

ASSIGNMENT -1

1. What will be the output of the following code snippet?

```
def func(a, b):  
    return b if a == 0 else func(b % a, a)  
  
print(func(30, 75))
```

Ans: 15

```
2. numbers = (4, 7, 19, 2, 89, 45, 72, 22)  
  
sorted_numbers = sorted(numbers)  
  
even = lambda a: a % 2 == 0  
  
even_numbers = filter(even, sorted_numbers)  
  
print(type(even_numbers))
```

Ans: Filter

3. As what data type are the *args stored, when passed into

Ans : Tuple

```
4) set1 = {14, 3, 55}  
  
set2 = {82, 49, 62}  
  
set3={99,22,17}  
  
print(len(set1 + set2 + set3))
```

Ans: Error

(**TypeError**: unsupported operand type(s) for +: 'set' and 'set')

5. What keyword is used in Python to raise exceptions?

Ans: Raise

6) Which of the following modules need to be imported to handle date time computations in Python?

Ans: datetime

7) What will be the output of the following code snippet?

```
print(4**3 + (7 + 5)**(1 + 1))
```

Ans: 208

8) Which of the following functions converts date to corresponding time in Python?

Ans: None

9) The python tuple is _____ in nature

Ans: immutable

10) The ____ is a built-in function that returns a range object that consists series of integer numbers, which we can iterate using a for loop.

Ans. range()

11) Amongst which of the following is a function which does not have any name?

Ans: Lambda Function

12)The module Pickle is used to ____.

Ans: Both A & B

13)Amongst which of the following is / are the method of convert Python objects for writing data in a binary file?

Ans: dump()

14) Amongst which of the following is / are the method used to unpickling data from a binary file?

Ans. load()

15) A text file contains only textual information consisting of ____.

Ans: D. All of the mentioned above

16) Which Python code could replace the ellipsis (...) below to get the following output? (Select all that apply.)

```
captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko", }
```

Enterprise Picard, Voyager Janeway Defiant Sisko

Ans :
both a and b

17) Which of the following lines of code will create an empty dictionary named captains?

Ans: captions={}

18) Now you have your empty dictionary named captains. It's time to add some data! Specifically, you want to add the key-value pairs "Enterprise": "Picard", "Voyager": "Janeway", and "Defiant": "Sisko".

Which of the following code snippets will successfully add these key-value pairs to the existing captains dictionary

Ans: captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko" }

19 You're really building out the Federation Starfleet now! Here's what you have:

```
captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko", "Discovery":  
"unknown", }
```

Now, say you want to display the ship and captain names contained in the dictionary, but you also want to provide some additional context. How could you do it?

Ans: for ship, captain in captains.items():

```
print(f"The {ship} is captained by {captain}.")
```

20) You've created a dictionary, added data, checked for the existence of keys, and iterated over it with a for loop. Now you're ready to delete a key from this dictionary:

```
captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko", "Discovery":  
"unknown", }
```

Ans: `del captains["Discovery"]`