

HOLIDAYS HOME WORK SUMMER VACATION

COMPUTER SCIENCE

PYTHON INTRODUCTION PART – 1

- 1. Find the error**

```
r=7  
if r>3:  
print(“value is less than 3”)
```

- 2. What is Python? List some popular applications of Python in the world of technology.**
- 3. What do you mean by comments? How will you add inline, single line or multiline comments in Python?**
- 4. Identify valid or invalid identifiers:**
- i. True**
 - ii. Student-Name**
 - iii. IF**
 - iv. PRINT**
 - v. 1stAge**
 - vi. Number1**
- 5. The default separator character for print is**
a)tab b)space c)newline d)dot
- 6. The lines ignored by the compiler and not executed are called**
a)operators b)operands c)functions d)comments
- 7. What will be the value of the following Python expression?**
4 + 5%5
- 8. Which of the following character is used to give single-line comments in Python?**
a) // b) # c) ! d) /*

9. Identify each of the following whether mutable and immutable :
- i. X= "Great India"
 - ii. Y= { 1: "Monday", 3: "Wednesday", 5: "Friday", 7: "Sunday" }
 - iii. Z= ["a","e", "i", "o", "u"]
 - iv. W= ("Rakesh", "Rajesh", "Ravindra", "Pawan", "Santosh")

10.find the error:

```
scale=90
```

```
Print scale
```

(SHORT ANSWER TYPES)

1. Create a variable named carname and assign the value Volvo to it
2. How many types of strings are supported by Python? Ans.
3. How can you create multi-line strings in Python?
4. Write a Program to obtain temperature in Celsius and convert it into Fahrenheit using formula – $C \times 9/5 + 32 = F$
5. Predict output:
a,b,c=2,3,4
a,b,c=a*a,a*b,a*c
print(a,b,c)
6. WAP to print the area of circle when radius of the circle is given by user
7. WAP to read a number in n and prints n2 , n3 , n4
8. WAP to find the area of a triangle.

PYTHON INTRODUCTION PART – 2

1. Find the output of the following code snippet:

```
X=y=z=8
```

```
print(y)
```

a) X

b) 8

c) y

- 2 Which is the correct output of the following statements:

```
X='24'+ '16'
```

a) 21

b) 40

c) 2416

3 Which is not the correct way of assignment?

a) A=b=c=89

b) a=6,b=8

c) a,b,c=1,2,3

4 What is the return type of function eval()?

a) float

b) string

c) int

d)None of the Above

5 What is the average value of the code that is executed below?

```
>>grade=80
```

```
>>grade2=90
```

```
>>average=(grade+grade2)/2
```

a) 85.0

b) 85.1

d)46

c) 95.0

6 Write the Python expressions for each situation as described below:

a) Increase the value of variable count by 2

b) Assign the value 3 to variables C1,C2,C3

7 Mohan is studying on Python data types discussed above . He has learnt all the concepts

Now answer the following questions based on above topic

a) Which datatype will he used to store week days name?

i) List

ii) string

iii) tuple

iv) dictionary

b) Which datatype will he use to store area of his father's plot

i) float

ii) string

iii) tuple

iv) dictionary

c) Which datatype will he used to store number of houses in the colony?

i) List

ii) int

iii) tuple

iv) dictionary

d) Which datatype will he use to store name of his friend 'Ajay' along with his mobile no?

i) float

ii) string

iii) tuple

iv) dictionary

8. Write a program to find the total surface area of a sphere. The radius is given by the user.

9 Write a python code to read two integers and find the quotient and remainder value

10 Write a program to read three numbers and find their average.

11 Write python program to Write a program two numbers without using third number.

Choose options for answering Assertion and Reason based question

a) Both Assertion (A) and Reason (R)are true and Reason(R) is the correct explanation

of Assertion (A)

b) Both Assertion (A) and Reason (R)are true and Reason(R) is not the correct

explanation of Assertion (A)

c) Assertion (A) is true and Reason (R) is false

d) Assertion (A) is false and Reason (R) is true.

12Assertion (A): In Python each character of the string is assigned two-way indices (forward and

backward).

Reason (R): String are the sequences of characters where their indices start with 1 (one) in

the direction and with -1 in the backward direction.

13 Assertion (A): Python lists allows to modify their elements by indexes easily.

Reason (R): Python lists are mutable.

14.Assertion (A): Dictionaries are mutable.

Reason (R): Contents of the dictionary cannot be changed after it has been created.

CONDITIONAL STATEMENTS PART – 2

1) Predict the output of the following code:

```
x=3
```

```
if x>2 or x<5 and x==6:
```

```
    print("ok")
```

```
else:
```

```
    print("no output")
```

a)ok b)okok c)no output d)none of these

2)Rewrite the code after correcting errors: -

```
if N=>0
```

```
print(odd)
else
    Print("even")
```

3-Rewrite the following code in python after removing all syntax error(s). Underline each correction done in the code.

```
weather='raining'
if weather='sunny':
    print("wear sunblock")
elif weather='snow':
    print("going skiing")
else:
    print(weather)
```

```
a=int{input("ENTER FIRST NUMBER")}
b=int(input("ENTER SECOND NUMBER"))
c=int(input("ENTER THIRD NUMBER"))
if a>b and a>c
    print("A IS GREATER")
if b>a and b>c:
    Print(" B IS GREATER")
if c>a and c>b:
    print(C IS GREATER)
```

4- Symbol used to end the if statement:

i. Semicolon(;) ii. Hyphen(-) I ii. Underscore(_) iv. colon(:)

6-Which of the following is true about nested if-else statements?

a)They cannot be used in Python b)They allow multiple conditions to be checked

c)They are always more efficient than regular if-else statements

d)They can only have one level of nesting

7- What is the output of the following code snippet?

```
x = 10
if x > 5:
    if x < 15:
        print('x is between 5 and 15')
    else:
        print('x is greater than or equal to 15')
else:
    print('x is less than or equal to 5')
```

**a)x is between 5 and 15 b)x is greater than or equal to 15
c)x is less than or equal to 5 d)Error**