

Question : 1 of 30

Find the correct statement in the following options:

(You can select more than one option)

☐ 1. The use of size attribute in numpy is to find the direction and shape.

☒ 2. Numpy main object is the homogeneous multidimensional array.

☒ 3. In numpy, dimensions are called axes.

☐ 4. The zeros function in numpy makes a matrix with first row 0.

☒ 5. Numpy array class is called ndarray.

What will the output of the following code ?

```
import numpy as np
a=np.array([[0, 1, 2], [3, 4, 5], [6, 7, 8]])
b=np.array([[ 0, 2, 4], [ 6, 8, 10], [12, 14, 16]])
print(np.concatenate((a, b), axis=1))
```

☐

1.

```
[[ 0 2 4 0 1 2]
 [ 6 8 10 3 4 5]
 [12 14 16 6 7 8]]
```

☒

2.

```
[[ 0 1 2 0 2 4]
 [ 3 4 5 6 8 10]
 [ 6 7 8 12 14 16]]
```

☐

3.

```
[[ 0 1 2]
 [ 3 4 5]
 [ 6 7 8]
 [ 0 2 4]
 [ 6 8 10]
 [12 14 16]]
```


Quiz : AIC Quiz 4 Numpy

Question : 3 of 30

How we can change the shape of numpy array ?

☐ 1. None of the mention options

 ☒ 2. reshape()

☐ 3. shape()

☐ 4. ord()

☐ 5. change()

Quiz : AIC Quiz 4 Numpy

Question : 4 of 30

Which of the following is the essential argument to pass in `full()` function of Numpy array

- ☐ 1. shape
- ☒ 2. None of the option
- ☐ 3. Both shape and value
- ☐ 4. value

Question : 5 of 30

What will the output of the following code?

```
import numpy as np
arr = np.array([67.98, -10.25, -22.06, 0.5, 12.90, 10.10])
print(arr.astype(np.int32))
```

- ☐ 1. None of the options
- ☒ 2. [67 -10 -22 0 12 10]
- ☐ 3. [67 0 12 10]
- ☐ 4. [67 -10.3 -22.1 0 13 11]

Question : 6 of 30

What will be the output of the following code ?

```
import numpy as np
a=np.array([0, 1])
b=np.array([0, 2])
print(np.column_stack((a,b)))
```

☐ 1. $\begin{bmatrix} 1 & 0 \\ 0 & 2 \end{bmatrix}$

☒ 2. $\begin{bmatrix} 0 & 0 \\ 1 & 2 \end{bmatrix}$

☐ 3. $\begin{bmatrix} 2 & 0 \\ 0 & 1 \end{bmatrix}$

☐ 4. $\begin{bmatrix} 0 & 1 \\ 0 & 2 \end{bmatrix}$

Question : 7 of 30

Which of the following is not valid to import the numpy module?



☒ 1. None of the options


☐ 2. `import numpy as np`

☐ 3. `import numpy as p`

☐ 4. `import numpy as n`

The resulting output of the code will be a NumPy array with the following values:

```
lua Copy code  
  
array([[[ 0,  0],  
        [ 1,  2],  
        [ 2,  4],  
        [45, 47]],  
       [[ 3,  6],  
        [ 4,  8],  
        [ 5, 10],  
        [ 7,  9]],  
       [[ 6, 12],  
        [ 7, 14],  
        [ 8, 16],  
        [ 8,  7]]])
```



Note that the original `a` and `b` arrays are combined in a column-wise fashion to



Quiz : AIC Quiz 4 Numpy

Question : 9 of 30

Which of the following attribute should be used while checking for type combination input and output ?

☐ 1. All of the options

☐ 2. .type

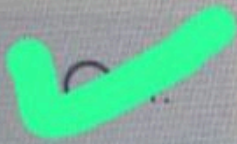
☐ 3. .class

☒ 4. .types

☐ 5. None of the options.

Question : 10 of 30

Which of the following returns an array of ones with the same shape and type as a given array ?



☒ 1. ones_like

☐ 2. one_like

☐ 3. All of the options

☐ 4. zeros_like

☐ 5. all_like

Question : 11 of 30

The _____ function returns its argument with a modified shape, whereas the _____ method modifies the array itself.

☐ 1. All of the mention options

☐ 2. reshape2 , resize

☒ 3. reshape , resize


☐ 4. resize , reshape

Next



The output of the code will be:

css

 Copy code

```
[[ 0  2  4]
 [ 6  8 10]
 [12 14 16]
 [ 0  1  2]
 [ 3  4  5]
 [ 6  7  8]]
```

12

Explanation:

The `numpy.concatenate()` function is used to concatenate arrays along a specified axis. In this case, the

`np.concatenate((b, a), axis=0)`

code concatenates arrays `b` and `a`

along axis 0, which means the arrays are

Question : 13 of 30

Which of the following argument we need to pass in reshape() function?

(You can select more than one option)

☒ 1. shape

☐ 2. array

☐ 3. metrics

☒ 4. size

Question : 14 of 30

ndarray is the buffer containing the actual elements of the array.

☒

1.

True

☐

2.

