BRAC UNIVERSITY
Department of Computer Science and Engineering

Examination: Midterm
Duration: 60 Minutes
No. of Questions: 3

CSE 111: Programming Language II

Semester: Fall 2022
Full Marks: 20
No. of Pages: 2

B

Name: (Please write in CAPITAL LETTERS)	ID:	Section:

✔ Use the back **part** of the answer script for rough work. **No washroom breaks.**
✔ At the end of the exam, put the question **paper** inside the answer script and **return both**.

Question 1: CO2 [4 Points]

Design the "**Spotify**" class with required properties to produce the given output for the provided driver code.

#Write your code here

```
rock= Spotify("Heavy Metal", "This Fire Burns", "Here I Am")
print(rock.show_playlist())
```

Output:

Genre: Heavy Metal

Song list: This Fire Burns, Here I Am

Question 2: CO4 [6 Points]

```
1  class MidB:
2    def __init__(self):
3        self.x = 3
4        self.y = 0
5        self.sum = 5
6    def methodA(self, x):
7
     self.y = self.sum + self.x + x
8        self.sum = x + self.y
9        d = MidB()
```

Illustrate the output of the following statements:

```
b = MidB()
b.methodA(6)
b.methodB(b, 99)
```

```
10
    d.sum = self.sum + self.methodB(d)
11          print(self.x, self.y, self.sum)
12      def methodB(self, t, z=0):
13          y = 3
14          t.x = self.x + self.sum
15          self.sum = t.x + t.y + y
16          print(t.x, t.y, t.sum)
17          if z == 0:
18              return t.sum
```

Question 3: CO2, CO4 [10 Points]

Implement the **"PizzaMachine"** class with necessary properties, so that the given output is produced for the provided driver code.

[**Hint:**

1. The Pizza machine can only bake pizzas of 3 spice levels: Regular, Hot and Super Naga.
2. Pizza cannot be baked if no toppings are specified.
3. "type(variable)" function returns the data type of the variable passed to it as an argument. You may need it.]

#Write your code here

```
pizza1 = PizzaMachine()
order1 = pizza1.customizePizza(["Cheese", "Pepperoni"], "Hot")
print("1################################## ")
print(order1)
print("2==============================")
pizza2 = PizzaMachine("Vege")
order2 = pizza2.customizePizza("Super Naga")
print("3##################################")
print(order2)
print("4==============================")
pizza3 = PizzaMachine("Chicken Blast",12)
order3 = pizza3.customizePizza(["Mushroom"])
print("5##################################")
print(order3)
print("6==============================")
pizza4 = PizzaMachine("Beef Bonanza",16)
order4 = pizza4.customizePizza(["Cheese","Beef kala bhuna"],"Mild")
print("7##################################")
print(order4)
print("8==============================")
```

Output:

```
1##################################
Your 6-inch Hot spicy Regular Pizza is ready with Cheese,Pepperoni toppings. Enjoy!
2==============================
3##################################
No toppings specified! Can't bake pizza.
4==============================
5##################################
Your 12-inch Regular spicy Chicken Blast Pizza is ready with Mushroom toppings. Enjoy!
6==============================
7##################################
Sorry! Spice level not allowed. Can't bake pizza.
8==============================
```