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?

a) strptime

b) strftime

Answer:- c) both a) and b)

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:- A. range()

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

Answer:- C. Lambda function

12. The module Pickle is used to ___.

A. Serializing Python object structure

B. De-serializing Python object structure

Answer:- C. Both A and B

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

Answer:- B. dump() method

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

Answer:- A. load()

15. A text file contains only textual information consisting of ___.

A. Alphabets

B. Numbers

C. Special symbols

Answer:- 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

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

Answer:- both a and b

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

Answer:- 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": "Janeway", and "Defiant": "Sisko".

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

Answer:- b) captains["Enterprise"] = "Picard"

captains["Voyager"] = "Janeway"

captains["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?

Answer:- b) 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",

}
```

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

Answer:- c) del captains["Discovery"]