MCQ with Ans.

1What 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**

## Ans. C) 15

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```
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The Run Code

In [1]: def func(a, b): return b if a == 0 else func(b % a, a) print(func(30, 75))

15
```

2 numbers = (4,7,19,2,89,45,72,22)

sorted\_numbers=sorted(numbers)e

ven=lambdaa:a%2==0

even\_numbers = filter(even,

sorted\_numbers)print(type(even\_numbers))

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

## Ans. B) Filter

```
[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) Tuple
b) List
c) Dictionary
d) none
Ans. 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
   Ans d) Error
    In [29]: set1 = {14, 3, 55}
              set2 = {82, 49, 62}
              set3 = {99,22,17}
              print(len(set1 + set2 + set3))
              TypeError
                                                            Traceback (most recent call last)
              Cell In[29], line 4
                     2 set2 = {82, 49, 62}
                     3 \text{ set} 3 = \{99,22,17\}
               ----> 4 print(len(set1 + set2 + set3))
              TypeError: unsupported operand type(s) for +: 'set' and 'set'
5) What key word is used in Python to raise exceptions?
a) raise
b) try
c) goto
d) except
```

3) As what data type are the\*args stored, when passed into

Ans a) raise

<b>6</b> ) Which of the following modules need to be imported to handle datetime computations in Python?
a) timedate
b) date
c) datetime
d) time
Ans. 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
Ans. C) 208
In [30]: print(4**3 + (7 + 5)**(1 + 1))
208
8) Which of the following functions converts date to corresponding time in Python?
a) strptime
b) strftime
c) botha)andb)
d) None
Ans b) strftime
9) The python tuple isin nature.
a) mutableb)
immutable
c)unchangeable
d) none

Ans. B) immutable

1	U)	
1	U)	

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

Ans. A) range()

## Question11

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

Ans. C) Lambda function

Question12

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

Ans. C) Both A and B

Question13

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

Ans b) dump() method

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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
Ans. B) set() method
 15.
 A text file contains only textual information consisting of ____.
     A. Alphabets
    B. Numbers
    C. Special symbols
     D. All of the mentioned above
Ans. D) All of the mentioned above
16
 Which Python code could replace the ellipsis (...) below to get the following output? (Select all
thatapply.)
 captains={"Enterprise":"
   Picard",
   "Voyager": "Janeway",
   "Defiant": "Sisko",
 }
    EnterprisePicard,
     VoyagerJaneway
    DefiantSisko
            a) for ship, captain in
               captains.items():print(ship,captain)
             b) forshipincaptains:print(
               ship,captains[ship])
             c) forship incaptains:
               print(ship,captains)
             d) bothaandb
```

```
n [33]: captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko"}
         for ship, captain in captains.items():
             print(ship, captain)
         Enterprise Picard
         Voyager Janeway
         Defiant Sisko
n [34]: captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko"}
         for ship in captains: print(ship, captains[ship])
         Enterprise Picard
         Voyager Janeway
         Defiant Sisko
n [36]: captains = { "Enterprise": "Picard", "Voyager": "Janeway", "Defiant": "Sisko"}
         for ship in captains:
             print(ship, captains)
         Enterprise {'Enterprise': 'Picard', 'Voyager': 'Janeway', 'Defiant': 'Sisko'}
         Voyager {'Enterprise': 'Picard', 'Voyager': 'Janeway', 'Defiant': 'Sisko'}
Defiant {'Enterprise': 'Picard', 'Voyager': 'Janeway', 'Defiant': 'Sisko'}
```

**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={}

Ans. 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
Ans. B)captains ["Enterprise"] = "Picard"
captains ["Voyager"] = "Janeway"
captains["Defiant"]= "Sisko"
  In [42]: captains = {}
          captains
  Out[42]: {}
  In [43]: captains["Enterprise"] = "Picard"
           captains["Voyager"] = "Janeway"
           captains["Defiant"] = "Sisko"
  In [45]: captains
  Out[45]: {'Enterprise': 'Picard', 'Voyager': 'Janeway', 'Defiant': 'Sisko'}
 19)You're really building out the Federation Star fleet 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) foritemincaptains.items():
       print(f"The[ship]iscaptainedby[captain].")
     b) for ship, captain in
       captains.items():print(f"The{ship}iscaptained
       by{captain}.")
     c) forcaptain, ship
       incaptains.items():print(f"The{ship}iscaptaine
       dby{captain}.")
     d) Allarecorrect
Ans. B) for ship, captain in captains.items():
print(f"The{ship}iscaptainedby{captain}.")
   In [47]: captains = {
                 "Enterprise": "Picard",
                 "Voyager": "Janeway",
                 "Defiant": "Sisko",
                 "Discovery": "unknown",
   In [48]: for ship, captain in captains.items():
                 print(f"The {ship} is captained by {captain}.")
             The Enterprise is captained by Picard.
             The Voyager is captained by Janeway.
```

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:

The Defiant is captained by Sisko. The Discovery is captained by unknown.

```
"Enterprise": "Picard",

"Voyager": "Janeway",

"Defiant": "Sisko",

"Discovery": "unknown",
}
```

What statement will remove the entry for the key "Discovery"?

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

Ans. delcaptains["Discovery"]

```
In [47]: captains = {
    "Enterprise": "Picard",
    "Voyager": "Janeway",
    "Defiant": "Sisko",
    "Discovery": "unknown",
}

In [48]: for ship, captain in captains.items():
    print(f"The {ship} is captained by {captain}.")

The Enterprise is captained by Picard.
    The Voyager is captained by Janeway.
    The Defiant is captained by Sisko.
    The Discovery is captained by unknown.

In [49]: del captains["Discovery"]

In [50]: captains

Out[50]: {'Enterprise': 'Picard', 'Voyager': 'Janeway', 'Defiant': 'Sisko'}
```