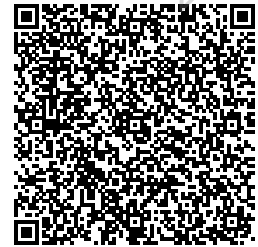# Rajalakshmi Engineering College

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NeoColab_REC_CS23221_Python Programming

REC_Python_Week 7_MCQ

Attempt : 1
Total Mark : 20
Marks Obtained : 17

Section 1 : MCQ

1. What is the result of the following NumPy operation?

```
import numpy as np
arr = np.array([1, 2, 3])
r = arr + 5
print(r)
```

Answer

[6 7 8]

Status : Correct   *Marks : 1/1*

2. In the DataFrame created in the code, what is the index for the row containing the data for 'Jack'?

```
import pandas as pd

data = {'Name': ['Tom', 'Jack', 'nick', 'juli'],
    'marks': [99, 98, 95, 90]}

df = pd.DataFrame(data, index=['rank1',
        'rank2',
        'rank3',
        'rank4'])
print(df)
```

Answer

rank2

Status : Correct   ***Marks : 1/1***

3. What is the output of the following code?

```
import numpy as np
a = np.arange(10)
print(a[2:5])
```

Answer

[2, 3, 4]

Status : Correct   ***Marks : 1/1***

4. What does the np.arange(10) function in NumPy do?

Answer

Creates an array with values from 0 to 10

Status : Wrong   ***Marks : 0/1***

5. Which function is used to create a Pandas DataFrame?

Answer

pd.DataFrame()

6.   What is the output of the following NumPy code snippet?

```
import numpy as np
arr = np.array([1, 2, 3, 4, 5])
r = arr[arr > 2]
print(r)
```

Answer

[3 4 5]

Status : Correct   *Marks : 1/1*

7.   Which NumPy function is used to create an identity matrix?

Answer

numpy.eye()

Status : Wrong   *Marks : 0/1*

8.   Which NumPy function is used to find the indices of the maximum and minimum values in an array?

Answer

argmax() and argmin()

Status : Correct   *Marks : 1/1*

9.   What is the primary purpose of Pandas DataFrame?

Answer

To store data in tabular form for analysis and manipulation

Status : Correct   *Marks : 1/1*

10. What will be the output of the following code snippet?

```
import numpy as np
arr = np.array([1, 2, 3])
result = np.concatenate((arr, arr))
print(result)
```

Answer

[1 2 3 1 2 3]

Status : Correct   *Marks : 1/1*

11. What does NumPy stand for?

Answer

Numerical Python

Status : Correct   *Marks : 1/1*

12. What is the primary data structure used in NumPy for numerical computations?

Answer

Array

Status : Correct   *Marks : 1/1*

13. Which NumPy function is used to calculate the standard deviation of an array?

Answer

numpy.std()

Status : Correct   *Marks : 1/1*

14. What is the purpose of the following NumPy code snippet?

```
import numpy as np
arr = np.zeros((3, 4))
print(arr)
```

Answer

Displays a 3x4 matrix filled with zeros

Status : Correct   *Marks : 1/1*

15. The important data structure of pandas is/are ____.

Answer

Both Series and Data Frame

Status : Correct   *Marks : 1/1*

16. Which of the following is a valid way to import NumPy in Python?

Answer

import numpy as np

Status : Correct   *Marks : 1/1*

17. Minimum number of argument we require to pass in pandas series ?

Answer

1

Status : Correct   *Marks : 1/1*

18. In NumPy, how do you access the first element of a one-dimensional array arr?

Answer

arr[0]

Status : Correct   *Marks : 1/1*

19. What is the output of the following NumPy code?

```
import numpy as np
arr = np.array([1, 2, 3, 4, 5])
r = arr[2:4]
print(r)
```

Answer

[3 4]

Status : Correct   *Marks : 1/1*

20. What will be the output of the following code?

```
import pandas as pnd
pnd.Series([1,2], index= ['a','b','c'])
```

Answer

Syntax Error

Status : Wrong   *Marks : 0/1*