking.

Answer: c) Releases a lock.

29. What function is used to get information about a file, such as its access time, modification time, etc.?

- a) fileinfo()
- b) file_info()
- c) stat()
- d) get_file_info()

Answer: c) stat()

30. Which of the following is NOT a valid file access mode for fopen()?

- a) r
- b) w
- c) z
- d) a

Answer: c) z

- Which command is commonly used in the command line to create a new directory?

a) cd

b) rm

c) mkdir

d) ls

Answer: c) mkdir

- What does mkdir stand for?

a) Move Directory

b) Make Directory

c) Modify Directory

d) Manage Directory

Answer: b) Make Directory

- To create a directory named "reports" in the current working directory, which command would you use?

a) cd reports

b) rm reports

c) mkdir reports

d) ls reports

Answer: c) mkdir reports

- Which option for the mkdir command allows you to create parent directories if they don't exist?

a) -r

b) -f

c) -p

d) -v

Answer: c) -p

- If you want to create a directory named "data" inside a directory named "projects" (and "projects" might not exist), which command would you use?

a) mkdir data/projects

b) mkdir -p data/projects

c) mkdir projects/data

d) mkdir -p projects/data

Answer: d) mkdir -p projects/data

- Which command is used to remove a directory?

a) rd

b) del

c) rmdir

d) erase

Answer: c) rmdir

- What is the primary difference between `rmdir` and `rm -r` when deleting directories?

a) `rmdir` can only delete empty directories.

b) `rm -r` can only delete empty directories.

c) There is no difference; they do the same thing.

d) `rmdir` is used for files, and `rm -r` is used for directories.

Answer: a) `rmdir` can only delete empty directories.

- To delete an empty directory named "temp", which command would you use?

- a) `rm temp`
- b) `rm -r temp`
- c) `rmdir temp`
- d) `del temp`

Answer: c) `rmdir temp`

- To recursively delete a directory named "backup" and all its contents (files and subdirectories), which command would you use?

- a) `rmdir backup`
- b) `rm backup`
- c) `rm -r backup`
- d) `del /f /q backup`

Answer: c) `rm -r backup`

- What does the `-r` option in the `rm` command stand for?

- a) Remove forcefully
- b) Remove recursively
- c) Remove silently
- d) Remove only files

Answer: b) Remove recursively

- Which command is used to change the current working directory?

a) `md`

b) `rd`

c) `cd`

d) `pwd`

Answer: c) `cd`

- What does `cd` stand for?

a) Change Directory

b) Current Directory

c) Create Directory

d) Command Directory

Answer: a) Change Directory

- To move from your current directory to a subdirectory named "images", which command would you use?

a) `cd ..`

b) `cd /images`

c) `cd images`

d) `move images`

Answer: c) `cd images`

- To move one level up in the directory hierarchy, which command would you use?

- a) cd .
- b) cd /
- c) cd ..
- d) cd ../../..

Answer: c) cd ..

- What does the single dot (.) represent in directory navigation?

 - a) The root directory
 - b) The parent directory
 - c) The current directory
 - d) The home directory

Answer: c) The current directory

- What do the double dots (..) represent in directory navigation?

 - a) The current directory
 - b) The root directory
 - c) The parent directory
 - d) The home directory

Answer: c) The parent directory

- To go directly to your home directory from any location in the file system, you can often use the command:

 - a) cd /home
 - b) cd ~

c) `cd .`

d) `cd root`

Answer: b) `cd ~`

- What does the tilde symbol (~) typically represent in command-line environments?

a) The current directory

b) The root directory

c) The user's home directory

d) The parent directory

Answer: c) The user's home directory

- Which command displays the path of the current working directory?

a) `ls`

b) `pwd`

c) `cd`

d) `dir`

Answer: b) `pwd`

- What does `pwd` stand for?

a) Print Working Directory

b) Present Working Directory

c) Previous Working Directory

d) Path of Working Directory

Answer: a) Print Working Directory

- If your current directory is `/home/user/documents` and you want to change to `/home/user/downloads`, which command could you use?

- a) `cd documents/downloads`
- b) `cd ../downloads`
- c) `cd /home/user/downloads`
- d) Both b and c

Answer: d) Both b and c

- Which of the following commands would create a directory named "new_folder" and then move you into it?

- a) `cd new_folder`
- b) `mkdir new_folder && cd new_folder`
- c) `mkdir -p new_folder`
- d) `create new_folder; change new_folder`

Answer: b) `mkdir new_folder && cd new_folder`

- Which command would you use to delete a directory named "old_files" even if it contains files and subdirectories, without prompting for confirmation?

- a) `rmdir old_files`
- b) `rm -i -r old_files`
- c) `rm -f -r old_files`
- d) `del old_files /q`

Answer: c) `rm -f -r old_files`

- What is the purpose of the `-v` (verbose) option in the `mkdir` command?
 - To create parent directories.
 - To remove existing directories before creating.
 - To display a message for each created directory.
 - To suppress error messages.
- Answer: c) To display a message for each created directory.
- Suppose you are in the `/usr/local` directory. Which command would take you to the root directory (`/`)?
 - `cd .`
 - `cd ..`
 - `cd ../../..`
 - `cd /`
- Answer: d) `cd /`
- You are in the directory `/home/user/data/images`. Which command would take you directly to `/home/user`?
 - `cd ..`
 - `cd ../../..`
 - `cd /home/user`
 - `cd ../../../../..`
- Answer: b) `cd ../../..`

- Which of the following is NOT a standard command for working with directories in most command-line interfaces?

