Python

Test 6

Name: **Time: 45 | MM: 30**

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1. Numpy arrays can be

(a) indexed (b) sliced (c) iterated (d) All of these

2.

```
import numpy as np
a=np.array([2,4,1])
b=a.copy()
a[1]=3
print(b)
```

(a) [2 4 1] (b) [2 3 1] (c) [3 4 1] (d) [2 4 3]

3.

```
import numpy as np
 a=np.array([2,4,1])
b=np.array([3,5])
c=a+b
print(c)
```

(a) [2 4 1 3 5] (b) [5 9 1] (c) 15 (d) Error

4.

```
import numpy as np
 a=np.array([2,4])
b=np.array([3,5])
c=a*b
print(c)
```

(a) [2 4 3 5] (b) [6 20] (c) [6 12 10 20] (d) [26]

5.

```
import numpy as np
a = np.arange(1,3,.5)
print(a)
```

(a) [1 2 3] (b) [1. 1.5 2. 2.5] (c) [1. 1.5 2. 2.5 3] (d) [1 1.5 2 2.5 3]

6.

```
import numpy as np
 a = np.arange(1,5,2)
 print(a)
```

(a) [135] (b) [13] (c) [1,3] (d) [1,2,3,4,5]

7.

```
import numpy as np  a = np.arange(5,1) print(a)
```

(a) [] (b) [12345] (c) [54321] (d) [1234]

8.

```
import numpy as np
a = np.array([1, 5, 4, 7, 8])
a = a + 1
print(a[1])
```

(a) 4 (b) 5 (c) 6 (d) 7

9.

```
import numpy as np
 a = np.array([2, 3, 4, 5])
b = np.arange(4)
 print(a+b)
```

(a) [2 3 4 5] (b) [3 4 5 6] (c) [1 2 3 4] (d) [2 4 6 8]

10.

```
import numpy as np
 a = np.array([1,2,3,5,8])
b = np.array ([0,1,5,4,2])
 c = a + b
c = c*a
print (c[2])
```

(a) 6 (b) 24 (c) 0 (d) 20

11.

```
import numpy as np
y = np.array([[11, 12, 13, 14], [32, 33, 34, 35]])
print(y.ndim)
```

(a) 1 (b) 2 (c) 3 (d) 0

12. Using ndim we can find

(a) dimension of the array | (b) Size of array | (c) Operational activities on Matrix | (d) None of the mentioned above

13. The most important object defined in NumPy is an N- dimensional array type called?

(a) ndarray | (b) narray | (c) nd.array | (d) None of these

14. Which of the following arrays is a two dimensional (2- D) array?

(a) 89 | (b) [1,2,3,4] | (c) [1,2,3], [3,4,5], [1,3,4] | (d) [[235][456][456]]

15. What is a correct syntax to check the number of dimensions in an array?

(a) np.ndim(array_name) | (b) array_name.ndim() | (c) np.dim(array_name) | (d) array_name.dim

16. What is a correct syntax to print the numbers [3, 4, 5] from the array below:

```
arr = np.array ([1,2,3,4,5,6,7])
```

(a) print(arr[2:4]) | (b) print(arr[2:5]) | (c) print(arr[2:6]) | (d) print(arr[3:6])

17. In NumPy, what does the SHAPE of an array mean?

(a) the shape is the number of rows | (b) the shape is the number of columns | (c) the shape is the number of element in each dimension | (d) Total number of elements in array

18. Regarding creating ndarray, choose the build in functions in numpy.

(a) np.array() | (b) np.zeros() | (c) np.empty() | (d) All of the above

19. What are the attributes of numpy array?

(a) shape, dtype, ndim | (b) objects, type, list | (c) objects, non vectorization | (d) Unicode and shape

20. What is zeros() function in numpy use to?

(a) make a matrix with all elements 0 | (b) make a matrix with first column 0 | (c) make a matrix with diagonal elements 0 | (d) All of the above

21. How to import numpy module?

(a) from numpy import * | (b) import numpy | (c) import numpy as my_numpy | (d) All of above

22. What does size attribute in numpy use to find?

(a) Number of Rows and Column in array | (b) Size of each items in array | (c) Number of elements in array | (d) Largest element of an array

23. NumPY stands for?

(a) Numbering python | (b) Number in python | (c) Numerical python | (d) Number for python

24. Numpy developed by?

(a) Guido van rossum | (b) Travis olliphant | (c) Tim Berner lee | (d) W3Schools

25. What is a correct method to join two or more arrays?

(a) np.concatenate() | (b) np.join() | (c) np.array_join() | (d) np.join_array()

26. What is the purpose of the np.array() function in NumPy?

(a) It creates a new Python list. | (b) It creates a NumPy array. | (c) It performs element-wise addition. | (d) It calculates the mean of an array.

27. Numpy array's dimension are known as

(a) axis | (b) degree | (c) coordinates | (d) points

28. What is the primary purpose of NumPy in Python?

(a) Web development | (b) Machine learning and Scientific computing | (c) Game development | (d) Database management

29. NumPy arrays used over lists because

(a) NumPy arrays have contiguous memory location | (b) They are more speedy to work with | (c) They are more convenient to deal with | (d) All of the above

30. empty() function used to create a NumPy array which contained the values

(a) Filled with Zero | (b) Filled with Blank space | (c) Filled with random garbage value | (d) Filled with One