Certainly! Here are 10 multiple-choice questions (MCQs) with answers for each of the following chapters from *Beginning PHP and MySQL: From Novice to Professional, Fifth Edition* by Frank M. Kromann:

## **Chapter 11: Third-Party Libraries**

- 1. What is Composer in PHP?
  - o A) A PHP framework
  - o B) A package manager for PHP
  - o C) A database management tool
  - o D) A code editor
  - o Answer: B) A package manager for PHP
- 2. Which file does Composer use to manage project dependencies?
  - o A) composer.lock
  - o B) package.json
  - o C) composer.json
  - o D) dependencies.xml
  - o **Answer:** C) composer.json
- 3. What command is used to install dependencies listed in composer.json?
  - o A) php install
  - o B) composer update
  - o C) composer install
  - o D) php composer install
  - o Answer: C) composer install
- 4. How do you add a new package using Composer?
  - o A) composer add package-name
  - o B) composer require package-name
  - o C) composer install package-name
  - o D) composer get package-name
  - o **Answer:** B) composer require package-name
- 5. Which of the following is a popular PHP logging library available via Composer?
  - o A) Log4PHP
  - o B) Monolog
  - o C) PHPLogger
  - o D) LogMaster
  - o **Answer:** B) Monolog
- 6. What is Packagist?
  - o A) A PHP framework
  - o B) A repository of PHP packages
  - o C) A code editor
  - o D) A database
  - o Answer: B) A repository of PHP packages
- 7. Which command updates all dependencies to the latest version according to composer.json?
  - o A) composer upgrade
  - o B) composer update
  - o C) composer refresh
  - o D) composer install

- o Answer: B) composer update
- 8. What does the caret (^) symbol signify in versioning within composer.json?
  - o A) Any version
  - o B) Exact version
  - o C) Compatible version updates
  - o D) Major version updates only
  - o **Answer:** C) Compatible version updates
- 9. Which file locks the versions of dependencies to ensure consistency across installations?
  - o A) composer.json
  - o B) composer.lock
  - o C) package.lock
  - o D) dependencies.lock
  - o Answer: B) composer.lock
- 10. How can you remove a package using Composer?
  - o A) composer delete package-name
  - o B) composer remove package-name
  - o C) composer uninstall package-name
  - o D) composer erase package-name
  - o **Answer:** B) composer remove package-name

## **Chapter 13: Forms**

- 1. Which PHP superglobal is used to collect form data sent with the POST method?
  - A) \$ GET
  - o B) \$ POST
  - o C) \$ FORM
  - o D) \$ REQUEST
  - o Answer: B) \$ POST
- 2. What attribute specifies where to send the form data upon submission?
  - o A) method
  - o B) action
  - o C) enctype
  - o D) target
  - o Answer: B) action
- 3. Which HTML tag is used to create a form in HTML?
  - o A)
  - o B)
  - o C)
  - o D)
  - o Answer: A)
- 4. What does the 'enctype' attribute in a form specify?
  - o A) The character encoding
  - o B) The form submission method
  - o C) The data encoding type for the form
  - o D) The target window for the response
  - o **Answer:** C) The data encoding type for the form
- 5. Which method is more secure for transmitting sensitive data?

- o A) GET
- o B) POST
- o C) REQUEST
- o D) SESSION
- o Answer: B) POST
- 6. How can you prevent Cross-Site Request Forgery (CSRF) attacks in forms?
  - o A) Use GET method
  - o B) Use CAPTCHA
  - o C) Implement CSRF tokens
  - o D) Use cookies
  - o **Answer:** C) Implement CSRF tokens
- 7. Which PHP function is used to validate an email address?
  - o A) validate email()
  - o B) check\_email()
  - o C) filter var()
  - o D) is email()
  - o **Answer:** C) filter var()
- 8. What is the default method for form submission if not specified?
  - o A) GET
  - o B) POST
  - o C) REQUEST
  - o D) None
  - o **Answer:** A) GET
- 9. Which input type is used for password fields in HTML forms?
  - o A) text
  - o B) password
  - o C) hidden
  - o D) secure
  - o **Answer:** B) password
- 10. How can you retain form data after submission in PHP?
  - o A) Using cookies
  - o B) Using sessions
  - o C) Re-populating form fields with PHP variables
  - o D) All of the above
  - o **Answer:** D) All of the above

# **Chapter 14: Authenticating Your Users**

- 1. Which PHP function is used to start a session?
  - o A) session\_begin()
  - o B) session start()
  - o C) start\_session()
  - o D) init session()
  - o **Answer:** B) session start()
- 2. What is the purpose of hashing passwords?
  - o A) To encrypt them
  - o B) To store them in plain text
  - o C) To compare them easily

