**Quiz 1 – Object Oriented Programming**

**General Instructions**:

1. Read each question carefully before answering.
2. No erasures allowed an erasure will be considered wrong

Part 1 Multiple Choice

1. Which of the following best describes Object-Oriented Programming (OOP)?

|  |  |
| --- | --- |
| a) A language for creating databases | c) A method of writing only procedural code |
| b) A paradigm based on objects containing data and behavior | d) A way to format HTML documents |

1. Which of the following is NOT a pillar of OOP?

|  |  |
| --- | --- |
| a) Inheritance | c) Polymorphism |
| b) Abstraction | d) Compilation |

1. In PHP, which operator is used for string concatenation?

|  |  |
| --- | --- |
| a) + | c) && |
| b) . | d) \* |

1. In OOP, which keyword is used to declare class members that can only be accessed within the same class?

|  |  |
| --- | --- |
| a) private | c) protected |
| b) public | d) static |

1. Which PHP function is used to display text to the screen?

|  |  |
| --- | --- |
| a) print() | c) echo |
| b) display() | d) show() |

1. In OOP, what is **a constructor** used for?

|  |  |
| --- | --- |
| a) To destroy objects after use | c) To access parent class members |
| b) To declare static properties only | d) special method that runs automatically when an object is created |

1. Which of the following keywords in OOP is used to create an object?

|  |  |
| --- | --- |
| a) build | c) new |
| b) class | d) create |

1. What does encapsulation in OOP mean?

|  |  |
| --- | --- |
| a) Combining multiple classes into one | c) Copying one class into another |
| b) Writing code in a procedural style | d) data and functions are kept inside the class, and data is protected from direct access. |

1. Which PHP superglobals are commonly used to get input from an HTML form?

|  |  |
| --- | --- |
| a) $\_POST and $\_GET | c) $\_INPUT |
| b) $\_FORM | d) $\_REQUEST |

1. Which of the following best describes a class?

|  |  |
| --- | --- |
| a) A single instance of an object | c) A blueprint for creating objects |
| b) A function inside PHP | d) A server that runs PHP |

1. Which OOP principle allows a subclass to inherit methods and attributes from another class?

|  |  |
| --- | --- |
| a) Polymorphism | c) Encapsulation |
| b) Inheritance | d) Abstraction |

1. What does the $this keyword in PHP refer to?

|  |  |
| --- | --- |
| a) The class itself | c) The current object instance |
| b) The parent class | d) A static method |

1. What is the purpose of a destructor in PHP OOP?

|  |  |
| --- | --- |
| a) special method that runs automatically when the object is destroyed | c) To make methods private |
| b) To initialize class properties | d) To allow multiple inheritance |

1. What makes OOP code easier to maintain and debug?

|  |  |
| --- | --- |
| a) Code is written in one large function | c) OOP automatically removes bugs |
| b) All code is hidden in a single file | d) Classes group related data and behaviors together |

1. What does polymorphism in OOP allow?

|  |  |
| --- | --- |
| a) Using the same method name in different classes with different behaviors | c) Copying attributes from one class to another |
| b) Hiding the internal details of a class | d) Grouping data and methods together |

Part 2 True or False

True or False, write **T** if the statement is correct and **F** if it is incorrect.

\_\_\_\_\_\_\_1) OOP is based on objects that contain both data and behavior.

\_\_\_\_\_\_\_2) Procedural programming is the same as object-oriented programming.

\_\_\_\_\_\_\_3) Inheritance allows one class to reuse properties and methods of another class.

\_\_\_\_\_\_\_4) Polymorphism means that different classes can define methods with the same name but different behaviors.

\_\_\_\_\_\_\_5) Abstraction hides implementation details and shows only necessary features.  
\_\_\_\_\_\_\_6) In PHP, variables must always start with a dollar sign ($).

\_\_\_\_\_\_\_7) The echo statement in PHP is used to read input from the user.

\_\_\_\_\_\_\_8) $this in PHP is used inside static methods to access class properties.

\_\_\_\_\_\_\_9) Access modifiers in OOP control the visibility of class members.  
\_\_\_\_\_\_\_10) self refers to the current object instance of a class.

\_\_\_\_\_\_\_11) Indexed arrays in PHP use numeric indexes starting from 0.  
\_\_\_\_\_\_\_12) Associative arrays in PHP use named keys instead of numbers.  
\_\_\_\_\_\_\_13) OOP makes it harder to maintain and debug large systems.

\_\_\_\_\_\_\_14) Static methods in PHP can be accessed without creating an object instance.  
\_\_\_\_\_\_\_15) A constructor in OOP is automatically called when an object is created.