

Name: _____

Reg. No: _____



**Ghulam Ishaq Khan Institute of
Engineering Sciences and Technology**

Faculty of Computer Science and Engineering

CS101 – Introduction to Computing (Fall 2021)

Quiz # 3

November 16, 2021

Total Marks: 20

Time: 20 Minutes

1. What is the output of this program? **(02 Point)**

```
for(int i = 50 ; i > 0 ; i -= 5 )  
    cout<< " " << i;
```

2. What is the output of this program? **(02 Point)**

```
for(int i = 60 ; i > 0 ; i -= 6 ) {  
    cout << " " << 60 - i;  
    i++;  
}
```

3. Identify the output of this program? **(02 Point)**

```
int number = 1;  
while((number < 10) || (number > 12)) {  
    cout << number << " ";  
    number = number + 2;  
}
```

4. Identify the output of this program? **(02 Point)**

```
int number = 1;  
while( number != 10 ) {  
    cout<< number << " ";  
    number = number + 2;  
}
```

5. What is the output of this code? **(02 Points)**

```
for(int i=0, j=11; (j+i <= 22) && (j >  
1);j--, i += 2)  
    cout << j + i << " ";
```

6. What is the output of this code? **(02 Points)**

```
int y, x = 1, total = 0;  
while( total <= 50 ) {  
    y = x * x;  
    cout << y << " ";  
    total += y;  
    x++;  
}  
cout << "\nTotal is " << total << endl;
```

7. What is the output of this code? **(02 Points)**

```
int count = 1, sum = 0;  
while(count <= 10) {  
    if(count != 1 && sum % 10 == 0)  
        break;  
    cout << count << " ";  
    sum = sum + count;  
    count ++;  
}
```

8. What does the following code do? **(02 Points)**

```
for(int i=2; i<100; i++) {  
    for(int j=2; j <= (i/j); j++) {  
        if(!(i%j))  
            break;  
        if(j > (i/j))  
            cout << i << "\n";  
    }  
}
```

- (a) print all prime numbers between 2 and 100
- (b) print some (but not all) prime numbers between 2 and 100
- (c) print all odd numbers between 2 and 100
- (d) the loop will run but never print anything

9. What is the value of num1 and num2 after the following code is executed? **(02 Points)**

```
int num1, num2;  
for(num2 = 0; num2 <= 3; num2++) {  
    for(num1 = 0; num1 <= 2; num1++) {  
        cout << endl;  
    }  
}
```

- (a) 0, 0
- (b) 2, 3
- (c) 3, 4
- (d) 4, 2

10. How many times will the following while loop run? **(02 Points)**

```
int x=0, y=1;  
while(x<100) {  
    x += y*y;  
    y += x*x;  
}
```

- (a) 0
- (b) 1
- (c) 2
- (d) 3