1. Which of the following statements is NOT true?

a) Class constants are public
b) Class constants are being inherited
c) Class constants can omit initialization (default to NULL)
d) Class constants can be initialized by consts

Answer: C

2. When a class is defined as final it:

A. Can no longer be extended by other classes.
B. Means methods in the class are not over-loadable.
C. Cannot be defined as such, final is only applicable to object methods.
D. Is no longer iteratable.

Answer: A

3. Which of the following statements is correct?

A. Interfaces can extend only one interface
B. Interfaces can extend more than one interface
C. Interfaces can inherit a method from different interfaces
D. Interfaces can redeclare inherited methods

Answer: B

4. Which of the following statements about PHP is true? (Choose 3)

a) A final class can be derived.
b) A final class may be instantiated.
c) A class with a final function may be derived.
d) Static functions can be final.
e) Properties can be final.

Answer: B,C,D

5. Which of the following is correct? (Choose 2)

A. A class can extend more than one class.
B. A class can implement more than one class.
C. A class can extend more than one interface.
D. A class can implement more than one interface.
E. An interface can extend more than one interface.
F. An interface can implement more than one interface.

Answer: D,E

6. What is the primary difference between a method declared as static and a normal method?

A. Static methods can only be called using the :: syntax and never from an instance
B. Static methods do not provide a reference to $this
C. Static methods cannot be called from within class instances
D. Static methods don't have access to the self keyword
E. There is no functional difference between a static and non-static method

Answer: B

7. The _____ keyword is used to indicate an incomplete class or method, which must be further extended and/or implemented in order to be used.

A. final
B. protected
C. incomplete
D. abstract
E. implements

Answer: D

8. To ensure that a given object has a particular set of methods, you must provide a method list in the form of an _____ and then attach it as part of your class using the _____ keyword.

A. array, interface
B. interface, implements
C. interface, extends
D. instance, implements
E. access-list, instance

Answer: B

9. Type-hinting and the `instanceof` keyword can be used to check what types of things about variables? Choose 3

A. If a particular child class extends from it
B. If they are an instance of a particular interface
C. If they are an abstract class
D. If they have a particular parent class
E. If they are an instance of a particular class

Answer: B,D,E

10. In PHP 5's object model, a class can have multiple _____ but only a single direct _____.

A. None of the above
B. interfaces, child
C. children, interface
D. interfaces, parent
E. parents, interface

Answer: D

11. What is the difference between "print" and echo"?

A: There is no difference

B: print returns true or false and echo does not

C: echo returns true or false and print does not

D: Print buffers the output, while echo does not

E: None of the above

Answer: B

12. What is the difference between the include and require language constructs?

A. Require constructs can't be used with URL filenames
B. Include constructs cause a fatal error if the file doesn't exist
C. There is no difference other than the name
D. Include constructs are processed at run time; require constructs are processed at compile time
E. Require constructs cause a fatal error if the file can't be read

Answer: E

13. Which `php.ini` directive should be disabled to prevent the execution of a remote PHP script via an `include` or `require` construct?
A. You cannot disable remote PHP script execution
B. curl.enabled
C. allow_remote_url
D. allow_url_fopen
E. allow_require

Answer: D

14. When implementing a permissions system for your Web site, what should always be done with regards to the session?
A. None of the above
B. You should not implement permission systems using sessions
C. Sessions should be cleared of all data and re-populated
D. The session key should be regenerated
E. The session should be destroyed

Answer: D

15. When attempting to prevent a cross-site scripting attack, which of the following is most important?
A. Not writing Javascript on the fly using PHP
B. Filtering Output used in form data
C. Filtering Output used in database transactions

D. Writing careful Javascript
E. Filtering all input

Answer: E

16. Which of the following `php.ini` directives should be disabled to improve the outward security of your application?
A. safe_mode
B. magic_quotes_gpc
C. register_globals
D. display_errors
E. allow_url_fopen

Answer: B,C,D,E

17. Which of the following list of potential data sources should be considered trusted?
A. None of the above
B. $_ENV
C. $_GET
D. $_COOKIE
E. $_SERVER

