| Part | sub/obj | Marks | Question | Answer Option 1 | Answer Option 2 | Answer Option 3 | Answer Option 4 | tt Answer(A/A | CO | n's Taxono | y Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | obj | 1 | Which one of the following is the correct extension of the Python file? | .py | .python | .p | None of these | A | CO1 | L3,L4 |  |
| A | obj | 1 | What do we use to define a block of code in Python language? | Key | Brackets | Indentation | None of these | C | CO1 | L3,L4 |  |
| A | obj | 1 | Which character is used in Python to make a single line comment? | 1 | // | \# | ! | B | C01 | L3,L4 |  |
| A | obj | 1 | Which of the following operators is the correct option for power(ab)? | $a^{\wedge} \mathrm{b}$ | a**b | $\mathrm{a}^{\wedge}{ }^{\text {b }} \mathrm{b}$ | $a^{\wedge}{ }^{*} \mathrm{~b}$ | B | CO1 | L3,L4 |  |
| A | obj | 1 | Which of the following functions is a built-in function in python language? | val() | print() | print | None of these | B | CO1 | L3,L4 |  |
| A | obj | 1 | Study the function: <br> all( $[2,4,0,6])$ What will be the output of this function? | FALSE | TRUE | 0 | All of these | A | CO2 | L3,L4 |  |
| A | obj | 1 | What is the purpose of NumPy in Python? | do numerical calculation | To do scientific computing | Both A and B | pne of the mentioned above | C | CO2 | L3,L4 |  |
| A | obj | 1 | NumPy package is capable to do fast operations on arrays. | TRUE | FALSE |  |  | A | CO2 | L3,L4 |  |
| A | obj | 1 | Amongst which Python library is similar to Pandas? | Npy | RPy | NumPy | None | C | CO2 | L3,L4 |  |
| A | obj | 1 | Amongst which Python library is similar to Pandas? | Indexed | Sliced | Iterated | Al the above | D | CO2 | L3,L4 |  |
| A | obj | 1 | What's the output of the following code: import numpy as np <br> $a=n p . a r r a y([1,2,3,4,5,6])$ <br> print(a) | [12345] | [123456] | [0123456] | pne of the mentioned above | B | CO2 | L3,L4 |  |
| A | obj | 1 | What's the output of the following code: import numpy as np $\begin{aligned} & x=n p . \operatorname{array}([[0,1], \\ & [2,3]]) \\ & \text { np.transpose }(x) \end{aligned}$ | mrray ([[0, 2], [1, 3]]) | $\operatorname{array}([[0,1], \quad[2,3]])$ | $\operatorname{ray}([2,3], \quad[0,1]])$ | None of the above | A | CO2 | L3,L4 |  |


| Part | sub/obj | Marks | Question | Answer Option 1 |  | Answer Option 2 | Answer Option 3 | Answer Option 4 | tt Answer(A/E | co | n's Taxono | Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | obj | 1 | What's the output of the following code: from numpy import random $x=\text { random.randint(100) }$ <br> print( $x$ ) | 56 |  | 26 | 48 | All the given | D | CO2 | L3,L4 |  |
| A | obj | 1 | Using ndim we can find - | find the dimension of th | h | Size of array | tional activities on MP | of the mentioned abov | A | CO2 | L3,L4 |  |
| A | obj | 1 | NumPy is often used along with packages like? | Matplotlib |  | SciPy | Both A and B | None | C | CO2 | L3,L4 |  |
| A | obj | 1 | What will be printed? $\begin{aligned} & \text { import numpy as np } \\ & a=n p . \operatorname{array}([1,2,3,5,8]) \\ & b=n p . \operatorname{array}([0,3,4,2,1]) \\ & c=a+b \\ & c=c^{*} a \\ & \text { print }(c[2]) \end{aligned}$ | 7 |  | 12 | 10 | 21 | D | CO2 | L3,L4 |  |
| A | obj | 1 | What will be output for the following code? <br> import numpy as np $a=n p . \operatorname{array}([[1,2,3],[0,1,4]])$ print (a.size) <br> A. 1 <br> B. 5 <br> C. 6 <br> D. | 1 |  | 5 | 6 | 4 | C | CO2 | L3,L4 |  |
| A | obj | 1 | What will be output for the following code? | 0 |  | 1 | 2 | 3 | B | CO2 | L3,L4 |  |
| A | obj | 1 | What does the eye() function in the NumPy package return? | A diagonal matrix |  | A null matrix | -ric matrix with only 1 | An identity matrix | D | CO2 | L3,L4 |  |
| A | obj | 1 | Slicing arrays which of the following would extract all the first 3 rows of the last 5 columns in a given numpy 2d array 'a'? | a[:, :3] |  | a[:, 3] | $a[:, 2]$ | a[:, :2] | A | CO2 | L3,L4 |  |
| A | obj | 1 | To create sequences of numbers, NumPy provides a function $\qquad$ analogous to range that returns arrays instead of lists | arange |  | aline | aspace | All of the Above | A | CO2 | L3,L4 |  |
| A | obj | 1 | What is the out put of the given code? import pandas as pd series1 = pd.Series([10,20,30,40,50]) print (series1) | p2 303404 50dtype | 203 | 304405 50dtype: in | 303404 50dtype | NOne | A | CO2 | L3,L4 |  |


