ANSWER KEY

PYTHON WORKBOOK – SECTION 1

Programmer's Hub – by CodeWithVivek
https://www.youtube.com/@code-with-vivek

1.1 What is Python?

Do You Understand?

- A high-level language means it is closer to human language and abstracts low-level machine details.

- Python is used in AI because of powerful libraries (NumPy, TensorFlow), fast prototyping, and clean syntax.

1.2 Installing Python

Debug This:
If python --version fails →
✓ Python is not added to PATH.

1.3 First Python Program

Your Turn (sample answer):

name = "Vivek"

age = 30

print("My name is", name, "and I am", age, "years old.")

Do You Understand?

- print() outputs text.

- Removing quotes creates a NameError.

1.4 How Python Executes Code

Try This (answers vary):

- Interactive Mode → Executes line-by-line

- Script Mode → Executes saved .py file

1.6 Input & Output

Try This (sample answer):

```python
a = int(input("Enter first number: "))

b = int(input("Enter second number: "))

print("Sum =", a + b)
```

Debug This:
input() returns a **string**, so "5" + 5 → error.

1.7 Comments

Correct answer → write comments using # or triple quotes.

Mini Assignment Solution (sample):

```python
print("My name is Vivek")

print("My goal is to become a Python expert")


age = int(input("Enter your age: "))

print(f"Next year, you will be {age + 1} years old.")


# This program prints name and goal

# It asks user age

# It prints next year's age
```