Answer: A

18. What is the best way to ensure the distinction between filtered / trusted and unfiltered / untrusted data?
A. None of the above
B. Never trust any data from the user
C. Enable built-in security features such as magic_quotes_gpc and safe_mode
D. Always filter all incoming data
E. Use PHP 5's tainted mode

Answer: B

19. What is the best measure one can take to prevent a cross-site request forgery?
A. Disallow requests from outside hosts
B. Add a secret token to all form submissions
C. Turn off allow_url_fopen in php.ini
D. Filter all output
E. Filter all input

Answer: B

20. If you would like to store your session in the database, you would do which of the following?
A. It requires a custom PHP extension to change the session handler
B. Implement the session_set_save_handler() function
C. Create functions for each session handling step and use session_set_save_handler() to override PHP's internal settings
D. Configure the session.save_handler INI directive to your session class

Answer: C

21. To destroy a PHP session completely, one must which of the following?
A. Regenerate the session ID using session_regenerate_id()
B. If cookies are used, destroy it

C. Use session_demolish() to completely destroy the session
D. Change the session name using session_name()
E. Destroy the session data using session_destroy()

Answer: B,E

22. If you would like to change the session ID generation function, which of the following is the best approach for PHP 5?
A. Set the session.hash_function INI configuration directive
B. Use the session_set_id_generator() function
C. Set the session id by force using the session_id() function
D. Use the session_regenerate_id() function
E. Implement a custom session handler

Answer: A

23. Setting a cookie on the client in PHP 5 can be best accomplished by:
A. Use the add_cookie() function
B. Use the setcookie() function
C. Use the the apache_send_header() function
D. Setting a variable in the $_COOKIE superglobal

Answer: B

24. How does one create a cookie which will exist only until the browser session is terminated?
A. You cannot create cookies that expire when the browser session is terminated
B. Setting the expiration time for a cookie to a time in the distant future
C. Do not provide a cookie expiration time
D. Enable Cookie Security
E. Set a cookie without a domain

Answer: C

25. Setting a HTTP cookie on the client which is not URL-encoded is done how in PHP 5?
A. Use the setrawcookie() function
B. Set the cookies.urlencode INI directive to false
C. Use urldecode() on the return value of setcookie()
D. Setting the $no_encode parameter of setcookie() to a boolean 'true'
E. All cookies must be URL encoded

Answer: A

26. During an HTTP authentication, how does one determine the username and password provided by the browser?
A. Parse the HTTP headers manually using http_get_headers()
B. Use the get_http_username() and get_http_password() functions
C. Use the $_SERVER['HTTP_USER'] and $_SERVER['HTTP_PASSWORD'] variables
D. Use the $_SERVER['PHP_AUTH_USER'] and $_SERVER['PHP_AUTH_PW'] variables
E. Parse the $_SERVER['REQUEST_URI'] variable

Answer: D

27. One can ensure that headers can always be sent from a PHP script by doing what?
A. Enable header buffering in PHP 5
B. Set the header.force INI directive to true
C. Enable output buffering in PHP 5
D. There is no way to ensure that headers can always be set, they must always be checked
E. None of the above

Answer: C

28. When is it acceptable to store sensitive information in an HTTP cookie?
A. Only under extremely controlled situations
B. When the cookie is sent over a secure HTTP request
C. When it is encrypted
D. It is always acceptable

Answer: C

29. When using a function such as strip_tags, are markup-based attacks still possible?
A. No, HTML does not pose any security risks
B. Yes, even a <p> HTML tag is a security risk
C. Yes, attributes of allowed tags are ignored
D. No, strip_tags will prevent any markup-based attack

Answer: C

30. Where should indirectly executed PHP scripts (i.e. include files) be stored in the file system?
A. Outside of the Document Root
B. In the document root
C. Anywhere you want
D. In the database

Answer: A

31. When executing system commands from PHP, what should one do to keep applications secure?
A. Remove all quote characters from variables used in a shell execution
B. Avoid using shell commands when PHP equivlents are available
C. Hard code all shell commands
D. Escape all shell arguments
E. Escape all shell commands executed

