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))
```

Answer=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))
```

Answer = filter

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

Answer = Tuple

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

Answer = Error

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

Answer = Raise

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

Answer = Datetime

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

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

Answer = 208

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

Answer = strptime

9) The python tuple is _____ in nature.

Answer = 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.

Answer = range()

Question 11

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

Answer = Lambda function

Question 12

The module Pickle is used to ___.

Answer = 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?

Answer = dump() method

Question 14

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

Answer = load()

Question 15.

A text file contains only textual information consisting of ___.

Answer = Alphabets

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

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

print(ship, captain)

b) for ship in captains:

print(ship, captains[ship])

c) for ship in captains:

print(ship, captains)

d) both a and b

Question 17

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

Answer = 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?

Answer = captains = {"Enterprise": "Picard","Voyager": "Janeway","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?

a) for item in captains.items():

print(f"The [ship] is captained by [captain].")

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

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

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

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

d) All are correct

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"?

Answer = del captains["Discovery"]