- a) `mkdir`
- b) `rmdir`
- c) `cd`
- d) `movedir`

Answer: d) `movedir`

- What happens if you try to use `rmdir` on a directory that is not empty?

- a) It will delete the directory and its contents.
- b) It will display an error message.
- c) It will empty the directory and then delete it.
- d) It will move the contents to the parent directory and then delete the original directory.

Answer: b) It will display an error message.

- Which command can be used to create multiple directories at once?

- a) `mkdir dir1, dir2, dir3`
- b) `mkdir dir1 & mkdir dir2 & mkdir dir3`
- c) `mkdir dir1 dir2 dir3`
- d) `create directories dir1 dir2 dir3`

Answer: c) `mkdir dir1 dir2 dir3`

- You want to create a directory named "logs" and then immediately navigate into it. Which of the following sequences of commands would achieve this?

- a) `cd logs; mkdir logs`

b) `mkdir logs && cd logs`

c) `mkdir logs || cd logs`

d) `cd logs && mkdir logs`

Answer: b) `mkdir logs && cd logs`

- Which HTTP method is essential for submitting file uploads via HTML forms?

a) GET

b) POST

c) PUT

d) DELETE

Answer: b) POST

- What `enctype` attribute is mandatory in the `<form>` tag for file uploads?

a) `application/x-www-form-urlencoded`

b) `text/plain`

c) `multipart/form-data`

d) `application/octet-stream`

Answer: c) `multipart/form-data`

- In PHP, where is the information about uploaded files primarily stored?

a) `$_GET`

b) `$_POST`

c) `$_SESSION`

d) `$_FILES`

Answer: d) `$_FILES`

- To access the original name of an uploaded file (from an input named `userfile`), you would use:

- a) `$_FILES['userfile']['name']`
- b) `$_POST['userfile_name']`
- c) `$_GET['userfile']`
- d) `$_FILE['name']['userfile']`

Answer: a) `$_FILES['userfile']['name']`

- Which key in the `$_FILES` array holds the temporary location of the uploaded file on the server?

- a) `name`
- b) `size`
- c) `type`
- d) `tmp_name`

Answer: d) `tmp_name`

- Which PHP function is used to move an uploaded file from its temporary location to a permanent directory?

- a) `copy()`
- b) `rename()`
- c) `move_uploaded_file()`
- d) `file_put_contents()`

Answer: c) `move_uploaded_file()`

- What is the return value of `move_uploaded_file()` upon successfully moving the file?

- a) The new file path
- b) The file size
- c) `true`
- d) `false`

Answer: c) `true`

- A crucial security practice when handling file uploads is to verify the file's:

- a) Temporary name
- b) Original name
- c) Extension and MIME type on the server-side
- d) Size on the client-side

Answer: c) Extension and MIME type on the server-side

- Which PHP configuration directives often limit the maximum size of uploaded files?

- a) `max_file_size` and `post_size_limit`
- b) `upload_max_size` and `post_max_upload`
- c) `upload_max_filesize` and `post_max_size`
- d) `file_upload_limit` and `max_post_size`

Answer: c) `upload_max_filesize` and `post_max_size`

- Where are uploaded files initially stored on the server before being processed by PHP?

- a) The webroot
- b) A temporary directory specified in `php.ini`
- c) The script's directory
- d) A database

Answer: b) A temporary directory specified in `php.ini`

- What is a common method to prevent overwriting files with the same name during uploads?

- a) Forcing users to provide unique names
- b) Automatically deleting older files
- c) Renaming uploaded files using timestamps or unique hashes
- d) Limiting the number of uploads

Answer: c) Renaming uploaded files using timestamps or unique hashes

- What does `$_FILES['userfile']['error']` having a value of 0 indicate?

- a) A file size limit was exceeded.
- b) The file was only partially uploaded.
- c) The file was uploaded successfully.
- d) No file was uploaded.

Answer: c) The file was uploaded successfully.

- What does an `$_FILES['userfile']['error']` value of `UPLOAD_ERR_NO_FILE` signify?

- a) The uploaded file is too large.

- b) No file was selected for upload.
- c) The temporary directory is missing.
- d) A file upload was interrupted.

Answer: b) No file was selected for upload.

- When handling multiple file uploads from an input with `multiple`, how do you typically access the individual file information in `$_FILES` (for an input named `files[]`)?
 - a) Directly as `$_FILES['files'][0]`, `$_FILES['files'][1]`, etc.
 - b) As separate variables like `$file1`, `$file2`.
 - c) Through a loop iterating over `$_FILES['files']['name']`,
`$_FILES['files']['tmp_name']`, etc.
 - d) Using a special function to parse the `$_FILES` array.

