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 : 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

Solution: b) filter

3) As what datatype are the *args stored, when passed into
a) Tuple
b) List
c) Dictionary
d) none

Solution : a) Tuple

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

Solution: b) 270

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

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

Solution :a) raise

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

   1. a) timedate
   2. b) date
   3. c) datetime

4. d) time

Solution: c) datatime

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

Solution: c) 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

Solution : a) strptime

9) The python tuple is _____ in nature. a) mutable
b)immutable c)unchangeable d) none

Solution: b) immtuable

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

Solution: a) range()

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

1. Del function
2. Show function
3. Lambda function
4. None of the mentioned above

Solution: Lambda function

Question 12

The module Pickle is used to ____.

1. Serializing Python object structure
2. De-serializing Python object structure
3. Both A and B
4. None of the mentioned above

Solution: Both A and B

Question 13

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

1. set()method
2. dump() method
3. load() method
4. None of the mentioned above

Solution dump() method

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

1. load()
2. set() method
3. dump() method
4. None of the mentioned above

Solution: load()

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

1. Alphabets
2. Numbers
3. Special symbols
4. All of the mentioned above

Solution: All of the mentioned above.

16.
Solution : b) for ship in captains:
   print(ship, captains[ship])

17.
Solution : captains = {}

18.
Solution : b) captains["Enterprise"] = "Picard"
captains["Voyager"] = "Janeway"

captains["Defiant"] = "Sisko"

19.
Solution : b) for ship, captain in captains.items():
    print(f"The {ship} is captained by {captain}.")

20.
Solution : c) del captains["Discovery"]