Objects and Classes, Theoretical Test

**1. What is the correct way to define a simple class Person in Python?**

A: class Person: pass

B: def Person: pass

C: Person(): pass

D: class Person(): def \_\_init\_\_(self): pass

**2. What is the output of the following Python code?**

Картина, която съдържа текст, Шрифт, екранна снимка

Описанието е генерирано автоматично

A: 0

B: 10

C: None

D: Error

**3. What is the correct way to inherit from a base class in Python?**

A: class Child extends Parent:

B: class Child inherits Parent:

C: class Child(Parent):

D: class Child.Parent:

**4. What is the result of calling the method below?**

Картина, която съдържа текст, екранна снимка, Шрифт

Описанието е генерирано автоматично

A: method in class A

B: method in class B

C: Error

D: None

**5. Which of the following defines a class attribute in Python?**

A: self.attribute = 5

B: attribute = 5

C: def \_\_init\_\_(self): self.attribute = 5

D: cls.attribute = 5

**6. How do you call a parent class's method from a child class in Python?**

A: Parent.method(self)

B: super().method()

C: Child.method(self)

D: self.method()

**7. Which of the following correctly represents encapsulation in Python?**

A: Private methods and attributes are defined with a single leading underscore \_

B: Private methods and attributes are defined with double leading underscores \_\_

C: Methods and attributes defined with self

D: All methods and attributes are public by default

**8. Which of the following best represents polymorphism in Python?**

A: The ability to define a function with the same name in multiple classes

B: Using inheritance to reuse code

C: Encapsulating data in classes

D: A class with only one method

**9. How do you create a static method in Python?**

A: By using the @classmethod decorator

B: By using the @staticmethod decorator

C: By using def staticmethod(self)

D: Static methods are not supported in Python

**10. What is the result of calling obj.greet() in the following code?**

Картина, която съдържа текст, екранна снимка, Шрифт

Описанието е генерирано автоматично

A: Hello from Base

B: Hello from Derived

C: Error

D: None

**11. BONUS QUESTION -> What is method overriding in Python?**

A: When a subclass provides a new implementation of a method defined in its parent class

B: When a method is defined multiple times in the same class

C: When multiple methods are combined into one method

D: When a method calls another method within the same class

**12. BONUS QUESTION -> What is the output of the following code?**

Картина, която съдържа текст, екранна снимка, Шрифт, дизайн

Описанието е генерирано автоматично

A: 10

B: 5

C: 15

D: Error

**13. Additional QUESTION**

Картина, която съдържа текст, екранна снимка, Шрифт

Описанието е генерирано автоматично

A: Some sound Some sound

B: Bark Bark

C: Some sound Bark

D: Error

**14. Additional QUESTION**

Картина, която съдържа текст, екранна снимка, Шрифт, дизайн

Описанието е генерирано автоматично

A: A's f

B: B's f

C: Error

D: None

**15. 😈 INSANE DIFFICULTY QUESTION 😈**

Картина, която съдържа текст, екранна снимка, Шрифт

Описанието е генерирано автоматично

A: 25

B: 20

C: 15

D: 30