

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: 15

2. `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: Filter

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

Answer: Dictionary

4. `set1 = {14, 3, 55}`
`set2 = {82, 49, 62}`
`set3={99,22,17}`
`print(len(set1 + set2 + set3))`

Answer: Error

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

Answer: raise

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

Answer: datetime

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

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

Answer:208

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

Answer: both a) and b)

9. The python tuple is _____ in nature.

Answer: 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: range()

11. Amongst which of the following is a function which does not have any name?

Answer: Lambda function

12. The module Pickle is used to ____.

Answer: 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: dump() method

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

Answer: load()

15. A text file contains only textual information consisting of ____.

Answer: All of the mentioned above(Alphabets, Numbers, Special symbols)

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
```

Answer: both a and b

17. Which of the following lines of code will create an empty dictionary named captains?

Answer: 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: `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: `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: `del captains["Discovery"]`