

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(4**3 + (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

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

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()`