



INDIAN SCHOOL AL WADI AL KABIR

CLASS IX WORKSHEET

ARTIFICIAL INTELLIGENCE CHAPTER 2:INTRODUCTION TO PYTHON

Section A: 1 Mark MCQs

1. Which symbol is used to write a comment in Python?
a) // **b) #** c) /* */ d) --
2. Which of the following is a valid identifier?
a) 1name b) **name_1** c) name@ d) class
3. Python is a:
a) Low-level language **b) High-level language** c) Machine language d) Assembly language
4. Which function is used to take input in Python?
a) print() **b) input()** c) scan() d) read()
5. Which function is used to display output?
a) show() b) display() **c) print()** d) output()
6. Which of the following is NOT allowed in identifiers?
a) Letters b) Digits **c) Spaces** d) Underscore
7. Python identifiers are:
a) Case-insensitive **b) Case-sensitive** c) Both d) None
8. Which of the following is a correct statement?
a) x == 10 **b) x = 10** c) x := 10 d) x === 10
9. A variable is:
a) Fixed value **b) Container to store data** c) Keyword d) Function
10. Which of the following is not a keyword?
a) name b) print c) if d) else

Section B: 2 Marks Subjective Questions

11. Define a Python statement with one example.
Answer: A Python statement is an instruction written in code for execution. Example: x = 10
12. What is a comment in Python? Why is it used?
Answer: A comment is a line in code that is ignored by Python. It is used to explain the code for better understanding.
13. Write any two rules for naming identifiers.
Answer: Identifiers can contain letters, digits, and underscore. They cannot start with a digit.

14. What is a variable? Give an example.

Answer: A variable is a container used to store data. Example: $x = 5$

15. What is the difference between variable and constant?

Answer: A variable can change its value, while a constant remains fixed.

16. Explain the use of the print() function.

Answer: The print() function is used to display output on the screen.

17. Explain the use of the input() function.

Answer: The input() function is used to take input from the user.

18. Give two examples of valid identifiers and two invalid identifiers.

Answer: Valid: name, value1. Invalid: 1name, name@

19. What do you mean by case sensitivity in Python?

Answer: Case sensitivity means that variables like name and Name are treated differently.

20. Write short notes on Python comments.

Answer: Comments are non-executable lines used to explain code. They start with # in Python.

21. Write a Python program to display your name and class.

Answer:

```
print('My name is John')  
print('Class IX')
```

22. Write a Python program to take input from the user and print it.

Answer:

```
name = input('Enter your name: ')  
print(name)
```

23. Write a Python program to store two numbers in variables and print their sum.

Answer:

```
a = 10  
b = 20  
print(a + b)
```

24. Write a Python program to demonstrate the use of comments.

Answer:

```
# This is a comment  
print('Hello World')
```

25. Write a Python program to declare variables and print their values.

Answer:

```
x = 5  
y = 10  
print(x)  
print(y)
```

Section C 4 Mark Subjective Questions with Answers

26. Explain the rules for naming identifiers in Python with suitable examples.

Answer:

Identifiers are names given to variables, functions, etc. The rules are:

- Can contain letters (a–z, A–Z), digits (0–9), and underscore (_).
- Cannot start with a digit (e.g., 1name ✗, name1 ✓).
- Cannot use special characters like @, #, %, etc.
- Cannot use Python keywords like if, class, for.
- Identifiers are case-sensitive (name, Name, NAME are different).

27. Differentiate between variables and constants in Python. Give examples for both.

Variable	Constant
Value can change during program execution	Value remains fixed
Declared normally	Usually written in uppercase
Example: <code>x = 10</code>	Example: <code>PI = 3.14</code>

Variables store data that may change, while constants store fixed values that do not change.

28. . Explain Python input and output functions with examples using input() and print().

input() function is used to take input from the user.

print() function is used to display output on the screen.

Example code:

```
name = input("Enter your name: ")  
print("Hello", name)
```

29. What are comments in Python? Explain their importance and types with examples.

Answer:

Comments are non-executable lines used to explain code.

Importance:

Improve readability

Help in understanding the program

Useful for debugging

Types:

Single-line comment: starts with #

Example: **# This is a comment**

Multi-line comment: written using multiple # or triple quotes

Example: **"""**

This is a multi-line comment

"""