

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: Answer is (c) 15 as it is the greatest common divisor of both the numbers.

```
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: The output even numbers is of type filter. So, the correct answer is (b) filter.

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

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

Answer: (a) 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

Answer: The output will show error as the sign (+) is used for concatenation. Therefore, the answer will be (d).

5 What keyword is used in Python to raise exceptions?

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

Answer: (a) raise is used to raise exceptions.

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: (c) 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

Answer: (c) 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

Answer: (b) strftime converts date to corresponding time.

9 The python tuple is _____ in nature.

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

Answer: (b) immutable in nature

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: (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: (c) Lambda function

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?

- A. set() method
- B. dump() method
- C. load() method
- D. None of the mentioned above

Answer: (b) 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

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: (a) alphabets

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?

- a) `captains = {dict}`
- b) `type(captains)`
- c) `captains.dict()`
- d) `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?

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: (b) `captains["Enterprise"] = "Picard"`
`captains["Voyager"] = "Janeway"`
`captains["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

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"?

- a) del captains
- b) captains.remove()
- c) del captains["Discovery"]
- d) captains["Discovery"].pop()

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