Python Debugging Test

Each question contains a faulty code snippet. Identify the error and choose the correct solution from the given options.

Each question carries 2 marks. The total test is 40 marks.

Q1. What will be the output of the following code?

```
x = 10

y = "5"

print(x + y)
```

A) 15
B) "105"
C) TypeError
D) 10

Q2. Find the error in this loop:

```
for i in range(5):

print(i)
```

A) IndentationError
B) SyntaxError

C) NameError
D) No Error

Q3. What will this function return?

```
def add(x, y):

    return x + y

print(add(2))
```

A) 2
B) Error
C) None
D) "2y"

Q4. What will happen when you run this code?

```
x = [1, 2, 3]

print(x[3])
```

A) 3
B) IndexError
C) None
D) 1

Q5. What will this code print?

```
x = "Hello"

x[0] = "h"

print(x)
```

A) hello
B) "Hello"
C) TypeError
D) H

Q6. What's wrong with this code?

```
if 5 > 3:

print("Yes")

else:

print("No")
```

A) SyntaxError
B) IndentationError
C) Logical Error
D) No Error

Q7. What will be the output?

```
for i in range(3):

    if i == 2:

        break

    print(i)
```

A) 0 1 2
B) 0 1

C) 1 2
D) No Output

Q8. What error will this code produce?

```
print("Hello" + 5)
```

A) TypeError
B) ValueError
C) No Error
D) SyntaxError

Q9. What will happen?

```
x = 5

y = 0

print(x / y)
```

A) 5
B) 0
C) ZeroDivisionError
D) None

Q10. Find the bug in this function:

```
def greet():

print("Hello")

    print("World")
```

A) SyntaxError
B) IndentationError
C) NameError
D) No Error

Q11. What will be the output of this function?

```
def multiply(a, b):

    print(a * b)

result = multiply(3, 4)

print(result)
```

A) 12
B) None
C) Error
D) 12 None

Q12. What error will this code produce?

```
x = [10, 20, 30]

print(x[5])
```

A) IndexError
B) TypeError
C) NameError
D) No Error

Q13. What will this code output?

```
def test():
```

```
    x = 10

print(x)
```

A) 10
B) None
C) NameError
D) No Error

Q14. Identify the error in this code:

```
x = (1, 2, 3)

x[1] = 5
```

A) SyntaxError
B) TypeError
C) No Error
D) IndexError

Q15. What will be the output of this loop?

```
for i in range(3):

    print(i)

    if i == 1:

        continue

    print("End")
```

A) 0 End 1 End 2 End
B) 0 End 1 2 End
C) 0 End 1 2
D) 0 End 1 End 2 End

Q16. What will be the output of this code?

```
def divide(a, b=2):

    return a / b

print(divide())
```

A) 0

B) TypeError

C) None

D) 1

Q17. What error will this code produce?

```
x = [1, 2, 3]

y = x

y.append(4)

print(x)
```

A) [1, 2, 3]
B) [1, 2, 3, 4]
C) TypeError
D) None

Q18. What will be the output of this code?

```
x = 5
def change():
```

```
    x = x + 1
change()
print(x)
```

A) 6
B) 5
C) UnboundLocalError
D) None

Q19. What will happen when you run this code?

```
def repeat(word, times):
    return word * times
print(repeat(3, "hello"))
```

A) hellohellohello
B) "3hello"
C) TypeError
D) hello hello hello

Q20. What will happen when this function is executed?

```
def func(a, b=[]):
    b.append(a)
    return b
print(func(1))
print(func(2))
```

A) [1] [2]
B) [1] [1, 2]
C) [1] []
D) Error

#1.C
#2.A
#3.B
#4.B
#5.C
#6.B
#7.A
#8.A
#9.C
#10.A
#11.D
#12.A
#13.C
#14.C
#15.B
#16.C
#17.B
#18.C
#19.A
#20.B