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**

Answer is 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))
```

a) **Int**
b) **Filter**
c) **List**
d) **Tuple**

Answer is **class 'filter'**

3) As what datatype are the *args stored, when passed into
a) Tuple
b) List
c) Dictionary
d) none

Answer is 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**

This will through a TypeError– answer d Error

5) What keyword is used in Python to raise exceptions?
a) raise
b) try
c) goto
d) except

Answer is a - raise

6) Which of the following modules need to be imported to handle date time computations in Python?
a) timedate
b) date
c) datetime
d) time

Answer is a – datetime

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

print(43 + (7 + 5)**(1 + 1))**

a) 248
b) 169
c) 208
d) 233

Answer is 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 is a - strptime()

9) The python tuple is_____in nature.

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

Answer is tuples are immutable & unchangeable – option b & c

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 is a The 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

Answer is c - 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

Answer is c- Both A and B - serializing and de-serializing a Python object structure.

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

Answer is 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 is a - The load() method is used to unpickle data from a binary file.

15.

A text file contains only textual information consisting of____.

A. Alphabets
B. Numbers
C. Special symbols
D. All of the mentioned above

Answer is 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 is both d) both a and b -
for ship, captain in captains.items(): print(ship, captain)
for ship in captains: print(ship, captains[ship])

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 is 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 is 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 is b -
for ship, captain in captains.items(): print(f"The {ship} is captained by {captain}.")

Output -

```
The Enterprise is captained by Picard.
The Voyager is captained by Janeway.
The Defiant is captained by Sisko.
```

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 is c -del captains["Discovery"]