```
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: d)Error 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? a) timedate b) date c) datetime d) time Solution: 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 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)immutabl c)unchangeable

d) none

Solution:b)immutable

10) 10)

The___is a built-in function that returns a range object that consists series of integer numbers, whichwe 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?

- A. Del function
- B. Show function
- C. Lambda function
- D. None of the mentioned above

Solution: c)Lambda function

Question 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

Solution: c) 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?

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

Solution:b) dump() method

14)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 **Solution:b) Set() method** 15. A text file contains only textual information consisting of_____. A. Alphabets B. Numbers C. Special symbols D. All of the mentioned above Solution: 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

Solution: d) both a an 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 $= \{ \}$

Solution: 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?

```
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 Solution: option B and C
```

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
Solution: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"?
    a) del captains
```

- b) captains.remove()
- c) del captains["Discovery"]
- d) captains["Discovery"].pop()

Solution: c) del captains["Discovery"]