

- When was Python released?
- Who developed Python?
- In how many ways, can you work in Python?
- What is the error in following code:  $x, y = 7$ ?
- What will the following code do:  $a=b=18$ ?
- What is the error in following Python program with one statement?  
a. 

```
print("My name is :", name)
```
- What will be the output of the following code:  

```
name='Hari'
age=18
print(name, ", you are ", age, " now but ", end="")
print("You will be ", age+1, " next Year")
```
- Identify the data types of the following values given below –  
3,3j, 13.0, "12", "14", 2+0j, 19, [1,2,3], (3,4,5)
- What will be the output of the following?:  
(a)12/4 (b)14//14 (c)14%4 (d) 14.0/4 (e) 14.0//4 (f)14.0%4
- What will be the output of the following?  

```
a=5-4-3
b=3**2**3
print(a)
print(b)
```
- Convert 11111011110101<sub>2</sub> to octal.
- Convert the following binary numbers to decimal (a)1010 (b) 111000
- Convert the following Decimal numbers to binary (a) 23 (b) 100
- Convert the following Hexadecimal numbers to Binary (a) BE (b) BC9
- Convert the following binary numbers to Hexadecimal -  
(a)101000001 (b) 11100011 (c) 10101111
- Convert the following Octal numbers to Binary -(a) 456 (b) 26 (c) 751
- Prove X.  $(X+Y) = X$  using truth table.
- Give duals for the following (a)  $X+X'Y$  (b)  $XY+XY'+X'Y$
- Draw logic circuit diagram for the following expression –  
(a)  $Y=AB+B'C+A'$  (b)  $R=XYZ' + Y.(X+Z')$
- The return type of the input() function is  
a. string b. integer c. list d. tuple
- Give an example each of following:  
i. Assigning same value to multiple variables.  
ii. Assigning multiple values to multiple variables
- Identify invalid identifiers and specify the reason:  
i. True ii. Student-Name iii. IF iv. PRINT v. 1stAge
- What will be the output of following code:**  

```
a, b = 10, 2
a, b, a= a +5, b+2, a+4
print(a, b)
```
- What will be value of x after evaluation of each of following separately: (Don't use Dynamic Typing)  
i.  $x = 29 / 5$  ii.  $x = 39 // 4 * 2$  iii.  $x = 3 ** 2 ** 2$  iv.  $x = 2 ** 5 \% 3 - 5$
- What will be the final output of following logical expression:  
 $(17 > 4)$  or  $(3 < 2)$  and not  $17 < 18$
- Differentiate equality (==) and identity (is) operators with example.

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 $(17 > 4)$  or  $(3 < 2)$  and not  $17 < 18$
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27. What will be the type of final evaluated value of following expressions:  
i.print (type (5\*2))      iii. print (type (3 \* 32 // 16))  
ii.print (type (14 \* 5.0 \* 2))      iv. print (type (50/2 + 5))
28. Write a program that prompts the user to input a Celsius temperature and outputs the equivalent temperature in Fahrenheit. The formula to convert the temperature is:  $F = 9/5 C + 32$  where F is the Fahrenheit temperature and C is the Celsius temperature.
29. Which Python built-in function returns the unique number assigned to an object?  
\*identity()      \*id()      \*refnum()      \*ref()
30. The operator used to check if both the operands reference the same object memory, is the ..... operator.      \*in      \*is      \*id      \*==
31. For two objects x and y, the expression x is y will yield True, if and only if  
\*id(x) == id(y)      \*len(x) == len(y)      \*x == y      \*all of these
32. Which of the following is not an immutable type in Python ?  
\*String      \*Tuples      \*Set      \*dictionary
33. Python operator always yields the result of ..... datatype.  
\*Integer      \*floating point      \*complex      \*all of these
34. What is the value of the expression 100 / 25 ?  
\*4      \*4.0      \*2.5      \*none of these
35. What is the value of the expression 100 // 25 ?  
\*4      \*4.0      \*2.5      \*none of these
36. In Python, a variable must be declared before it is assigned a value.  
\*True      \*False      \*Only in Functions      \*Only in modules
37. In Python, a variable is assigned a value of one type, and then later assigned a value of a different type. This will yield .....  
\*Warning      \*Error      \*None      \*No Error
38. In Python, a variable may be assigned a value of one type, and then later assigned a value of a different type. This concept is known as .....  
\*Mutability      \*static typing      \*dynamic typing      \*immutability
39. Is it safe to directly use the == operator to determine whether objects of type float are equal ? \*Yes      \*No      \*Yes, if the values are < 100      \*Yes, if the values are > 100
40. What will the following code produce ?  
a = 8.6  
b = 2  
print ( a/b )  
\*4.3      \*4.0      \*4      \*compilation error
41. In the Python statement x = a + 5 - b : a and b are .....  
\*Operands      \*Expression      \*operators      \*Equation
42. What will be the value of y after following code fragment is executed?  
x = 10.0; y = (x < 100.0) and x >= 10  
\*110      \*True      \*False      \*Error.
43. Which of the following operators has the lowest precedence ?  
\*not      \*%      \*and      \*+
44. What is the value of the expression 10 + 3 \*\* 3 \* 2?  
\*28      \*739      \*829      \*64
45. To increase the value of x five times using an augmented assignment operator, the correct expression will be  
\*x += 5      \*x \*= 5      \*x = x \*\* 5      \*none of these

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