

CS0.101: Computer Programming (Section B)

Quiz 1 (Fall 2023)

Duration: 45 mins

✓ Question 1: (5 marks)

Write a program to find the sum of first n even numbers. Here n can be taken to be an input from the user.

? Question 2: (5 marks)

Explain the control flow between the RAM, Hard disk and the CPU after a program is written.

✗ Question 3: (5 marks)

Write -15 in 1's complement form (assume 8-bit representation).

✓ Question 4: (5 marks)

State True/False with justification: Given two numbers x and y , the expression $y \wedge ((x \wedge y) \& - (x < y))$ calculates the minimum of the two numbers.

✓ Question 5: (10 marks)

Write a program to print the following pattern.

1
2 3
4 5 6
7 8 9 10

```
int a=1
for( int n=1; n<5, n++ ) {
    for( int i=1; i!=n, i++ )
        cout << a;
    cout << endl;
}
```

Question 6:

What is output of the following programs with proper justification ?

✓ (5 marks)

```
#include<stdio.h>
int main()
{
    int x=7, y, z;
    y = --x;
    z = x++;
    printf("%d %d %d\n", x, y, z);
    return 0;
}
```

✓ (5 marks)

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 9; i!=0; i--)
        printf("i= %d\n", i--);
    return 0;
}
```

✓ 3. (5 marks)

```
#include<stdio.h>
int main()
{
    int x = 4, y = 4, z = 4;
    if (x == y == z)
    {
        printf("YES");
    }
    else
    {
        printf("NO");
    }
    return 0;
}
```

4. (5 marks)

```
#include<stdio.h>
int main()
{
    printf("%d", printf("Hello World"));
    return 0;
}
```