SUNBEAM
Exploring New Ideas Reaching New Heights

**1.**
**What will be the output of following code?**

```c
#include <stdio.h>
#define SIZE(arr) sizeof(arr) / sizeof(*arr);
void fun(int* arr, int n)
{
    int i;
    *arr += *(arr + n - 1) += 10;

    return;
}
void printArr(int* arr, int n)
{
    int i;
    for(i = 0; i < n; ++i)
        printf("%d ", arr[i]);

    return;
}
int main( void )
{
    int arr[] = {10, 20, 30};
    int size = SIZE(arr);

    fun(arr, size);
    printArr(arr, size);

    return 0;
}
```

A. 20 30 40
B. 20 20 40
C. 50 20 40
D. Compile-time error
E. 40 20 40

Answer: C

**2.**
**What will be the output of following code?**

```c
#include <stdio.h>
int main(void)
{
    int arr[] = {45, 23, 44, 21, 98, 67};
    int *ptr = (int*)(&arr+1);
    printf("%d", *(ptr-3) + ptr[-5] - *(arr+2) );

    return 0;
}
```

**A. 42**
**B. 121**
**C. 66**
**D. error**
**E. 0**

**Answer: E**

**3.**
```c
#include <stdio.h>
void changeData(int *ptr)
{
    int index;
    for(index=8; index>=0; index--){
        *(ptr+index) *= index +1 ;
    }
    return;
}
int main(void)
{
    int a[9]={1,2,3,4,5};
    printf("%d %d ", *(a+1), *(a+3));
    changeData(a);    int *ptr=&a[4];
    printf("%d %d ", ptr[-1], ptr[-3]);
    return 0;
}
```

**A.** 2 4 12 2
**B.** 1 3 12 2
**C.** 2 4 16 4
**D.** Errpr
**E.** 2 4 12 4

**Answer: C**

**4.**
**What will be the output of following code?**

```c
#include <stdio.h>
void function_array(int *a, int size)
{
    *(&0[a]) = a[0] + 4[a]/10;
    *(&1[a]) = a[1] + 4[a]/10;
    *(&2[a]) = a[2] + 4[a]/10;
    *(&3[a]) = a[3] + 4[a]/10;
    *(&4[a]) = a[4] + 4[a]/10;
    return;
}
int main(void)
{
    int arr[] = {10, 20, 30, 40 , 50}, i;

    function_array(arr, 5);

    for(i=0; i <5 ; i++)
        printf(" %4d ", *(arr+i));
    return 0;
}
```

**A.** 15 25 35 45 55
**B.** 5 15 25 35 45
**C.** 45 35 25 15 5
**D.** 15 25 35 45 45
**E.** error

**Answer: A**

**5.**

**What will be the output of following code?**

```c
#include<stdio.h>
void function_Array(int arr[], int size)
{
    int i=2,j,m;

    i=arr[i++]++;
    j=++arr[++i];
    m=--arr[j--];

    printf("%d,%d,%d,%d",i,j,m, *(arr+i+j+m));

    return;
}
int main( void )
{
    int a[5]={100,1,0,200,1};
    function_Array(a, 5);
    return 0;
}
```

A. 0,0,0,199
B. 1,1,0,200
C. 1,1,1,1
D. 1,1,0,0
E. Error

Answer: D