Answer: c) Through a loop iterating over `$_FILES['files']['name']`,
`$_FILES['files']['tmp_name']`, etc.

- A significant security risk associated with using the original uploaded filename for storage is:
 - a) Potential filename collisions.
 - b) Exposure of the user's local file structure.
 - c) The possibility of executing malicious code if the filename is crafted maliciously.
 - d) All of the above.

Answer: d) All of the above

- What is the primary goal of Object-Oriented Programming (OOP)?

- a) To write code that is only functional.
- b) To organize code into reusable and manageable units called objects.
- c) To execute code in a sequential manner.
- d) To avoid using functions.

Answer: b) To organize code into reusable and manageable units called objects.

- Which of the following is a core principle of OOP?

- a) Procedural programming
- b) Functional decomposition
- c) Encapsulation
- d) Imperative programming

Answer: c) Encapsulation

- In OOP, what is a class?

- a) An instance of an object.
- b) A blueprint or template for creating objects.
- c) A specific value assigned to an object's property.
- d) A function that belongs to an object.

Answer: b) A blueprint or template for creating objects.

- In OOP, what is an object?

- a) A blueprint for creating classes.
- b) A specific instance of a class.
- c) A characteristic or attribute of a class.
- d) An action that a class can perform.

Answer: b) A specific instance of a class.

- Which keyword is used in PHP to define a class?

- a) `class`
- b) `object`
- c) `new`
- d) `function`

Answer: a) `class`

- Which keyword is used in PHP to create an instance of a class (an object)?

- a) `class`
- b) `object`
- c) `new`
- d) `instanceof`

Answer: c) `new`

- In PHP OOP, what are properties?
- a) Actions that an object can perform.
 - b) Characteristics or attributes of an object.

- c) Blueprints for creating objects.
- d) Ways to control access to object members.

Answer: b) Characteristics or attributes of an object.

- In PHP OOP, what are methods?

 - a) Characteristics or attributes of an object.
 - b) Blueprints for creating objects.
 - c) Functions that belong to a class and can operate on its objects.
 - d) Keywords used to define classes.

Answer: c) Functions that belong to a class and can operate on its objects.

- Which of the following is NOT a common visibility modifier for class properties and methods in PHP?

 - a) `public`
 - b) `private`
 - c) `protected`
 - d) `internal`

Answer: d) `internal`

- What does the `public` visibility modifier allow?

 - a) Access only from within the class itself.
 - b) Access from within the class and its parent classes.
 - c) Access from anywhere (within the class, its parent classes, and outside the class).
 - d) No access from outside the class.

Answer: c) Access from anywhere (within the class, its parent classes, and outside the class).

- What does the `private` visibility modifier allow?
 - a) Access from anywhere.
 - b) Access only from within the class itself.
 - c) Access from within the class and its parent classes.
 - d) No access at all.

Answer: b) Access only from within the class itself.

- What does the `protected` visibility modifier allow?
 - a) Access only from outside the class.
 - b) Access only from within the class.
 - c) Access from within the class and its parent classes.
 - d) No access from within the class.

Answer: c) Access from within the class and its parent classes.

- What is inheritance in OOP?
 - a) The ability of an object to contain other objects.
 - b) The mechanism by which a class can acquire the properties and methods of another class.
 - c) The process of hiding the internal implementation details of an object.
 - d) The ability of objects of different classes to respond to the same method call in their own way.

Answer: b) The mechanism by which a class can acquire the properties and methods of another class.

- Which keyword is used in PHP to implement inheritance?

- a) implements
- b) extends
- c) uses
- d) inherits

Answer: b) extends

- What is polymorphism in OOP?

- a) The ability of a class to have multiple constructors.
- b) The mechanism of hiding the internal details of an object.
- c) The ability of objects of different classes to respond to the same method call in their own way.
- d) The process of creating new classes from existing ones.

Answer: c) The ability of objects of different classes to respond to the same method call in their own way.

- What is encapsulation in OOP?

- a) The ability of a class to inherit from multiple parent classes.
- b) The mechanism of bundling data (properties) and the methods that operate on that data within a single unit (class).
- c) The ability of objects to take on many forms.
- d) The process of creating objects.

Answer: b) The mechanism of bundling data (properties) and the methods that operate on that data within a single unit (class).

- What is an abstract class in PHP?

- a) A class that cannot have any methods.
- b) A class that can be directly instantiated.
- c) A class that can have abstract methods (declared but not implemented) and cannot be directly instantiated.
- d) A class that automatically inherits from all other classes.

Answer: c) A class that can have abstract methods (declared but not implemented) and cannot be directly instantiated.

- Which keyword is used to define an abstract method in PHP?

- a) static
- b) final
- c) abstract
- d) interface

Answer: c) abstract

- What is an interface in PHP?

- a) A class that can only contain constants.
- b) A blueprint for classes, defining a set of methods that a class implementing the interface must define.
- c) An abstract class with no methods.
- d) A special type of object.

Answer: b) A blueprint for classes, defining a set of methods that a class implementing the interface must define.

- Which keyword is used in PHP for a class to implement an interface?

- a) extends
- b) implements
- c) uses
- d) inherits

Answer: b) implements