

United International University B.Sc. in Data Science

DS 1501: Programming for Data Science Class Test 01: Fall 2023 Time: 30 Minutes Marks: 20

Student ID: Name:

1. Which one is not a correct variable name and why?

[2]

```
my-var, my_var, 1_var, _var
```

2. Find the syntax errors in the following code and fix them.

[3]

```
number = 23
if number %2 = 1:
    print("Odd Number")
else
    print("Even Number")
```

3. The following code should calculate the square of a number:

```
number = input("Input a number between 1 and 10")
square = number * number
```

What is wrong with the code? Write the correct code.

[3]

[3]

4. Find the output of the following code.

```
number = 23
if 25 < number < 30:
    print("Good", end=" ")
else:
    print("Bad", end=" ")
print("Number.")</pre>
```

5. Find the output of the following code.

[3]

```
x = 12
y = 4
print(x // y + 5 + x * y % 4)
```

6. Find the output of the following code.

```
x = 12
y = 4
print(not x<y and x>y or x<y and not x>y)
```

[3]

7. In the computer labs of UIU, 35 students can sit together for classes. Write a program in python, that will take the number of students admitted in the first trimester of data science program. As the students are taking admissions one-by-one, the department has decided to fill up the open sections full to their capacity and then open a new section. For example, if 90 students are admitted, 3 sections will be needed. First section will be full first, 35 students then second section will be full with another 35 students and the last section will have only 20 students. Your program will print will be needed for these newly admitted students and the size of the last section.