- o D) To secure them against unauthorized access
- o Answer: D) To secure them against unauthorized access
- 3. Which function is used to hash passwords in PHP?
  - o A) md5()
  - o B) sha1()
  - o C) password\_hash()
  - o D) crypt()
  - Answer: C) password hash()
- 4. Which function verifies a password against a hash?
  - o A) password verify()
  - o B) hash verify()
  - o C) verify password()
  - o D) check password()
  - Answer: A) password verify()
- 5. What is a common method to prevent session hijacking?
  - o A) Using cookies
  - o B) Regenerating session IDs
  - o C) Using GET method
  - o D) Storing session data in database
  - o **Answer:** B) Regenerating session IDs
- 6. Which superglobal is used to store session variables?
  - o A) \$ SESSION
  - o B) \$ COOKIE
  - o C) \$ SERVER
  - o D) \$ POST
  - o Answer: A) \$ SESSION
- 7. What is the purpose of the 'remember me' functionality?
  - o A) To remember user preferences
  - o B) To keep users logged in across sessions
  - o C) To store passwords
  - o D) To auto-fill forms
  - o Answer: B) To keep users logged in across sessions
- 8. Which HTTP status code indicates unauthorized access?
  - o A) 200
  - o B) 301
  - o C) 401
  - o D) 404
  - o **Answer:** C) 401
- 9. What is the risk of storing passwords in plain text?
  - o A) No risk
  - o B) They can be easily read if the database is compromised
  - o C) They take up more space
  - o D) They are harder to compare
  - o Answer: B) They can be easily read if the database is compromised
- 10. Which PHP function destroys all data registered to a session?
  - o A) session destroy()
  - o B) session unset()
  - C) session\_end()
  - o D) session delete()
  - o **Answer:** A) session destroy()

# **Chapter 15: Handling File Uploads**

- 1. Which HTML attribute is necessary for file uploads?
  - o A) enctype="multipart/form-data"
  - o B) method="get"
  - o C) action="upload.php"
  - o D) type="file"
  - o **Answer:** A) enctype="multipart/form-data"
- 2. Which PHP superglobal is used to access uploaded files?
  - o A) \$ FILES
  - o B) \$ POST
  - o C) \$ UPLOAD
  - o D) \$ REQUEST
  - o Answer: A) \$ FILES
- 3. What function moves an uploaded file to a new location?
  - o A) move uploaded file()
  - o B) copy file()
  - o C) upload file()
  - o D) file move()
  - o **Answer:** A) move uploaded file()
- 4. Which function checks if a file was uploaded via HTTP POST?
  - o A) is uploaded file()
  - o B) file uploaded()
  - o C) check upload()
  - o D) upload check()
  - o **Answer:** A) is uploaded file()
- 5. What is the risk of not validating uploaded file types?
  - o A) No risk
  - o B) Users can upload malicious files
  - o C) Files may not upload
  - o D) Files may be corrupted
  - o Answer: B) Users can upload malicious files
- 6. Which PHP directive limits the maximum size of an uploaded file?
  - o A) upload max filesize
  - o B) max upload size
  - o C) file upload limit
  - o D) max file size
  - o Answer: A) upload max filesize
- 7. How can you restrict file uploads to images only?
  - o A) Check file extension
  - o B) Check MIME type
  - o C) Use getimagesize()
  - o D) All of the above
  - o **Answer:** D) All of the above
- 8. Which function returns information about an image?
  - o A) getimagesize()
  - o B) imageinfo()
  - o C) fileinfo()

- o D) get image info()
- o **Answer:** A) getimagesize()
- 9. What is a common directory to store uploaded files?
  - o A) /uploads
  - o B)/files
  - o C)/images
  - o D)

## **Chapter 17: Session Handlers**

- 1. What is the purpose of custom session handlers in PHP?
  - o A) To change session variable names
  - o B) To store session data in a custom storage mechanism
  - o C) To encrypt session data
  - o D) To manage user authentication
  - o Answer: B) To store session data in a custom storage mechanism
- 2. Which function is used to set custom session save handlers?
  - A) session\_set\_save\_handler()
  - o B) set session handler()
  - o C) session handler set()
  - o D) session save handler()
  - o **Answer:** A) session set save handler()
- 3. Which of the following is NOT a method required by a custom session handler class?
  - o A) open()
  - o B) read()
  - o C) write()
  - o D) execute()
  - Answer: D) execute()
- 4. What is the return type expected from the read() method in a custom session handler?
  - o A) Integer
  - o B) Boolean
  - o C) String
  - o D) Array
  - o **Answer:** C) String
- 5. Which method is responsible for cleaning up old sessions in a custom session handler?
  - o A) gc()
  - o B) clean()
  - o C) destroy()
  - o D) close()
  - o Answer: A) gc()
- 6. What is the purpose of the write() method in a custom session handler?
  - o A) To read session data
  - o B) To write session data to storage
  - o C) To delete session data
  - o D) To open a session

- o **Answer:** B) To write session data to storage
- 7. Which PHP interface can be implemented for custom session handling?
  - o A) SessionHandlerInterface
  - o B) CustomSessionInterface
  - o C) SessionInterface
  - o D) HandlerInterface
  - o **Answer:** A) SessionHandlerInterface
- 8. What does the open() method typically do in a custom session handler?
  - o A) Initializes resources for session storage
  - o B) Opens a file for writing
  - o C) Starts a new session
  - o D) Validates session data
  - o Answer: A) Initializes resources for session storage
- 9. Which method is called when a session is destroyed?
  - o A) destroy()
  - o B) delete()
  - o C) close()
  - o D) end()
  - Answer: A) destroy()
- 10. What is the purpose of the close() method in a custom session handler?
  - o A) To close the session write stream
  - o B) To close the session read stream
  - o C) To release resources associated with the session
  - o D) All of the above
  - o **Answer:** D) All of the above

