

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 -- unsupported operand type(s) for +: 'set' and 'set'

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

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

Answer: a)raise the try catch block is for handling exceptions, the raise keyword on the opposite is to generate an exception, **raise** keyword to explicitly raise an exception.

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: a) strptime

9. The python tuple is _____ in nature.

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

Answer: both b) immutable and c) unchangeable

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()

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

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: 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?

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

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: 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 = {}`

Answer: d) `captains = {}` , another method is `captains= dict()`

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: 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

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: c) del captains["Discovery"]