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 :
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:
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 :
 D - Error
**Here we know that in Python we cant use '+' to add 'set'. We have use operator '|'.
Thus this will give error.**

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

a) raise

b) try

c) goto

d) except

Answer :
 A - raise
To raise exceptions, we need to use the keyword '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:

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 :

C – both a) and b)

strftime is used to format date/time objects into strings, while strptime is used to parse date/time strings into date/time objects.

9) The python tuple is _____ in nature.

a) mutable

b)immutable

c)unchangeable

d) none

Answer:
B & C – Immutable & Unchangeable
We can say Python Tuple is immutable or unchangeable collection of various datatypes elements.
The option should be b & C both

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()

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 :
C- Lambda function
Lamda functions do not have any name & are also known as anonymous functions because they are defined without a specific name.

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 :
C- Both A & B
Pickle module is used for serializing and deserializing Python objects.

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 :
B – dump() method .
The dump() method is used to convert Python objects into binary data , that can be written into a binary file.

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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

15.

A text file contains only textual information consisting of ____.

    A. Alphabets
    B. Numbers
    C. Special symbols
    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

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 = {}

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

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-
  a) for ship, captain in captains.items():

     print(f"The {ship} is captained by

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()