CHAPTER – 9

CONNECTING PHP AND MYSQL

1. Which one the following statements instantiates the mysqli class?
   B) $mysqli=new mysqli() 
2. Which one is correct way, we can retrieve the data in the result set of Mysql 
   using php? D) all the above 
3. How can we create a database using php and mysql? 
   A) mysqli_create_db(“database name”) 
4. Which is the correct function to execute the sql queries in php? A) 
   mysqli_query(“connection object”,”sql query”) 
5. Which is the correct function closing connection in php? 
   A) mysqli_close(“connection object”); 
6. Which is the correct function to establish connection in php? 
   A) mysqli_connect(“server name”,”user name”,”password”,”db name”); 
7. Which is the not a correct mysql function in php? 
   C) mysqli_select_data(function 
8. How many parameter are required for mysqli connect function in php?c) 4 
9. How many parameter are required for mysqli query function in php? A)2 
10. How many parameter are required for mysqli close function in php?A)1 
11. Which version of php supports mysqli function? D) version 5.0 
12. the ___ combination became very popular server side web in internet php and 
   mysql 
13. ___ is extension in php which gives access to the mysql function mysqli 
14. ___ is open soure and community support scripting language php 
15. ___ percentage of website has been built by php and mysql seventy 
16. ___ is a request of data from a database table query 
17. ___ is an open-source relational database management system mysql 
18. ___ is an organized collection of data, from a computer system database 
19. ___ it returns the number of affected rows in the previous query affected rows 
20. ___ is used to fetches a result row as an associative array. Fetch assoc()
Part – II

Short Answer

1. What are the mysqli function available in php?
   - mysqli_connect() Function
   - mysqli_close() Function
   - mysqli_select_db() Function
   - mysqli_affected_rows() Function
   - mysqli_connect_error() Function
   - mysqli_fetch_assoc() Function

2. What is mysqli function?
   mysqli function is execution of mysqli query on the web.

3. What are the types mysqli function available php?
   - mysqli_connect() Function
   - mysqli_close() Function
   - mysqli_select_db() Function
   - mysqli_affected_rows() Function
   - mysqli_connect_error() Function
   - mysqli_fetch_assoc() Function

4. Difference between connection and close function?
   Connections:
   Before accessing MySQL Database, connect to Database Server machine via PHP scripting language using mysqli_connect() Function.
   Syntax:
   ```php
   mysqli_connect(“Server Name “,”User Name”,”Password”,”DB Name”);
   ```

   Closing Connection:
   mysqli_close() Function is used to close an existing opened database connection between PHP scripting and MySQL Database Server.
   Syntax:
   ```php
   mysqli_close(“Connection Object”);
   ```

5. Give few examples of mysqli queries.
Example:
$con = mysqli_connect("localhost","my_user","my_password","Student_DB ");
$sql = "SELECT student_name,student_age FROM student";mysqli_query($con,$sql);

6. What is connection string?
   ●● $servername -> Database Server Server IP address
   ●● $username -> Database Server User Name
   ●● $password -> Database Server Password
   ●● $DB_Name -> Database Name

7. What is web database?
   It managing data in online
   Build your own database
   Storage the data without a technical person

8. What is mysqli_fetch_assoc() function?
   The mysqli_fetch_assoc() function is used to fetch the data from table or database
   example :-$row = mysqli_fetch_array($result)

9. Define mysqli_connect_errno() function.
   The mysqli_connect_errno() function is used to throw the error while the query execute from the database
   Example: - mysqli_connect_errno()

10. Define mysqli_affected_rows() function.
    The mysqli_affected_rows() function is used the returns the numbers of affected rows from database
    Example: - mysqli_fetch_array($result)

Part – III

Explain the brief answer

1. Write the syntax for mysqli queries.
The main goal of MySQL and PHP connectivity is to retrieve and manipulate the data from MySQL database server. The SQL query statements are helping with PHP MySQL extension to achieve the objective of MySQL and PHP connection. ”mysqli_query” is a function, helps to execute the SQL query statements in PHP scripting language.

