



Test

Python Classes - Test

Part A: Multiple Choice Questions (MCQs)

Choose the correct answer for each question:

1. What is the correct syntax to create a class in Python?
 - a) `class MyClass[]:`
 - b) `class MyClass():`
 - c) `def MyClass():`
 - d) `create class MyClass:`
2. What does the `__init__` method do in a class?
 - a) Deletes the object
 - b) Initializes the class variables
 - c) Defines a class method
 - d) Initializes an object when it is created
3. How do you create an instance of a class named `Car`?
 - a) `Car = new Car()`
 - b) `Car.create()`
 - c) `my_car = Car()`
 - d) `my_car = Car.new()`
4. What will be the output of the following code?

```
class Test:
    def __init__(self, x):
```

```
self.x = x

def display(self):
    print(self.x)

obj = Test(5)
obj.display()
```

- a) 0
 - b) x
 - c) 5
 - d) Error
5. Which of the following is used to access class attributes?
- a) object.attribute
 - b) class::attribute
 - c) attribute.object
 - d) attribute.class
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Part B: Practical Questions

1. Define a Python class called `Person` with attributes `name` and `age`. Add a method `greet()` that prints a greeting message including the name and age. Create an instance and call the `greet()` method.
2. Create a class `Rectangle` that has attributes `length` and `breadth`, and a method `area()` to calculate and return the area of the rectangle. Also, include a method `perimeter()` to return the perimeter. Instantiate the class and print the area and perimeter for length = 5 and breadth = 3.
3. Write a class called `BankAccount` with attributes `account_holder` and `balance`. Include methods to `deposit(amount)` and `withdraw(amount)`, and a method to `display_balance()`. Implement the class with sample data.
4. Implement a class `Student` that stores a student's name and a list of marks. Add a method `average()` that returns the average marks. Create an object and

calculate the average for marks [85, 90, 78].

5. Demonstrate the concept of class inheritance by creating a class `Animal` with a method `speak()` and another class `Dog` that inherits from `Animal` and overrides the `speak()` method to say "Bark".
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