Answer: B,C,D

32. Why is it important from a security perspective to never display PHP error messages directly to the end user, yet always log them?
A. Error messages will contain sensitive session information
B. Error messages can contain cross site scripting attacks
C. Security risks involved in logging are handled by PHP
D. Error messages give the perception of insecurity to the user
E. Error messages can contain data useful to a potential attacker

Answer: D,E

33. Which of the following functions allow you to introspect the call stack during execution of a PHP script?
   A. get_backtrace()
   B. get_function_stack()
   C. debug_backtrace()
   D. debug_print_backtrace()
   E. print_backtrace()

Answer: C,D

34. When running PHP in a shared host environment, what is the major security concern when it comes to session data?
   A. Sessions on shared hosts are easily hijacked by outside malicious users
   B. All of the above
   C. You cannot use a custom data store in shared hosts
   D. Session data stored in the file system can be read by other scripts on the same shared host
   E. Users outside the shared host can access any site which created a session for them

Answer: D

35. **Which of the following filtering techniques prevents cross-site scripting (XSS) vulnerabilities?**

A. Strip all occurrences of the string script.
B. Strip all occurrences of the string javascript.
C. Enable magic_quotes_gpc.
D. None of the above.

Answer: D

36. **Identify the security vulnerability in the following example:**

```
<?php
 echo "Welcome, {$_POST['name']}.";
 ?>
```

A. SQL Injection
B. Cross-Site Scripting
C. Remote Code Injection
D. None of the above

Answer: B

37. **Which options do you have in PHP to set the expiry date of a session?**

A. Set the session.duration directive in php.ini
B. Set session cookie expiry date locally via session_set_cookie_params()
C. Set session expiry date locally via session_cache_expire()
D. None of the above

Answer: D

38. **Which of the following data types cannot be directly manipulated by the client?**

A. Cookie Data
B. Session Data
C. Remote IP Address
D. User Agent

Answer: B

39. What is the function of backtick (`) characters in PHP?

A. Same as single-quotes, used to enclose strings.
B. Escape operators.
C. No special meaning.
D. Execute the enclosed string as a command.
E. Error control operators.

Answr: D

40. Which constant must be passed as the second argument to htmlentities() to convert single quotes (') to HTML entities?

A. TRUE
B. FALSE
C. ENT_QUOTES
D. ENT_NOQUOTES
E. ENT_COMPAT

Answer: C

41. You want to allow your users to submit HTML code in a form, which will then be displayed as real code and not affect your site layout. Which function do you apply to the text, when displaying it? (Choose 2)

A. strip_tags()
B. htmlentities()
C. htmltidy()
D. htmlspecialchars()
E. showhtml()

Answer: B,D

42. One common security risk is exposing error messages directly in the browser. Which PHP configuration directive can be disabled to prevent this?

A. html_display
B. error_reporting
C. display_errors
D. error_log
E. ignore_repeated_errors

Answer: C

43. Which of the following functions can help prevent session fixation vulnerabilities?

A. magic_quotes_gpc()
B. strip_tags()
C. addslashes()
D. session_regenerate_id()

Answer: D

44. How can you determine if magic_quotes_gpc is enabled? (Choose 2)

A. Use the get_magic_quotes() function.
B. Using the get_magic_quotes_runtime() function.
C. Use the get_magic_quotes_gpc() function.

D. Using ini_get('magic_quotes_gpc').
E. Using ini_get('magic_quotes').

Answer: A,D

45. **Which of the following statements about exceptions are correct? (Choose 2)**

A. you can only throw classes derived from Exception
B. a try block can have multiple catch blocks
C. a try block must not be followed by a catch block
D. try blocks cannot contain nested try blocks

Answer: A,B

46. **In a shared hosting environment, session data can be read by PHP scripts written by any user. How can you prevent this?**

A. Store session data in a different location with session.save_path
B. Store session data in a database.
C. Enable safe_mode.
D. Set session.name to something unique.

