TEST-02

Intern Name: Max Marks: 65
Intern ID:

- Subjective answer should be brief and to the point.
- Maintain proper coding standards and indentation.
- Do not write anything on the question papers. Each question has 5 marks
- Explain each concept with example. Concept without example will not be given marks.

Theory

Q-1 : Explain Following: 15 M
Null Pointer, Generic Pointer, Difference between malloc & calloc, ?

Q- 2 : WAP to add two 1-D array of float elements & print result (Guide: Use malloc & array_size 5 elements) 15 M

Q-2: What is Static Storage Class in C ? Explain Features with example of program & Memory Segments. 10 M

Objective

```
main()
{
    auto int i = 10 ;
    register int j = 20 ;
    printf ( "main's i and j are %d %d\n", i, j ) ;
    change() ;
    printf ( "main's i and j are %d %d\n", i, j ) ;
}
change()
{
    auto int i = 100 ;
    register int j = 200 ;
    printf ( "change's i and j are %d %d\n", i, j ) ;
}
```

```
int i = 10, j = 20, k = 30 ;
main()
{
    int i = 1, j = 2, k = 3 ;
    printf ( "i = %d j = %d k = %d\n", i, j, k ) ;
    val() ;
}
val()
{
    printf ( "i = %d j = %d k = %d", i, j, k ) ;
}
```

```
int num ;
main()
{
    int i, j ;
    for ( i = 1 ; i <= 3 ; i++ )
    {
        j = increment() ;
        printf ( "j = %d\n", j ) ;
    }
```

```
int i ;
main()
{
    int j ;
    for ( ; ; )
    {
        if ( j = function ( i ) )
            printf ( "j = %d\n", j ) ;
        else
            break ;
    }
}
function ( x )
```

```
int x ;
{
    static int v = 2 ;
    v-- ;
    return ( v - x ) ;
}
```

```
main()
{
    auto int i = 100 ;
    printf ( "i = %d\n", i ) ;
    {
        int i = 1 ;
        printf ( "i = %d\n", i ) ;
        {
            i += 1 ;
            printf ( "i = %d\n", i ) ;
        }
        printf ( "i = %d\n", i ) ;
    }
    printf ( "i = %d\n", i ) ;
}
```