False

Question : 15 of 30

What will be the output of the following code?

```
import numpy as np  
print(np.arange(9,-1,-1))
```

☒ 1. [9 8 7 6 5 4 3 2 1 0]

☐ 2. [9 8 7 6 5 4 3 2 1]

☐ 3. [9 7 5 4 2 0]

☐ 4. [9 7 5 4 2]

Output:

```
array([[0, 1, 2, 3, 4],  
       [5, 6, 7, 8, 9],  
       [1, 1, 1, 1, 1],  
       [1, 1, 1, 1, 1]])
```

Code

```
A) a = np.arange(10).reshape(2,-1)  
b = np.repeat(1, 10).reshape(2,-1)  
print(np.concatenate([a, b], axis=0))
```

```
B) a = np.arange(10).reshape(2,-1)  
b = np.repeat(1, 10).reshape(2,-1)  
print(np.vstack([a, b]))
```

```
C) a = np.arange(10).reshape(2,-1)  
b = np.repeat(1, 10).reshape(2,-1)  
print(np.r_[a, b])
```

☒ 1. B and C

☐ 2. A and C

☐ 3. A and B

☐ 4. A, B and C

Question : 17 of 30

What will be the output of the following code?

```
import numpy as np
a = np.array([[10, 20, 30], [40, 50, 60], [70, 80, 90]])
print(np.hsplit(a, 3))
```

☐ 1.

[array([[10], [20], [30]]),
array([[40], [50], [60]]),
array([[70], [80], [90]])]

☐ 2.

[array([[90], [80], [70]]),
array([[60], [50], [40]]),
array([[30], [20], [10]])]



☒ 3.

[array([[10], [40], [70]]),
array([[20], [50], [80]]),
array([[30], [60], [90]])]

☐ 4.

[array([[90], [60], [30]]),
array([[80], [50], [20]]),
array([[70], [40], [10]])]

Question : 18 of 30

Numpy.array(list), what it does ?

☐ 1. It convert array to array

☒ 2. It convert list to array

☐ 3. Error

☐ 4. It convert array to list

Question : 19 of 30

Which is the correct syntax of the reshape() function in numpy, select all that apply?

(You can select more than one option)

☐ 1. `np.reshape(array,shape)`

☒ 2. `array.reshape(shape)`

☐ 3. `np.reshape(array,shape)`

☐ 4. `np.reshape(shape,array)`

Question : 20 of 30

Which of the following statement is true about numpy :

(You can select more than one option)

☐

1.

ndarray is also known as the alias array.

☐

2.

In numpy, if a dimension is given as -1 in a reshaping operating, the other dimensions are automatically calculated.

☐

3.

Size attribute in numpy helps to find the number of items.

☐

4.

To install numpy we use, pip install numpy.

☐

5.

In numpy, dimensions are called axes.

Question : 21 of 30

The numpy(Numeric Python) package helps us manipulate large _____ of numeric data.

☐ 1. string

☐ 2. dictionary

☐ 3. list

☒ 4. array



The code will output a new 2D NumPy array which is the result of vertically stacking the two input arrays `a` and `b`.

The output of the code will be:

css



Copy code

```
[[ 0  1  2]
 [ 3  4  5]
 [ 6  7  8]
 [ 0  2  4]
 [ 6  8 10]
 [12 14 16]]
```

22

Question : 23 of 30

What will the output of the following code?

```
import numpy as np
arr = np.array([0, 1, 2, 3, 4, 5, 6, 7, 8, 9])
arr[arr % 2 == 1] = -1
print(arr)
```

☐ 1. [0 -1 -2 -3 -4 -5 -6 -7 -8 -9]

☒ 2. [0 -1 2 -1 4 -1 6 -1 8 -1]

☐ 3. [0 1 2 -1 4 -1 6 -1 8 -1]

☐ 4. [0 1 -1 3 -1 5 -1 7 -1 9]

Question : 24 of 30

What will be output of the following code:

```
import numpy as np
names = np.array(['Ali', 'Neha', 'Ali', 'Hamza', 'neha', 'Fatima', 'Hamza'])
print(np.unique(names))
```

- ☐ 1. ['Ali' 'Fatima' 'Hamza' 'Neha']
- ☐ 2. ['Ali' 'Fatima' 'Hamza' 'Neha' 'neha']
- ☐ 3. ['neha' 'Ali' 'Fatima' 'Hamza' 'Neha']
- ☒ 4. ['Ali' 'Ali' 'Fatima' 'Hamza' 'Hamza' 'Neha' 'neha']

How to find the maximum number in numpy array?

☐ 1. `np.array(max)`

☐ 2. All of the options

☒ 3. `np.max (array)`

☐ 4. `array.max()`

Question : 26 of 30

Is it possible to convert the numpy array to list in python ?

☐ 1. Depend on the numpy array

☐ 2. None of the options

☐ 3. No

☒ 4. Yes

☐ 5. Sometimes

Question : 27 of 30

What will be output of the following code?

```
import numpy as np  
arr=[ 0.3490, -1.4545, 1.204 , -9.7152, 11.43 , -0.8439]  
arr.sort()  
print(arr)
```

☐ 1. [-0.8439 , -1.4545 , -9.7152 , 0.349 , 1.204 , 11.43]

☐ 2. [11.43 , 1.204 , 0.349 , -9.7152 , -1.4545 , -0.8439]

☒ 3. [-9.7152 , -1.4545 , -0.8439 , 0.349 , 1.204 , 11.43]

☐ 4. Error: 'list' object has no attribute 'sort'

Question : 28 of 30

What will be the output of the following code ?

```
import numpy as np
arr = np.array([ 0, 1, 2, 3, 4, 5, 6, 7, 8, 9])
arr = np.arange(10)
print(arr.reshape(2, -1))
```

☐ 1. $\begin{bmatrix} 0, 2, 5, 7, 9, \\ 1, 3, 4, 6, 8 \end{bmatrix}$

☒ 2. $\begin{bmatrix} 0, 1, 2, 3, 4, \\ 5, 6, 7, 8, 9 \end{bmatrix}$

☐ 3. $\begin{bmatrix} 5, 3, 2, 1, 0, \\ 9, 8, 7, 6, 5 \end{bmatrix}$

☐ 4. $\begin{bmatrix} 9, 8, 7, 6, 5, \\ 4, 3, 2, 1, 0 \end{bmatrix}$