

Task-1  
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

Ans: 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

Ans: Filter

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

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

Ans: 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
```

Ans: Error

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

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

Ans: raise

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

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

Ans: 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

Ans: 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

Ans: `strptime`

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

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

Ans: `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

Ans: `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

Ans: 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

Ans: 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

Ans: 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

Ans: load()

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

A. Alphabets

B. Numbers

C. Special symbols

D. All of the mentioned above

Ans: 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

Ans: 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 = {}

Ans: 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

Ans: 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

Ans: 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()

Ans: del captains["Discovery"]