| Part | sub/obj | Marks | Question | Answer Option 1 | Answer Option 2 | Answer Option 3 | Answer Option 4 | tt Answer(A/- | CO | n's Taxono | y Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | obj | 1 | Give output of the given Code: import pandas as pnd pnd.Series([1,2], index= ['a','b','c']) | Syntax error | Index error | Value Error | None | A | CO2 | L3,L4 |  |
| A | obj | 1 | The following code create a dataframe named 'D1' with $\qquad$ columns. import pandas as pd $\begin{aligned} & \text { dicts = [\{'a':10, 'b':20\}, \{'a':5, 'b':10, 'c':20\}] } \\ & \text { D1 = pd.DataFrame(dicts)v } \end{aligned}$ | 1 | 2 | 3 | 4 | C | CO2 | L3,L4 |  |
| A | obj | 1 | Which of the following function is used to create DataFrame? | DataFrame() | NewFrame() | CreateDataFrame( ) | None of the Above | A | CO2 | L3,L4 |  |
| A | obj | 1 | Which library is to be imported for creating DataFrame? | Python | DataFrame | Pandas | Random | B | CO2 | L3,L4 |  |
| A | obj | 1 | Panadas in Python stands for .............. | Panel Data analysis | PAnel Data analysts | Panel Data | Panel Dashboard | A | CO2 | L3,L4 |  |
| A | obj | 1 | Whihc of the library is used in python for plotting graphs and visulaizations | Pandas | NumPy | Matplotlib | None of the Above | C | CO2 | L3,L4 |  |
| A | obj | 1 | Which function/method isused to create series? | Series() | series() | CreateSeries() | None of the Above | A | CO2 | L3, L4 |  |
| A | obj | 1 | Which of the following statements is false? | ataframe is size mutable | Dataframe is value mutable | ttaframe is immutabl | capable of holding multiple | C | CO2 | L3,L4 |  |
| A | obj | 1 | Suppose that you are given two lists: $\begin{aligned} & a=[1,2,3] \\ & b=[4,5,6] \end{aligned}$ <br> Your task is to create a list which contains all the elements of a and b in a single dimension. <br> Output: $a=[1,2,3,4,5,6]$ <br> Which of the following functions will you use? | a.append(b) | a.extend(b) | any one of the above | none of the above | B | CO2 | L3,L4 |  |
| A | obj | 1 | What will be output for the following code? <br> import pandas as pd import numpy as np $s=$ pd.Series(np.random.randn(4)) print s.ndim | 0 | 1 | 2 | 3 | B | CO2 | L3,L4 |  |
| A | obj | 1 | What will be output for the following code? <br> import pandas as pd s = pd.Series([1,2,3,4,5],index = ['a','b','c','d','e']) print s['a'] | 1 | 2 | 3 | 4 | A | CO2 | L3,L4 |  |


| Part | sub/obj | Marks | Question | Answer Option 1 | Answer Option 2 | Answer Option 3 | Answer Option 4 | tt Answer(A/E | CO | n's Taxonomy Level |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | obj | 1 | Series in Pandas is | 1 dimensional array | 2 dimensional array | 3 dimensional array | NOne | A | CO2 | L3,L4 |  |
| A | obj | 1 | Identify the correct statement: | -ker for missing data in P | ct in a way similar to that of | Both A \& B | NOne | C | CO2 | L3,L4 |  |
| A | obj | 1 | names.append("Mary") | e "Mary" from the list ca | dd "names" to the list called | Mary" to the list called | d "Mary" to the list called " | c | CO2 | L3,L4 |  |
| A | obj | 1 | To declare an array, you must use | brackets[] | parenthesis() | curly braces\{ \} | pipes \| \| | A | CO1 | L3,L4 |  |
| A | obj | 1 | names=[Fred,John,Sue] print names[2] would return | Fred | Sue | John | none | B | CO1 | L3,L4 |  |
| A | obj | 1 | The location of an item in an array is called | Index | Value | position | none | A | CO1 | L3,L4 |  |
| A | obj | 1 | Who developed Python Programming Language? | Wick van Rossum | Rasmus Lerdorf | Guido van Rossum | none | C | CO1 | L3,L4 |  |

