

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:- 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: List

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

a) Tuple

b) List

c) Dictionary

d) none

Answer: 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:- Error

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

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

Answer:- Raise

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

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

Answer: 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: -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: d) None

9) The python tuple is _____ in nature.

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

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.

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 (i.e. Serializing Python object structure and De-serializing Python object structure)

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()

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:- 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

Don't Know

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:- 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?

- 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:- `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"]`