Task - 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))
```

a) 10

b) 20

c) 15

d) 0

Ans :- C. ➔ 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))
```

a) Int
b) Filter
c) List
d) Tuple

Ans :- B. ➔ Filter

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

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

Ans :- D. ➔ None, it is passed into a function.

4. 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

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

a) raise
b) try
c) goto
d) except

Ans :- A. ➔ Raise

6. Which of the following modules need to be imported to handle date time computation s in Python?

a) timedate
b) date
c) datetime
d) time

Ans :- C. ➔ datetime

7. 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

(4**3 + (7+5) ** (1+1))
(4**3 + 12**2)
64 + 144
208

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

a) strptime
b) strftime
c) both a) and b)
d) None

Ans :- A. ➔ strptime

9. The python tuple is _____ in nature.

a) mutable
b) immutable
c)unchangeable
d) none

Ans :- B. ➔ 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

A. range()
B. set()
C. dictionary{}
D. None of the mentioned above

Ans :- A. ➔ range()

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

Ans :- C. ➔ Lambda function

12. 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

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

A. set() method
B. dump() method
C. load() method
D. None of the mentioned above

Ans :- B. ➔ Dump() method

14. Amongst which of the following is / are the method used to unpickling data from a bi nary file?

A. load()
B. set() method
C. dump() method
D. None of the mentioned above

Ans :- A. ➔ Load()

15. 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

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",
}
```

output:-

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

17. 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 = {}

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": "Jane way", and "Defiant": "Sisko".

Which of the following code snippets will successfully add these key-value pairs to the ex isting 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 :- C. ➔

```
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?

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}.")
```

output :-

```
The Enterprise is captained by Picard.
The Voyager is captained by Janeway.
The Defiant is captained by Sisko.
```

20. You've created a dictionary, added data, checked for the existence of keys, and iterate d 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"]