

Student Name:

Branch:

1. Write a C++ condition to express the following

(a) y is odd but not 13

(b) n is divisible by 7 or divisible by 5

2. Consider the following snippet of the code.

```
switch (x*3){
    case 9: cout <<"9,";
    default: cout <<"default,";
    case 6: cout <<"6,"; break;
    case 12: cout <<"12,";
}
```

What is the output when

(a)  $x = 6$ 
☐ "no thing will be printed"   ☐ 9,default,6,   ☐ default,   ☐ 12,   ☐ default,6   ☐ 12,default,
(b)  $x = 4$ 
☐ "no thing will be printed"   ☐ 9,default,6,   ☐ default,   ☐ 12,   ☐ default,6   ☐ 12,default,
3. Assuming  $\text{int } x = 5$ , what is the value of  $x$  after executing each of the following (each one should be run individually)?(a)  $x+ = 5+ --x;$ 
☐ 12   ☐ 14   ☐ 13   ☐ 11
(c)  $x = 5/x \&\& x - 10;$ 
☐ 1   ☐ 0   ☐ True   ☐ False
(b)  $x = x * 5\%3;$ 
☐ 10   ☐ 5   ☐ 1
(d)  $x = x ++ \%5 \parallel x - 5;$ 
☐ 1   ☐ 0   ☐ True   ☐ False   ☐ 6

4. What is the output of the following

```
int y = 10;
if (y++ > 6)
    if (y-- < 20)
        cout <<"This_group\t";
        cout <<"Perfect.";
```

5. Consider the following program

```
int y;
cin >> y;
if (y < 15) {
    if (y != 9)
        cout << "cond1_";
    else
        --y;
} else {
    if (y == 21)
        y *= 2;
    else
        cout << "cond2_";
}
cout << y << endl;
```

What will the program print if the user provides the following input?

(a) 21

(b) 9

(c) 32