

MCQ

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

```
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

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

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

```
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

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

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

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

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

7) What will be the output of the following code snippet?

print(43 + (7 + 5)**(1 + 1))**

- a) 248
- b) 169
- ☒ c) 208
- d) 233

8) Which of the following functions converts date to corresponding time in Python?

- a) strptime
- ☒ b) strftime
- c) both a) and b)
- d) None

9) The python tuple is _____ in nature.

- a) mutable
- ☒ b) immutable

c)unchangeable

d) none

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

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

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

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

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

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

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 = { }`

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

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

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()`