Answer: B

47. **Which is the most secure approach for handling dynamic data in SQL queries?**

A. Use addslashes().
B. Enable magic_quotes_gpc.
C. Use prepared statements if supported by the database library, data-specific escaping functions otherwise.
D. Use stored procedures.

Answer: C

48. **Which of the following functions are used to escape data within the context of HTML? (Choose 2)**

A. htmlentities()
B. addslashes()
C. stripslashes()
D. strip_tags()
E. htmlspecialchars()

Answer: A,E

49. **Which of the following configuration directives increase the risk of remote code injection when enabled? (Choose 2)**

A. allow_url_fopen
B. register_globals
C. magic_quotes_gpc
D. safe_mode

Answer: A,B

50. **Assume that you are using PHP s session management without cookies and want to make sure that session information does not get lost when redirecting the client to another URL. Which of the following functions do you need to achieve that? (Choose 3)**

A. header()
B. session_id()
C. session_info()
D. session_name()
E. session_write_close()

Answer: A,B,D

51. Which of the following actions must be taken before this code may go into production? (Choose 2)

A. Check with is_uploaded_file() whether the uploaded file $_FILES['myFile']['tmp_name'] is valid
B. Sanitize the file name in $_FILES['myFile']['name'] because this value is not consistent among web browsers
C. Check the charset encoding of the HTTP request to see whether it matches the encoding of the uploaded file
D. Sanitize the file name in $_FILES['myFile']['name'] because this value could be forged
E. Use $HTTP_POST_FILES instead of $_FILES to maintain upwards compatibility

Answer: B,D

52. What will the following code print?

echo addslashes('I am a small "HTML" string, which is \'invalid\'</u>.');

A. I am a small "HTML" string, which is 'invalid'</u>.
B. I am a small \"HTML\" string, which is \'invalid\'</u>.
C. I am a small \"HTML\" string, which is \\'invalid\\'</u>.
D. I am a small \"HTML\" string, which is \\\'invalid\\\'</u>.
E. I am a \<b\>small\<\/b\> "HTML" string, which is 'invalid'\<\/u\>.

Answer: B

53. Which session function can help to avoid session fixation?

A. session_is_registered()
B. session_register()
C. session_unregister()
D. session_regenerate_id()
E. None of the above.

Answer: D

54. Which function can help prevent cross-site scripting? (Choose 2)

A. addslashes()
B. htmlentities()
C. htmlspecialchars()
D. strip_tags()
E. quotemeta()

Answer: B,C

55. Under which circumstances is the $_SESSION super-global available? (Choose 2)

A. If session_start() was called.
B. If session.auto_start INI setting is enabled.
C. Always available in PHP 5.
D. If a valid session id is passed via GET, POST or COOKIE.
E. If register_globals are enabled.

Answer: A,B

56. You need to escape special characters to use user input inside a regular expression. Which functions would you use? (Choose 2)

A. addslashes()
B. htmlentities()
C. preg_quote()
D. regex_quote()
E. quotemeta()

Answer: C,E

57. PHP 5 supports which of the following XML parsing methods?
A. SAX
B. FastDOM
C. DOM
D. XPath
E. XML to Object mapping

Answer: A,C,D,E

58. When embedding PHP into XML documents, what must you ensure is true in order for things to function properly?
A. Disabling of the short_tags PHP.ini directive
B. Enabling the asp_tags PHP.ini directive
C. That you have XPath support enabled in PHP 5
D. That your XML documents are well-formed
E. None of the above, PHP can be embedded in XML in all cases.

Answer: A

59. What XML technology is used when you mix two different document types in a single XML document?
A. Validators
B. DTD
C. Transformations
D. Namespaces

Answer: D

60. Event-based XML parsing is an example of which parsing model?
A. SAX
B. DOM
C. XML Object Mapping
D. XPath
E. XQuery

Answer: A

61. What is the primary benefit of a SAX-based XML parser compared to DOM?
A. All of the above
B. Faster then DOM methods
C. Requires less memory then DOM
D. Easier to develop parsers

Answer: A

62. Creating new nodes in XML documents using PHP can be done using which XML/PHP 5 technologies?
A. XQuery

B. XPath
C. SimpleXML
D. DOM
E. SAX

Answer: C,D

63. When working with SimpleXML in PHP 5, the four basic rules on how the XML document is accessed are which of the following?

