Q1.

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

Ans: c)15

Q2.

```
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))
```

a) Int

b) Filter

c) List

d) Tuple

Ans: b) Filter

Q3.

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

a) Tuple

b) List

c) Dictionary

d) none

Ans: a) Tuple

Q4.

set1 = {14, 3, 55}

set2 = {82, 49, 62}

set3={99,22,17}

print(len(set1 + set2 + set3))

a) 105

b) 270

c) 0

d) Error

Ans: d) Error

Q5.

What keyword is used in Python to raise exceptions?

a) raise

b) try

c) goto

d) except

Ans: a) raise

Q6.

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

a) timedate

b) date

c) datetime

d) time

Ans: c) datetime

Q7.

What will be the output of the following code snippet?

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

a) 248

b) 169

c) 208

d) 233

Ans: c) 208

Q8.

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

a) strptime

b) strftime

c) both a) and b)

d) None

Ans: d) None

Q9.

The python tuple is _____ in nature.

a) mutable

b) immutable

c)unchangeable

d) none

Ans: b) immutable

Q10.

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.

A. range()

B. set()

C. dictionary{}

D. None of the mentioned above

Ans: A. range()

Q11.

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

Ans: C. Lambda function

Q12.

The module Pickle is used to ___.

A. Serializing Python object structure

B. De-serializing Python object structure

C. Both A and B

D. None of the mentioned above

Ans: C. Both A and B

Q13.

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

A. set() method

B. dump() method

C. load() method

D. None of the mentioned above

Ans: B. dump() method

Q14.

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

A. load()

B. set() method

C. dump() method

D. None of the mentioned above

Ans: A. load()

Q15.

A text file contains only textual information consisting of ___.

A. Alphabets

B. Numbers

C. Special symbols

D. All of the mentioned above

Ans: D. All of the mentioned above

Q16.

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

Ans: d) both a and b

Q17.

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

a) captains = {dict}

b) type(captains)

c) captains.dict()

d) captains = {}

Ans: d) captains = {}

Q18.

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?

a) captains{"Enterprise" = "Picard"}
   captains{"Voyager" = "Janeway"}
   captains{"Defiant" = "Sisko"}
b) captains["Enterprise"] = "Picard"
   captains["Voyager"] = "Janeway"
   captains["Defiant"] = "Sisko"
c) captains = {
   "Enterprise": "Picard",
   "Voyager": "Janeway",
   "Defiant": "Sisko",
   }
d) None of the above

Ans: b) captains["Enterprise"] = "Picard",

captains["Voyager"] = "Janeway" ,

captains["Defiant"] = "Sisko"

Q19.

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

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

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

Q20.

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"?

a) del captains

b) captains.remove()

c) del captains["Discovery"]

d) captains["Discovery"].pop()

Ans: c) del captains["Discovery"]