

## MCQ

### Question 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: OPTION (C) 15**

### Question 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: OPTION (B) Filter**

### Question 3

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

- a) Tuple
- b) List
- c) Dictionary
- d) None

**ANSWER: OPTION (A) Tuple**

#### Question 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: OPTION (D) ERROR**

#### Question 5

What keyword is used in Python to raise exceptions?

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

**ANSWER: OPTION (A) raise**

#### Question 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

**ANSWER: OPTION (C) datetime**

#### Question 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: OPTION (C) 208**

### Question 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: OPTION (D) None**

### Question 9

The python tuple is \_\_\_\_\_ in nature.

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

**ANSWER: OPTION (B) Immutable**

### Question 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: OPTION (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: OPTION (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: OPTION (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.

**ANSWER: OPTION (B) dump () method**

### Question 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: OPTION (A) load ()**

### Question 15

A text file contains only textual information consisting of \_\_\_\_.

- A. Alphabets
- B. Numbers
- C. Special symbols
- D. All the mentioned above.

**ANSWER: OPTION (D) All of the mentioned above**

### Question 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: OPTION (D) both a and b**

### Question 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: OPTION (D) captains= {}**

### Question 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: OPTION (B)**

**`captains["Enterprise"] = "Picard"`**  
**`captains["Voyager"] = "Janeway"`**  
**`captains["Defiant"] = "Sisko"`**

### Question 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: OPTION (B)**

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

### Question 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: OPTION (C) del captains["Discovery"]**