**Syntax:**

mysqli_query(“Connection Object”,”SQL Query”)

2. Write is the purpose of mysqli function available.
   - The mysqli functions allows you to access mysql database servers
   - It returns the information about the most recently executed query
   - It is used to sets connect options and change connection settings.

3. Differentiate mysqli_affected_rows() function and mysqli_fetch_assoc() function.

   **Mysqli_affected_rows()**
   It returns the number of affected rows in the previous select, insert, update, replace or delete query

   **Mysqli_fetch_assoc()**
   It is used to fetches a result row as an associative array.

4. Write mysqli connection syntax with example.

   **Syntax:**

   mysqli_connect(“Server Name “,”User Name”,”Password”,”DB Name”);
   This function requires four parameters to connect to database server. Database Server name, Database username, password and Database Name.

   **Managing Database Connections**
   The below code snippet describes managing database connection methods and features.

   ```php
   <?php
   $servername = “localhost”;
   $username = “username”;  
   $password = “password”;
   $DB_name = “School_DB”;
   ```
$conn = mysqli_connect($servername, $username, $password,$DB_name);
    if (!$conn) {
        die("Connection failed: ". mysqli_connect_error());
    }
    echo "Connected successfully";
?>

5. Write a note php mysql database connection.

   Data is important to all computer and Internet related applications. Numerous growths of data need a secure and convenient environment to store and manipulate autonomously.

   All these features are available in Relational Database Management System (RDMS) such as MySQL, Oracle, IBM DB2, and Microsoft SQLSERVER etc.

   These databases are connected with Programing language and perform the major operations like INSERT, SELECT, UPDATE and DELETE using Structure query language (SQL).

   The combination of PHP and MySQL has become very popular server side web scripting language in Internet.

   MySQL and PHP scripting language connectivity, which covers Database connection establishment, Database Selection, SQL statement execution, and Connection termination.

Part – IV

Explain in detail

1. Discuss in detail about mysql functions with example.

   The mysqli extension contains the following important functions which are related to MySQL database connectivity and management.

   ●● Mysqli_connect() Function
   ●● Mysqli_close() Function
   ●● mysqli_select_db() Function
   ●● mysqli_affected_rows() Function
   ●● mysqli_connect_error() Function
   ●● mysqli_fetch_assoc() Function

1   Database Connections:
Before accessing MySQL Database, connect to Database Server machine via PHP scripting language using Mysqli_connect() Function.

**Syntax:**

```php
mysqli_connect("Server Name ","User Name","Password","DB Name");
```

This function requires four parameters to connect to database server. Database Server name, Database username, password and Database Name.

**2 Managing Database Connections**

The below code snippet describes managing database connection methods and features.

```php
<?php
    $servername = "localhost";
    $username = "username";
    $password = "password";
    $DB_name = "School_DB";
    $conn = mysqli_connect($servername, $username, $password,$DB_name);
    if (!$conn) {
        die("Connection failed: ". mysql_connect_error());
    }
    echo "Connected successfully";
?>
```

In the above code snippet, three variables are used to connect to the Database server. They are

- $servername -> Database Server Server IP address
- $username -> Database Server User Name
- $password -> Database Server Password
- $DB_Name -> Database Name

The mysqli_connect function uses these variables and connect Database server from PHP scripting. If connection gets fail, output will be printed with MySQL error code. Otherwise connection is success.

**3 Performing Queries**

The main goal of MySQL and PHP connectivity is to retrieve and manipulate the data from MySQL database server. The SQL query statements are helping with PHP MySQL extension to achieve the objective of MySQL and PHP connection. "mysqli_query" is a function, helps to execute the SQL query statements in PHP scripting language.

**Syntax:**

```php
mysqli_query("Connection Object","SQL Query")
```

**Example:**
$con=mysqli_connect("localhost","my_user","my_password","Student_DB");
$sql="SELECT student_name,student_age FROM student";mysqli_query($con,$sql);

4 Closing Connection:
mysqli_close() Function is used to close an existing opened database connection between PHP scripting and MySQL Database Server.

