Benefits of Participating

Skill Enhancement: Improve your problem-solving and coding abilities.

Real-World Application: Apply what you've learned in practical scenarios.

Competition Experience: Gain experience in coding contests which are highly regarded in academic and professional settings.

Feedback and Improvement: Receive constructive feedback to further enhance your coding skills.

Certificates and Recognition: Earn certificates of participation and excellence.

Submission Guidelines

1. **Create a Document:**

➔ Open a new document in Microsoft Word or Google Docs.
➔ Title the document with your full name and batch code, like [AMIT B-24].

2. **Write Your Answers:**

➔ Type your answers directly into the document.
➔ For coding questions, include the complete code along with comments explaining your approach.

3. **Attach Code Screenshot:**

➔ Run your code and take a screenshot of the code along with its output.
➔ Insert the screenshot into the document below your written answer for each coding question.

4. **No Handwritten Notes:**

➔ Handwritten notes or submissions will not be accepted. Ensure all your answers are typed and screenshots are clear.

5. **Submit Your Document:**

➔ Save the document in PDF format.
➔ Upload the PDF file through the submission link provided on the community group.

5-Day Python Workshop - Coding Contest

Total Marks: 45

Section 1: Objective Type Questions (15 Marks)

1. Multiple Choice Questions (MCQs) (5 Marks)

1. Which of the following is used to get input from the user in Python?
   - a) input()
   - b) get_input()
   - c) scanf()
   - d) read()

2. What is the correct way to declare a variable in Python?
   - a) var x = 5
   - b) int x = 5
   - c) x = 5
   - d) declare x = 5

3. What data type is the value returned by the function `input()`?
   - a) int
   - b) float
   - c) string
   - d) bool

4. Which of the following is not a valid comparison operator in Python?
   - a) ==
   - b) !=
   - c) !==
   - d) <=

5. How do you write a comment in Python?
   - a) //
   - b)
   - c) /*
   - d) <!-- -->

2. Fill in the Blanks (5 Marks)

1. In Python, a _____ is used to denote a comment.
2. The `input()` function returns data as a _____ type.
3. To check if two values are equal, we use the _____ operator.
4. A _____ data type is used to represent decimal numbers in Python.
5. The `if` statement can be followed by an _____ statement to handle multiple conditions.

3. Match the Column (3 Marks)

| Column A | Column B |

1. int	a. Text data
2. str	b. Conditional
3. if	c. Whole numbers

Match the correct pairs.

4. True or False (2 Marks)

1. The `input()` function in Python can return an integer value directly. (True/False)
2. In Python, `elif` is used to check another condition if the previous condition in an `if` statement is False. (True/False)

Section 2: Explain and Guess the Output (15 Marks)

1. Explain the Following Code (5 Marks)

```
age = int(input("Enter your age: "))
if age >= 18:
    print("You are eligible to vote.")
elif age >= 16:
    print("You can drive a car.")
else:
    print("You are too young.")
```

Explain what the code does, including the purpose of each part of the code.

2. Guess the Output (5 Marks)

What will be the output of the following code snippet?

```
number = 10
if number % 2 == 0:
    print("Even")
else:
    print("Odd")

number = 15
if number % 5 == 0:
    print("Divisible by 5")
else:
    print("Not divisible by 5")
```

3. Guess the Output (5 Marks)

What will be the output of the following code snippet?

```
name = "Alice"
if name == "Alice":
    print("Hello, Alice!")
else:
    print("Hello, stranger!")

age = 20
if age > 18:
    print("Adult")
elif age == 18:
    print("Just turned adult")
else:
    print("Minor")
```

Section 3: Coding Questions (15 Marks)

1. Create a Simple Calculator (5 Marks)

Write a Python program that takes two numbers and an operator as input from the user and performs the corresponding operation (addition, subtraction, multiplication, division). Print the result.

2. Temperature Converter (5 Marks)

Write a Python program to convert temperature from Celsius to Fahrenheit. The formula to convert Celsius to Fahrenheit is: `F = C * 9/5 + 32`. Take the temperature in Celsius as input from the user.

3. Grade Calculator (5 Marks)

Write a Python program that takes marks of three subjects as input from the user and calculates the average. Based on the average, determine the grade as follows:
- Average >= 90: Grade A
- Average >= 80 and < 90: Grade B
- Average >= 70 and < 80: Grade C
- Average < 70: Grade D

Print the average and the corresponding grade.
