

# PFA 1

Batch- DS2039

Internship ID- 61

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))
```

**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))
```

**Answer: b) Filter**

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

**Answer: a) Tuple**

4. set1 = {14, 3, 55}

```
set2 = {82, 49, 62}
```

```
set3={99,22,17}
```

```
print(len(set1 + set2 + set3))
```

**Answer: d) Error**

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

**Answer: d) except**

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

**Answer: c) datetime**

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

```
print(4**3 + (7 + 5)**(1 + 1))
```

**Answer: c) 208**

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

**Answer: a) strptime**

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

**Answer: b) 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.

**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: d) None of the mentioned above**

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?

**Answer: b) dump() method**

14. Amongst which of the following is / are the method used to unpickling data from a binary file?

**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?

**Answer: 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?

**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?

**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"?

**Answer: c) del captains["Discovery"]**