Quiz 01-05: Python Basics and If-Statement

Name: _____ Date: _____

Instructions

- Answer in the blanks.
- For “write code” questions, write valid Python code.
- For “what does it print” questions, write the **exact** output.
- Do **not** use functions (no `def`). Use variables and `print(...)`.
- Remember: code inside `if` blocks must be indented with **4 spaces**.

Topic 1 — Variables and Types (`int`, `float`, `str`)

1) Identify name, value, and type

Look at the code:

```
player = "Mia"
level = 5
accuracy = 0.8
```

Fill in:

- `player` value: _____ ; type: _____
- `level` value: _____ ; type: _____
- `accuracy` value: _____ ; type: _____

---

2) Update a variable (watch the type!)

```
x = 10
x = x + 2.5
print(x)
print(type(x))
```

Output:

```

```

3) Quotes vs no quotes

```
team = "Tigers"
print(team)
print("team")
```

- `team` (no quotes) prints: _____
- `"team"` (with quotes) prints: _____

Topic 2 — Basic Arithmetic (`+ - * / // %`) and Precedence

4) What does it print? (order matters)

```
print(18 - 5 * 2)
print((18 - 5) * 2)
```

Output:

```

```

5) `//` and `%` together

```
print(17 // 4)
print(17 % 4)
print(4 * (17 // 4) + (17 % 4))
```

Output:

```

```

6) Write code: snacks per kid

You have `29` cookies and `6` kids.

Write a program to print **two lines**:

1) cookies per kid (everyone gets the same number)
2) leftover cookies

```

```

7) Mini “calculator”, but with a twist

Start with:

```
a = 20
b = 6
```

Write code to print (in this exact order):

1) `a / b`

1) `a / b`
2) `a // b`
3) `a % b`

```

```

Topic 3 — String Basics (`+` , indexing, slicing, `str()`)

8) Fix the TypeError (string + number)

This code will cause an error. Fix it using `str()` so it prints: `Level: 7`

```
level = 7
message = "Level: " + level
print(message)
```

Corrected code:

```

```

---

9) Index + slice (read carefully)

```
word = "pineapple"
print(word[0])
print(word[4])
```

```
print(word[0:4])
print(word[4:9])
```

Output:

```

```

10) Build a sentence (spaces matter)

Fill in the blank so the output is exactly: `Hello, Harry Potter!`

```
first = "Harry"
last = "Potter"

message = "Hello, " + first + __________ + last + "!"
print(message)
```

11) Slice + reorder

```
code = "ABCDEF"
part1 = code[1:4]
part2 = code[4:6]
print(part2 + part1)
```

Output:

```

```

Topic 4 — If Statements (`if`, `if-else`, `if-elif-else`)

`if-elif-else`)

12) What does it print?

```
score = 85

if score >= 90:
    print("A")
elif score >= 80:
    print("B")
else:
    print("C")

print("Done")
```

Output:

13) Even or odd, then add a message

```
n = 15

if n % 2 == 0:
    print("Even")
else:
    print("Odd")

print("n =", n)
```

Output:

14) Fix the indentation

This program should print **both** lines when `age` is at least 10.

```
age = 11

if age >= 10:
print("Welcome!")
    print("Have fun!")
```

Write the corrected code:

```

```

15) Write code: temperature helper

Rules:

- If `temperature` is **greater than or equal to 30**, print `"Hot"`
- Otherwise, print `"Not hot"`

Complete the code:

```
temperature = 28


```

```

```

Topic 5 — Booleans and Logic (`and` , `or` , `not`)

16) True or False (logic)

Write `True` or `False` for each expression:

1. `True and False` → _____
2. `True or False` → _____
3. `not True` → _____
4. `(5 > 3) and (2 > 10)` → _____
5. `(7 == 7) or (4 != 4)` → _____

17) Fill in the blank (use `and` / `or`)

You get a prize if:

- your `score` is at least `90` , **or**
- you helped a friend (`helped_friend` is `True`)

```
score = 88
helped_friend = True

if ____________________________________:
    print("Prize!")
else:
    print("No prize.")
```

Expected output:

```

```

18) Write code: permission check (with `not`)

Rules: You can join the game if:

- you are at least `10`, **or**
- you are with a parent

Write a program that prints `"Allowed"` or `"Not allowed"`.

```
age = 9
with_parent = False

# complete the code:
```

Output:

```
Not allowed
```