

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
```

Answer (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
```

Answer (b) Filter

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

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

Answer (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

Answer (d) Error

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

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

Answer (a) raise

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

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

Answer (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

Answer(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

Answer(c) both a) and b)

9) The python tuple is _____ in nature.

- a) mutable
- b) immutable

- c)unchangeable
- d) none

Answer(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

Answer (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

Answer (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

Answer (D). None of the mentioned above

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

Answer (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

Answer (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

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 (a) for ship, captain in captains.items():
print(ship, captain)

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 = {}

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?

- 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

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?

- 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

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"?

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

Answer (a) del captains