

Question 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))`**

- a) 10**
- b) 20**
- c) 15**
- d) 0**

solution: `def func(a, b):`

`return b if a == 0 else func(b % a, a)`

`print(func(30, 75))`

output: 15

Question 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))`

output: filter

Question 3)

As what datatype are the `*args` stored, when passed into

- a) Tuple
- b) List
- c) Dictionary
- d) none

Output: Tuple

Question 4)

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

Output: Error

Question 5)

What keyword is used in Python to raise exceptions?

Output: raise

Question 6)

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

Output: datetime

Question 7)

What will be the output of the following code snippet?

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

output: 208

Question 8)

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

Output: strtime

Question 9)

The python tuple is ____ in nature.

Output: unchangeable

Question 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.

Output: range()

Question 11

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

A. Del function

B. Show function

C. Lambda function

D. None of the mentioned above

Output: Lambda function

Question 12

The module Pickle is used to ____.

Output: Serializing Python object structure as well as De-serializing Python object structure

Question 13

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

Output: dump() method

Question 14

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

Output: load() method

Question 15)

A text file contains only textual information consisting of ____.

A. Alphabets

B. Numbers

C. Special symbols

D. All of the mentioned above

Output: All of the mentioned above

Question 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

Output:

a) for ship, captain in captains.items(): print(ship, captain)

b) for ship in captains: print(ship, captains[ship])

Question 17)

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

Output: captains = {}

Question 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?

Output:

```
captains["Enterprise"] = "Picard"
```

```
captains["Voyager"] = "Janeway"
```

```
captains["Defiant"] = "Sisko"
```

Question 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?

Output:

```
for ship, captain in captains.items():  
    print(f"The {ship} is captained by {captain}.")
```

Question 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", }
```

What statement will remove the entry for the key "Discovery"?

Output:

```
del captains["Discovery"]
```