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

$$ANS = © 15$$

```
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

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

print(len(set1 + set2 + set3))
 a) 105 b) 270 c) 0 d) Error ANS= (D) error
5) What keyword is used in Python to raise exceptions?
a) raise
b) try
c) goto
d) except
ANS= (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
ANS=© 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= (D) 233
8) Which of the following functions converts date to corresponding time in Python?
a) strptime
b) strftime
c) both a) and b)
d) None
ANS= (D) None

9) The python tuple is _____in nature.

- a) mutable
- b)immutable

c)unchangeable
d) none
ANS= (b) immutable
10) 10)
Theis 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()
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 ANS= (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 ANS= (C) Both A and B
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 ANS= (B) dump() method

Amongst which of the following is / are the method used to unpickling data from a binary fil	Amongst wh	hich of the following is \prime	are the method use	d to unpickling data	from a binary file'
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A. load() B. set() method C. dump() method D. None of the mentioned above ANS=(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 ANS= (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 bANS= (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 $= \{ \}$

ANS= (a)- captains={dict}

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= (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
    ANS=(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()
ANS= (C) del captain["Discovery"]