

A

Ans 1)

Lambda function :-

Lambda function is a small anonymous function. The lambda function can take any number of arguments, but can only have one expression.

Ex :-

```
x = lambda a,b : a+b
print(x(5,10))
```

Ans 2)

The break statement terminates the loop containing it. Control of the program flows to the statement immediately after the body of the loop.

Syntax of break  
break

The Continue statement is used to skip the rest of code inside a loop for the current iteration. Loop doesn't terminate but continues on next iteration.

Syntax: continue

Ex :-

```
n = 10
if (n > 10):
    break
```

Ex :-

```
n = 5
if (n = 15):
    continue
```



Ans 3)

A dictionary is an unordered collection of key : value pairs separated by commas inside a curly brackets.

Ex:- students = { 1: "Sagar", 2: "Hemant", 3: "Yusuf", 4: "Ijaz" }

Ans 4)

Program to check if a number is positive, negative or 0.

```
n = float(input("Enter a number"))
```

```
if n > 0:
```

```
    print("Positive number")
```

```
elif n == 0 n == 0:
```

```
    print("Zero")
```

```
else:
```

```
    print("Negative number")
```

Ans 5)

Different types of operators are:-

- (\*) Arithmetic operators
- (\*) Assignment operators
- (\*) Comparison operators
- (\*) Logical operators
- (\*) Identity operators
- (\*) Bitwise operators.
- (\*) Membership operators.



Ans 6)

An iterator is an object that contains a countable number of values. It consists of the method `__iter__()`

Ans 7)

A python iterator object must implement two special methods `iter()` and `next()`, collectively called the iterator protocol.

The `iter()` function returns an iterator from the list.

The `next()` function points to next element in the list.

Ans 8)

The generator function is easy to define, as normal function, but with a `yield` statement instead of a `return` statement.

Ex:- `def my_gen():`

`n = 1`

`print ("First number")`

`yield n`

Ans 9)

Program to add two numbers

`a = float(input("Enter 1st Number:"))`

`b = float(input("Enter 2nd Number:"))`

`print ("Sum of two number is :", a+b)`

Ans 10)

Error in output because `myfunc` is not defined to calculate.



B

Ans 1)

List

Tuples

(\*) List are mutable

(\*) Tuples are immutable

(\*) The implication of iterations is Time

(\*) The implication of iteration is comparatively fast.

Containing

(\*) List is better for performing operations such as iterations and deletion

(\*) Tuple data type is appropriate for accessing the elements

(\*) List consume more memory

(\*) Tuple consume less memory for ~~less~~ compared to list.Ans 2)

Global variables are defined before the functions and are accessed by all the functions.

Local variables are defined inside a function and accessed only in that function.

Ex :-

a = "Sagar"

def name():

print(a)

b = "Sam"

print(b)

Here a is global variable

b is local variable



STUDENT NAME		TOTAL MARKS OBTAINED
CLASS	SUBJECT	
ROLL No.	DATE	

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Ans 3)

Common built-in data types are:-

- (\*) Numeric data type : int, float
- (\*) String data type : str
- (\*) Sequence type : list, tuple, range
- (\*) Mapping data type : dict
- (\*) Boolean type : bool

Ans 4)

import math

def sqn(n):

return lambda y: math.sqrt(n)

x = sqn(25)

print("Square root of value is :", x(25))

Ans 5)

Function in python are essential part of a program that takes certain input and returns the calculated value.

The different types of functions are:-

- (\*) Built-in functions
- (\*) User defined functions

(C)

Ans 1)

List = [1, 2, 3, 4, 5, 6, 7, 8]

for i in List:

if i % 2 != 0:

print(i, end=" ")

6

Ans 2)

```
num = int(input("Enter the number"))
if num > 1:
    for i in range(2, int(num/2) + 1):
        if (num % i) == 0:
            print(num, "is not prime number")
            break
    else:
        print(num, "is prime number")
else:
    print(num, "is not a prime number")
```

Ans 3)

```
roll_no = [1, 2, 3, 4]
name = ['A', 'B', 'C', 'D']
```

```
dictionary = dict(zip(roll_no, name))
print(dictionary)
```

Ans 4)

```
def convert(n):
    print(bin(n), "in binary")
    print(oct(n), "in octal")
    print(hex(n), "in hexadecimal")
n = int(input("Enter the number"))
convert(n)
```

Ans 5)

```
import math
r = float(input("Enter the radius"))
area = math.pi * r * r
print("Area of circle is : ", area)
```