1. Basic Understanding

Question 1:

What is the result of the following operation in Python?

print(10 + 5)

Options:

- a) 15
- b) 105
- c) 10.5
- d) Error

Question 2:

What will this code output?

print(15 - 7)

Options:

- a) 8
- b) -8
- c) 7
- d) Error

Question 3:

Which operator is used for multiplication in Python?

Options:

- a) *
- b) x
- c) mult
- d) .

Question 4:

What will this code produce?

print(20 / 4)

Options:

- a) 5
- b) 5.0
- c) 4
- d) Error

2. Intermediate Applications

Question 5:

What is the result of the following code?

print(10 % 3)

Options:

- a) 1
- b) 0
- c) 3
- d) Error

Question 6:

What does the ** operator do in Python?

Options:

- a) Addition
- b) Division
- c) Exponentiation
- d) Modulus

Question 7:

Predict the output:

result =
$$3 * (2 + 4) - 5$$

print(result)

Options:

- a) 7
- b) 13
- c) 11
- d) 17

Question 8:

What is the result of print(9 // 2)?

Options:

- a) 4.5
- b) 4
- c) 5
- d) Error

3. Problem-Solving

Question 9:

Write a Python program to calculate the area of a rectangle where:

- Length = 10
- Breadth = 5

Question 10:

What is the output of the following code?

x = 7

x += 3

x *= 2

print(x)

Options:

- a) 14
- b) 17
- c) 20
- d) 10

4. Bonus Challenge

Question 11:

Evaluate and write the output of the following code:

```
a = 5
b = 2
c = a ** b
d = c % b
```

print(a + b + c + d)