#### **Chapter 18: Web Services**

- 1. What is a web service?
  - o A) A website
  - o B) A method of communication between two devices over the web
  - o C) A web browser
  - o D) A web server
  - o Answer: B) A method of communication between two devices over the web
- 2. Which protocol is commonly used for web services?
  - o A) FTP
  - o B) SMTP
  - o C) HTTP
  - o D) SSH
  - o Answer: C) HTTP
- 3. What does REST stand for?
  - o A) Representational State Transfer
  - o B) Remote Execution Standard Technique
  - o C) Random Execution of Service Transactions
  - o D) None of the above
  - o **Answer:** A) Representational State Transfer
- 4. Which HTTP method is typically used to retrieve data in a RESTful service?
  - o A) POST

- o B) GET
- o C) PUT
- o D) DELETE
- o **Answer:** B) GET
- 5. Which HTTP method is used to create new resources in RESTful services?
  - o A) GET
  - o B) POST
  - o C) PUT
  - o D) DELETE
  - o **Answer:** B) POST
- 6. What is JSON?
  - o A) A programming language
  - o B) A database
  - o C) A lightweight data-interchange format
  - o D) A web server
  - o Answer: C) A lightweight data-interchange format
- 7. Which PHP function is used to decode a JSON string?
  - o A) json decode()
  - B) json\_encode()
  - o C) decode\_json()
  - o D) parse json()
  - o Answer: A) json decode()
- 8. What is the purpose of the Content-Type header in HTTP?
  - o A) To specify the size of the content
  - o B) To specify the type of content being sent
  - o C) To specify the server type
  - o D) To specify the request method
  - o Answer: B) To specify the type of content being sent
- 9. Which PHP extension is commonly used to make HTTP requests?
  - o A) cURL
  - o B) PDO
  - o C) GD
  - o D) mysqli
  - o Answer: A) cURL
- 10. What does SOAP stand for in web services?
  - o A) Simple Object Access Protocol
  - o B) Secure Object Access Protocol
  - o C) Simple Online Access Protocol
  - o D) None of the above
  - o Answer: A) Simple Object Access Protocol

## **Chapter 19: Secure PHP Programming**

- 1. What is SQL injection?
  - o A) A method to optimize SQL queries
  - o B) A technique to secure databases
  - o C) An attack that allows execution of malicious SQL statements
  - o D) A way to backup databases

- o **Answer:** C) An attack that allows execution of malicious SQL statements
- 2. Which function is used to prevent SQL injection in PHP?
  - o A) mysqli query()
  - B) mysqli\_real\_escape\_string()
  - o C) mysql query()
  - D) escape\_string()
  - o **Answer:** B) mysqli real escape string()
- 3. What is Cross-Site Scripting (XSS)?
  - o A) A method to style web pages
  - o B) A security vulnerability that allows injection of malicious scripts
  - o C) A way to compress web content
  - o D) A technique to improve SEO
  - o Answer: B) A security vulnerability that allows injection of malicious scripts
- 4. Which function can help prevent XSS attacks?
  - A) htmlspecialchars()
  - o B) htmlentities()
  - o C) strip tags()
  - o D) All of the above
  - o **Answer:** D) All of the above
- 5. What is the purpose of using prepared statements in PHP?
  - o A) To speed up query execution
  - o B) To prevent SQL injection
  - o C) To format SQL queries
  - o D) To cache SQL results
  - o Answer: B) To prevent SQL injection
- 6. Which PHP function is used to hash passwords securely?
  - o A) md5()
  - o B) sha1()
  - o C) password hash()
  - o D) crypt()
  - o **Answer:** C) password hash()
- 7. What is the recommended way to store passwords in a database?
  - o A) Plain text
  - o B) Encrypted with a reversible algorithm
  - o C) Hashed with a secure algorithm
  - o D) Base64 encoded
  - o **Answer:** C) Hashed with a secure algorithm
- 8. What is CSRF?
  - o A) Cross-Site Request Forgery
  - o B) Cross-Site Resource Fetching
  - o C) Client-Side Resource Function
  - o D) None of the above
  - o **Answer:** A) Cross-Site Request Forgery
- 9. How can you prevent CSRF attacks?
  - o A) Use HTTPS
  - o B) Validate user input
  - o C) Implement CSRF tokens in forms
  - o D) Use cookies
  - o **Answer:** C) Implement CSRF tokens in forms
- 10. What does the 'secure' flag in cookies do?

- o A) Encrypts the cookie
- B) Ensures the cookie is sent over HTTPS only
  C) Makes the cookie accessible via JavaScript
- o D) Sets the cookie to expire immediately
- Answer: B) Ensures the cookie is sent over HTTPS only