

MANISA CELAL BAYAR UNIVERSITY – DEPARTMENT OF COMPUTER ENGINEERING
QUIZ 02 FOR NUMERICAL ANALYSIS FOR COMPUTER ENGINEERS

Student Id:

Name Surname:

Signature:

Questions

1. What is the correct way to create a NumPy array?

- ☐ `np.list([1, 2, 3])`
- ☐ `np([1, 2, 3])`
- ☐ `np.array([1, 2, 3])`
- ☐ `np(array([1, 2, 3]))`

2. Which of the following arrays is a 2-D array?

- ☐ `[3, 5]`
- ☐ `[[3], [5]]`
- ☐ `[{1, 3}, {5, 7}]`
- ☐ `[2]`

3. What is the correct way to print 5 from the array given below?

- ```
a = np.array([[1, 2], [3, 4], [5, 6]])
```
- ☐ `print(a[3, 1])`
  - ☐ `print(a[2, 0])`
  - ☐ `print(a[1, 2])`
  - ☐ `print(a[1, 3])`

**4.** What is the correct way to print every other item from the array given below?

- ```
a = np.arange(5)
```
- ☐ `print(a[1:3:5])`
 - ☐ `print(a[:,2])`
 - ☐ `print(a[1:5])`
 - ☐ `print(a[0:2:4])`

5. What does the shape mean of a NumPy array?

- ☐ Number of columns
- ☐ Total number of items
- ☐ Number of items in each dimension
- ☐ Number of rows

6. What is the output of the code below?

```
n_1 = np.array([1, 2, 3])  
n_2 = np.array([4, 5, 6])  
n_3 = np.array([7, 8, 9])  
print(np.array([n_1, n_2, n_3]).ndim)
```

Your answer:

7. What is the output of the code below?

```
n_1 = np.array([1, 2, 3])  
n_2 = np.array([4, 5, 6])  
n_3 = np.array([7, 8, 9])  
print(np.array([n_1 + n_2 + n_3]).shape)
```

Your answer:

8. Which of the following is created with the code given below?

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

- ☐ 1-d array of shape 6 x 1
- ☐ 2-d array of shape 2 x 3
- ☐ 3-d array of shape 3 x 2
- ☐ 3-d array of shape 2 x 3

9. What is the output of the code below?

```
print(np.arange(10).reshape(2, -1))
```

10. What is the output of the code below?

```
Print(np.array([0.5, 1.5, 2.5]).dtype)
```

Assoc. Prof. Dr. Bora Canbula

gl hf