

Arrays

Que 1: Define Array. Write the declaration statement for an array to store the name of a student **Marks :(2)**

Ans: An array is a collection of elements of the same type placed in contiguous memory locations

Char name [15]

Que 2: a) Write the Formula to compute the space allocated for an array.

b) Calculate the total number of bytes allocated for an array Float a[10]

Marks :(2)

Ans: a) $\text{total_bytes} = \text{sizeof}(\text{array_type}) \times \text{size_of_array}$

b) Size of Float - 4 Bytes

size of array=10

Total Bytes=4 x 10 =40

Que 3: Define Index /Subscript of an Array. What will be the Starting value for the index in an array **Marks :(2)**

Ans: The Position of an Element in an array is called index/Subscript. The Starting Value for an index in an array will be 0.

Que 4: Consider the following code

Marks :(2)

```
#include <iostream>
using namespace std;
int main()
{
    int i, score[5];
    for(i=0; i<5; i++) // Reads the scores
    {
        cout<<"Enter a score: ";
        cin>>score[i];
    }
    .....
    .....
    return 0;
}
```

Fill the missing blanks to Print the Score of 5 students in reverse order

Ans: `for(i=4; i>=0; i--) // Prints the scores`
`cout<<"score[" << i << "]" is " << score[i]<<endl;`

Que 5: Consider an array num[10] of integer datatype. If the array is initialized using the statement given below what will be the Values of the rest of the elements of the array? Give Reason

num[]={16,12,10,14,11};

Marks :(2)

Ans: Value for the rest of the array will be Zeros

If the number of initial values is less than the size of the array, they will be stored in the elements starting from the first position and the remaining positions will be initialized with zero, in the case of numeric data types. and for char type array, such positions will be initialised with ' ' (space bar) character