## SSD - Monsoon 2024

# **Python Lab Activity (15 Marks)**

**Duration: 30 minutes** 

## **Instructions:**

- 1. Write your answers in a text file with question number and correct option. Example:
  - **1.** A
  - 2. B
- 2. Save the file with your roll no. Example 2021101005.txt
- 3. Upload your text file to Moodle.
- 1. Which of the following statements correctly defines a class in Python?
  - A) class Car():
  - B) class Car:
  - C) class Car{}
  - D) define class Car
- 2. What will be the output of the following code?

```
python
```

for i in range(3):

for j in range(2):

print(i, j)

- A) 0 1 2
- B) 0 0, 1 1
- C) 0 0, 0 1, 1 0, 1 1, 2 0, 2 1
- D) Error

#### 3. In a nested loop, which loop runs more frequently?

- A) Outer loop
- B) Inner loop
- C) Both run the same number of times
- D) Depends on the condition

#### 4. What does self represent in a Python class method?

- A) The class itself
- B) A global variable
- C) The current instance of the class
- D) An arbitrary keyword

#### 5. What will be the output of the following code?

```
python
x = 10

if x > 5:
    if x < 15:
        print("x is between 5 and 15")
    else:
        print("x is greater than 15")

else:</pre>
```

print("x is less than or equal to 5")

- A) x is between 5 and 15
- B) x is greater than 15
- C) x is less than or equal to 5
- D) None of the above

# 6. What is the purpose of the \_\_init\_\_ method in Python classes?

- A) To initialize the class
- B) To define class attributes

- C) To act as a destructor
- D) To define public variables

#### 7. What is the output of this code?

```
python
x = 1
while x < 3:
x += 1
if x == 2:
    continue
print(x)</pre>
```

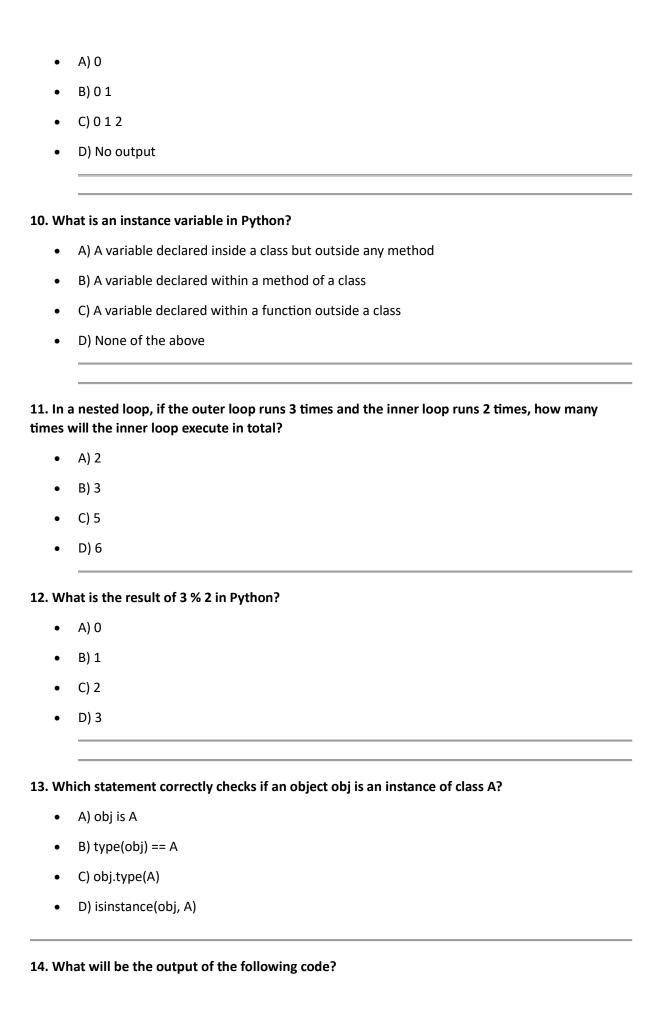
- A) 1
- B) 2
- C) 3
- D) Error

### 8. Which keyword is used in Python to inherit a class?

- A) inherit
- B) extends
- C) superclass
- D) class ChildClass(ParentClass)

# 9. What is the result of the following code?

```
python
for i in range(3):
    if i == 1:
        break
    print(i)
```



```
python
class MyClass:
  def __init__(self):
    self.value = 10
  def update(self):
    self.value += 5
obj = MyClass()
obj.update()
print(obj.value)
   • A) 5
   • B) 10
   • C) 15
   • D) Error
15. Which special variable can you check to determine if your Python program was executed
```

interactively or imported by another Python program?

• A. \_\_main\_\_ • B. \_\_imported\_\_ • C. \_\_interactive\_\_ • D. \_\_name\_\_