Florida International University

## Please circle your responses

1. Which of the following statements concerning arrays are true? Select all valid answers.
2. An array is an object.
3. The elements of an array can either be objects or primitive data values
4. All of the element in an array has the same type.
5. The array size is fixed after it is created.

**Answer : a, c, d**

1. Given the declaration **int [] arr;**, what is the correct way to get the size of the array, assuming the array has been initialized. Select the one right answer.
2. arr[].length()
3. arr.length()
4. arr[].length
5. arr.length

**Answer : d**

1. Which of these array declarations and instantiations are not legal? Select all valid answers
2. int[]a[] = new int[4][4];
3. int a[][] = new int[][4];
4. int[] a = new int[4][];
5. int a[][] = new int [4];

**Answer : b, c, d**

1. Consider the following two lines of code:

int [] x = {5, 6, 7, 8, 9};

int y = x;

Which of the following statements are correct? Select all valid answers.

* + 1. The second statement is invalid.
    2. x[2] has the value of 7.
    3. y.length() is 5
    4. x.length has the same value as y.length

**Answer : a, b**

1. Create an integer array called **list** with the following values: **15 45 20 25 30 70 80 50**

\_\_\_**int[] list = {15, 45, 20, 25, 30, 70, 80, 50};\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Question 6. Trace the following code and write down the output. When you are done, code it, compile it, run it, and compare your answer with the coded version.

int arr1[] = new int[5];

for (int p = 0; p < arr1.length; p++)

arr1[p] = p \*10;

for (int p1 = 0; p1 < arr1.length; p1++)

System.out.print(arr1[p1]+ " ");

System.out.print( "\n\*\*\*\*\*\*\*\*\*\*\*\*\n");

**int copy[] = (int[])arr1.clone();**

for (int p2 = 0; p2 < copy.length; p2++)

System.out.print(copy[p2]+ " ");

System.out.print( "\n\*\*\*\*\*\*\*\*\*\*\*\*\n");

copy [0] = 100;

System.out.println("arr1[0] = " + arr1[0] + "\tand copy[0] = " + copy[0] + "\n");

|  |  |
| --- | --- |
| **Output** | **After compiling output** |
| 0 10 20 30 40  \*\*\*\*\*\*\*\*\*\*\*\*  0 10 20 30 40  \*\*\*\*\*\*\*\*\*\*\*\*  arr1[0] = 0 and copy[0] = 100 | 0 10 20 30 40  \*\*\*\*\*\*\*\*\*\*\*\*  0 10 20 30 40  \*\*\*\*\*\*\*\*\*\*\*\*  arr1[0] = 0 and copy[0] = 100 |