Python Variables Worksheet – Grade 11

Section A: Practice Questions

1. Create variables to store your name, age, and school name. Print them in one sentence.

2. Create four variables: one integer, one float, one string, and one boolean.
   Print each value and its type.

3. Take two numbers from the user and print their sum, difference, and product.

4. Write a program to swap two numbers.

5. Take length and breadth from the user and calculate the area of a rectangle.

6. Take marks of 3 subjects. Calculate total and average.

7. Convert minutes into hours and remaining minutes.
   Example: 130 minutes $\rightarrow$ 2 hours 10 minutes

8. Calculate Simple Interest.
   SI = (P * R * T) / 100

9. Convert Celsius to Fahrenheit.
   F = (C * 9/5) + 32

10. Debug the code:
    ```
    age = input("Enter your age: ")
    total = age + 5
    print(total)
    ```

Answer Key

1.
```python
name = "Arjun"
age = 16
school = "ABC School"
print("My name is", name, "I am", age, "years old. I study at", school)
```

2.
```python
a = 10
b = 3.14
c = "Hello"
d = True
print(type(a), type(b), type(c), type(d))
```

3.
```python
n1 = int(input("Enter first number: "))
n2 = int(input("Enter second number: "))
print("Sum:", n1+n2)
print("Difference:", n1-n2)
print("Product:", n1*n2)
```

4.
```python
a = int(input("Enter first number: "))
b = int(input("Enter second number: "))
a, b = b, a
print("After swapping:", a, b)
```

5.
```python
length = float(input("Enter length: "))
breadth = float(input("Enter breadth: "))
area = length * breadth
print("Area:", area)
```

6.
```python
m1 = int(input("Mark 1: "))
m2 = int(input("Mark 2: "))
m3 = int(input("Mark 3: "))
total = m1 + m2 + m3
average = total / 3
print("Total:", total)
print("Average:", average)
```

7.
```python
minutes = int(input("Enter minutes: "))
hours = minutes // 60
remaining = minutes % 60
print(hours, "hours", remaining, "minutes")
```

8.
```python
P = float(input("Principal: "))
R = float(input("Rate: "))
T = float(input("Time: "))
SI = (P * R * T) / 100
print("Simple Interest:", SI)
```

9.
```
C = float(input("Enter Celsius: "))
F = (C * 9/5) + 32
print("Fahrenheit:", F)
```

10.
Error: input() returns string.
Fix:
```
age = int(input("Enter your age: "))
total = age + 5
print(total)
```