A. Element namespaces are denoted by the 'namespace' attribute
B. converting an element to a string denotes text data
C. Non-numeric indexes are element attributes
D. Numeric indexes are elements
E. Properties denote element iterators

Answer: B,C,D,E

64. SimpleXML objects can be created from what types of data sources?

A. A String
B. An array
C. A DomDocument object
D. A URI
E. A Database resource

Answer: A,C,D

65. What DOMElement method should be used to check for availability of a non-namespaced attribute?

A. getAttributeNS()
B. getAttribute()
C. hasAttribute()
D. hasAttributeNS()

Answer: C

66. REST is a(n) ...

A. Web service protocol similar to SOAP with a strict XML schema.
B. Principle to exchange information using XML and HTTP.
C. API to get information from social networking sites.

Answer: B

67. Which of the following statements are NOT true?

A. SimpleXML allows removal of attributes.
B. SimpleXML allows addition of new attributes.
C. SimpleXML allows removal of nodes.
D. SimpleXML allows addition of new nodes.

E.None of the above

Answer: E

68. What DOM method is used to load HTML files?

A. load()
B. loadXML()
C. loadHTML()
D. loadHTMLFile()

Answer: D

69. Which of the following are valid SoapClient calls? (Choose 2)

A. $client = new SoapClient("weather.wsdl");
B. $client = new SoapClient;
C. $client = new SoapClient(null, array("location" => "http://example.com/weather", "uri" => "http://test-uri.com/"));
D. $client = new SoapClient(null, array());

Answer: A,C

70. What parsing methodology is utilized by the SimpleXML extension?

A. SAX
B. DOM
C. XPath
D. Push/Pull Approach
E. Expat

Answer: B

71. Which of the following is an invalid DOM save method?

A. save()
B. saveFile()
C. saveXML()
D. saveHTML()
E. saveHTMLFile()

Answer: B

72. Which of the following statements about SOAP is NOT true?

A. SOAP is a request-/response-based protocol.
B. SOAP can be transported using SMTP, HTTP and other protocols.
C. SOAP requires developers to use WSDL.
D. SOAP traffic via HTTP can be encrypted and compressed just like other HTTP requests

Answer: C

73. Which of the following XML declarations is NOT valid?

A. <?xml version="1.0" ?>
B. <?xml version="1.1" encoding="UTF-8" ?>
C. <?xml standalone="no" ?>
D. <?xml standalone="1" ?>

Answer: D

<mark>74. Which</mark> of these protocols are NOT governed by the W3C in their latest versions? (Choose 2)

A. XML-RPC
B. SOAP
C. WSDL
D. UDDI

Answer: A,D

75. Which one of the following technologies was not built into PHP before version 5?

A. XSL
B. SOAP
C. DOM
D. SAX

Answer: B

76. What SimpleXML function is used to parse a file?

A. simplexml_load_file()
B. simplexml_load_string()
C. load()
D. loadFile()
E. loadXML()
F. None of the above.

Answer: A

77. What is the method used to execute XPath queries in the SimpleXML extension?

A. xpathQuery()
B. xpath()
C. simpleXMLXpath()
D. query()
E. evaluate()

Answer: B

78. What is the method used to execute XPath queries in the SimpleXML extension? \

A. xpathQuery()
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C. simpleXMLXpath()
D. query()
E. evaluate()

Answer: E

79. Which of the following parts must a XML document have in order to be well-formed?

A. An XML declaration
B. A root element
C. A specified encoding
D. A reference to either a DTD or an XML schema definition

Answer: B

80. How can XML parsing errors be suppressed in the SimpleXML extension?

A. error_reporting(E_ALL^E_NOTICE);
B. simplexml_disable_errors(TRUE);
C. simplexml_ignore_errors(TRUE);
D. libxml_use_internal_errors(TRUE);
E. simplexml_load_file("file.xml", LIBXML_NOERROR) ;

Answr: D