Syntax:
mysqli_close("Connection Object");

Example:
<?php
    $con=mysqli_connect("localhost","$user","$password","SCHOOL_DB");
    mysqli_close($con);
?>

2. Explain the database error handling and management process in php?

The default error handling in PHP is very simple. An error message with filename, line number and a message describing the error is sent to the browser.

When creating scripts and web applications, error handling is an important part. If your code lacks error checking code, your program may look very unprofessional and you may be open to security risks.

This tutorial contains some of the most common error checking methods in PHP.

We will show different error handling methods:

- Simple "die()" statements
- Custom errors and error triggers
- Error reporting

<?php
    $con=mysqli_connect("localhost","my_user","my_password","my_db");
    // Check connection
    if (mysqli_connect_errno())
        die();
?>
<?php
$servername = "localhost";
$username = "username";
$password = "password";
$DB_name = "School_DB";
$conn = mysqli_connect($servername, $username, $password, $DB_name);
if (!$conn) {
    die("Connection failed: ". mysqli_connect_error());
}
echo "Connected successfully"
?>


**Database Connections:**

Before accessing MySQL Database, connect to Database Server machine via PHP scripting language using Mysqli_connect() Function.

**Syntax:**

```
mysqli_connect("Server Name","User Name","Password","DB Name");
```

This function requires four parameters to connect to database server. Database Server name, Database username, password and Database Name.

**Managing Database Connections**

The below code snippet describes managing database connection methods and features.

```php
<?php
    $servername = "localhost";
    $username = "username";
    $password = "password";
    $DB_name = "School_DB";
    $conn = mysqli_connect($servername, $username, $password, $DB_name);
    if (!$conn) {
        die("Connection failed: ". mysqli_connect_error());
    }
    echo "Connected successfully";
?>
```

In the above code snippet, three variables are used to connect to the Database server. They are

- $servername -> Database Server Server IP address
$username -> Database Server User Name
$password -> Database Server Password
$DB_Name -> Database Name

The mysqli_connect function uses these variables and connect Database server from PHP scripting. If connection gets fail, output will be printed with MySQL error code. Otherwise connection is success.

4. Explain mysqli queries with examples.

**Performing Queries**

The main goal of MySQL and PHP connectivity is to retrieve and manipulate the data from MySQL database server. The SQL query statements are helping with PHP MySQL extension to achieve the objective of MySQL and PHP connection. “mysqli_query” is a function, helps to execute the SQL query statements in PHP scripting language.

**Syntax:**

mysqli_query(“Connection Object”,”SQL Query”)

**Example:**

$con=mysqli_connect(“localhost”,”my_user”,”my_password”,”Student_DB “);
$sql=”SELECT student_name,student_age FROM student”;mysqli_query($con,$sql);

**Example of PHP and MySQL Program:**

```php
<?php
$servername = “localhost”;
$username = “username”;
$password = “password”;
$dbname = “school_DB”;
$connection = mysqli_connect(‘$servername’, ‘$username’, ‘$password’,’$dbname’);
if (mysqli_connect_errno())
    {
    echo “Failed to connect to MySQL: “ . mysqli_connect_error();
    }
$sql_stmt = “SELECT * FROM my_contacts”; 
$result = mysqli_query($connection,$sql_stmt
if ($rows)
    {
```
while ($row = mysqli_fetch_array($result))
    {
        echo 'ID: ' . $row['id'] . '<br>';
        echo 'Full Names: ' . $row['full_names'] . '<br>';
        echo 'Gender: ' . $row['gender'] . '<br>';
        echo 'Contact No: ' . $row['contact_no'] . '<br>';
        echo 'Email: ' . $row['email'] . '<br>';
        echo 'City: ' . $row['city'] . '<br>';
        echo 'Country: ' . $row['country'] . '<br><br>';
    }
}
mysqli_close($connection); //close the database connection
?>