

REVISION PRACTICE ASSIGNMENT (RPA)

SUBJECT-INFORMATION PRACTICES

SESSION-2020-21

CLASS-XII

TOPIC: CHAPTER-1 WORKING WITH NUMPY AND CHAPTER-2 PYTHON PANDAS

1. State True or False: 5*1=5
 - a) Can a Series store data of different types?
 - b) Is DataFrame both value mutable and size mutable?
 - c) Is the stop value included in output in linspace()?
 - d) Is the stop value is also included in output in arange()?
 - e) Is Python list and Numpy array are same?
2. Answer in one word: 5*1=5
 - a) Find the output:
`df.iloc[0:2,1:2]`
 - b) Name the function used to join the arrays horizontally.
 - c) Give syntax for zeros()
 - d) Find the output:
`s=np.arange(6)`
`s1=s.reshape(3,2)`
`print(s1)`
 - e) Name the function used to create a Series type object.
3. Short answer type questions: 3*2=6
 - a) Explain the 2 different ways of performing arithmetic operations on 2D arrays by giving examples.
 - b) How can we extract non-contiguous subset of a Numpy array?
 - c) Give the syntax for creating a DataFrame.
4. Long answer type questions: 1*4=4
 - a) Write program to find and plot the linear regression line for the 2 set of data:
`[10,20,30,40,50]`
`[400,800,1100,1700,2100]`