

```
using namespace std;
```

```
int main() {
```

```
int a[6]={2,1,3,15,20,50};
```

```
int i=++a[1];
```

```
int j=a[1]++;
```

```
int k=a[i++];
```

```
int l=a[--i]*i;
```

```
int m=a[++i]-1;
```

```
cout<<"j" <<"k" <<"l" <<"m" <<" ";
```

```
return 0;
```

```
}
```

output

3 2 3 6 14

2. Bitwise operators to mention

& =bitwise AND operator

| =bitwise OR operator

^ =bitwise Exclusive OR operator

~ =bitwise NOT operator

3.

```
int A[5] = {1 , 2, 3, 4};
```

```
int i;
```

```
for (i=0; i<5; i++)
```

```
{
```

```
A[i] = 2*A[i];
```

```
Cout<< A[i] " ";
```

```
}
```

output

2 4 6 8 118

4.

**What will be the output of the following; (5 marks)**

```
void main()
{
union Num
{
int ValueI;
float ValueF;
double ValueD;
char ValueC;
};

Num TestVal = {100};

cout<<"Integer ="<< TestVal.ValueI<<endl;

TestVal.ValueF = 2.123;

cout <<"Float="<< TestVal.ValueF<<endl;

cout<<"Uninitialized double ="<< TestVal.ValueD<< endl;

cout<<"Some rubbish???"<<endl;

TestVal.ValueC = 'U';

cout<<"character="<< TestVal.ValueC<<endl;
}
```

output

Integer = 100

Float= 2.123

Uninitializad double 5.30754e-315

Some rubbish???

Character = U

5.

```
#include <iostream.h>

main ()
{
int y[10] = { 10,20,30,40,50,60,70,80,90,100};

int *yptr, i;

yptr = y;

cout*(yptr+1*2)endl;

}

output
```

30

Q) what will be the Out put of

```
int x=10;
int y=30;
int *xptr;
xptr=&x;
cout "x = " *xptr+x ; (Out put signs are present but cant write here )
```

Answer: x=20

Q))When a pointer is incremented then how many bytes will it move to change its address?

Ans:When a pointer is incremented, it actually jumps the number of memory addresses

► According to data type (Pg 160)

“If an integer occupies four bytes in the memory, then the yptr++; will increment its value by four. when we increment the yptr, it

points to the next integer in the memory”

It depends on the data type of the size. \*ptr++ this pointer will point to the next element in the array.

Q 3 : If ( char array [7], is a character array then write a char at fifth loction of this array.

```
char[4]='a';
```

Q 4 : Which function is used in read & write while handling file.

`ifstream inFile; // object for reading from a file`

`ofstream outFile; // object for writing to a file`

**1: intPtr is a constant pointer to integer 155**

`int *const intPtr = &x;`

**2: intPtr is a pointer to constant**

`const int *intPtr = &x;`

**q3: Char name [] = " Hello World";**

**size of array name ?**

**ans :12 including space and NULL character**

`double atof (const char *nptr)`

Answer: page 191

Converts the string nPtr to double.

`char *strcpy (char *s1, const char *s2)`

Answer: page 192

Copies string s2 into character array s1. The value of s1 is returned.

**q5 tel the size of initialized array**

`int arr []={0,0,0,0}`

**ans: 4**

--We are trying to open a txt file which does not exist with command ("myfile.txt", ios::out); (2 marks)

`ofstream out;`

`Out.open("myfile.txt", ios::out);`

`If(!out) { cout<<"not found"; exit(1);}`

**A new file will be created and now we have to add our data in this file.**

---A two-dimensional array has 2 rows and 3 columns. Write down the syntax to initialize first element of all rows of two-dimensional array with value 3 (2 marks)

```
int num[2][3];
```

```
num[0][0]=3;
```

```
num[1][0]=3;
```

```
num[2][0]=3;
```

Q)) When a pointer is incremented, what happens in the following cases? page#172

- a) single-dimensional array
- b) two-dimensional array