1)what makes Numpy.shape()_different from Numpy.size()?

A)>>>Numpy.shape():- NumPy arrays have an attribute
called shape that returns a tuple with each index
having the number of corresponding elements
>>>Numpy.size():-size()function in python.the size of an array is the
Total number of elements in the array.the Numpy.size() function
In the numpy package returns the size of a given array
>>>Difference:- Numpy.shape() is used to get complete stuctural
Shape of our 2D array. For example(6,7). Numpy.size() will give us how many
Elements are present in total.

2)In **numpy,describe the idea of broad casting?**

A) The term broadcasting refers to the ability
of NumPy to treat arrays of different shapes
during arithmetic operations. Arithmetic
operations on arrays are usually done on
corresponding elements. If two arrays are of
exactly the same shape, then these
operations are smoothly performed.

3)**what makes python better than other libraries for numericalcomputataion?**

A) >>> Numerical Python has a fixed-size,
homogeneous (fixed-type), multidimensional array type and lots of functions
for various array operations. The result is a
dynamically typed environment for array
computing similar to basic Matlab.
>>>We can use a lot of numerical libraries
which can solve any mathematical problem
>>>Also Python can solve any special numerical
modules be used to solve numerical
problems as well.

>>>All the above points we discussed makes

makes Python better than other libraries for

numerical computation

4)how does Numpy deal with files?

A)>>> NumPy introduces a simple file format for

ndarray objects. This . npy file stores data,

shape, dtype and other information

required to reconstruct the ndarray in a disk

file such that the array is correctly retrieved

python assignement 1even if the file is on another machine with

different architecture.

5) mention the importance of Numpy.empty().

A) The empty() function is used to create a

new array of given shape and type, without

initializing entries. Shape of the empty

array, e.g., (5, 4) or 4. Desired output datatype for the array, e.g, numpy. Int9