1. what is output

1 points

```
x = 10
def func(x):
    x += 5
    return x
x = func(x) + x
print(x)
```

- 10
- 20
- 25
- 30

Choose correct answers:

2. What is the purpose of the __init__ method in a Python class?

1 points

- Initialize class variables ✓
- Define class methods
- Create an instance of the class
- Specify the class inheritance

3.Which one is NOT a legal variable name? 1 points

- (●) my-var
- ( ) my_var
- ( ) Myvar
- ( ) _myvar

Choose correct answers:

What is the correct syntax to define a class in Python? 1 points

- ( ) class MyClass[]:
- ( ) class MyClass():
- ( ) class MyClass{}:
- (●) class MyClass: ✓

5. What is the output of the following Python code? 1 points

```
def outer_func(x):
    def inner_func(y):
        return x + y
    return inner_func

closure = outer_func(5)
result = closure(3)
print(result)
```

- 5
- 8
- 15
- TypeError

Choose correct answers:

6- To add a new element to a list we use which Python command? 1 points

- list1.addEnd(5)
- list1.addLast(5)
- list1.append(5) ✓
- list1.add(5)

7. What is the output of the following Python code? 1 points

```
x = [1, 2, 3]
y = x
x.append(4)
print(y)
```

- [4]
- [1, 2, 3]
- [1, 2, 3, 4]
- This code will raise an error.

Choose correct answers:

8. What is the output of the following Python code? 1 points

```
x = 10
def my_function():
    global x
    x += 5
my_function()
print(x)
```

- 5
- 10
- 15 ✓
- This code will raise an error.

9.What is the output of the following Python code? 1 points

```
my_list = [1, 2, 3, 4, 5]
result = [x * 2 for x in my_list if x % 2 == 0]
print(result)
```

- [1, 2, 3, 4, 5]
- [4, 8]
- [2, 4]
- [1, 3, 5]

10.What is the output of the following Python code? 1 points

```python
class Parent:
    def __init__(self):
        self.x = 1

class Child(Parent):
    def __init__(self):
        super().__init()
        self.y = 2

child = Child()
print(child.x, child.y)
```

- (●) 1 2
- ( ) 2
- ( ) garbage value
- ( ) This code will raise an error.

Choose correct answers:

11. In Python, what is the purpose of the "pass" statement? 1 points

- (●) It is used to indicate an empty code block and does nothing. ✓
- ( ) It raises an exception.
- ( ) It is used to define a variable.
- ( ) It is used to create a new function.

12. Consider the following code snippet. What will it print? 1 points

```python
import threading

def print_numbers():
    for i in range(5):
        print(i)

thread = threading.Thread(target=print_numbers)
thread.start()
thread.join()
print("Done")
```

- (●) 0 1 2 3 4 Done
- ( ) Done 0 1 2 3 4
- ( ) 0 Done 1 2 3 4
- ( ) 1 2 3 4 0 Done

13. What will be the output of the following code? 1 points

```
try:
    result = 10 / 0
except ZeroDivisionError:
    result = "Infinity"

print(result)
```

- 10
- "Infinity"
- ZeroDivisionError
- None

Choose correct answers:

14. What is called when a function is defined inside a class? 1 points

- Module
- Class
- Another Function
- Method ✓

15. Suppose list1 is [3, 4, 5, 20, 5, 25, 1, 3], what is list1 after list1.pop(1)? 1 points

- [3, 4, 5, 20, 5, 25, 1, 3]
- [1, 3, 3, 4, 5, 5, 20, 25]
- [3, 5, 20, 5, 25, 1, 3]
- [1, 3, 4, 5, 20, 5, 25]

Choose correct answers:

16.How do you create a callback function for a button click event in Tkinter? 1 points

```
1  from tkinter import *
2  root = Tk()
3
4  def on_button_click():
5      print("Button clicked")
6
7  button = Button(root, text="Click me", _________)
8  button.pack()
9  root.mainloop()
```

- command=on_button_click ✓
- action=on_button_click
- callback=on_button_click
- event=on_button_click

17. Select the correct ways to get the value of marks key. 1 points

```
student = {
  "name": "Emma",
  "class": 9,
  "marks": 75
}
```

- m = student.get(2)
- m = student.get('marks')
- m = student[2])

Choose correct answers:

18. What will the following code print? 1 points

```
class MyClass:
    def __init__(self, value):
        self.value = value

    def get_value(self):
        return self.value

obj = MyClass(10)
print(obj.get_value())
```

- 10 ✓
- value
- obj
- Error

19. What is the output of the following code? 1 points

```
squares = [x**2 for x in range(5)]
print(squares)
```

- [ ] [1, 4, 9, 16, 25]
- [x] [0, 1, 4, 9, 16]
- [ ] [0, 1, 2, 3, 4]
- [ ] [0, 1, 8, 27, 64]

Choose correct answers:

20. What is the output of the following code? 1 points

```
nums = [1, 2, 3, 4, 5, 6]
evens = list(filter(lambda x: x % 2 == 0, nums))
print(evens)
```

- [ ] [1, 3, 5]
- [x] [2, 4, 6] ✓
- [ ] [1, 2, 3, 4, 5, 6]
- [ ] []