

Student Name:

Branch:

1. Consider the following snippet of the code.

```
switch (x*2){
    default: cout <<"default , ";
    case 4: cout <<"4, ";
    case 2: cout <<"2, "; break;
    case 10: cout <<"10, ";
}
```

What is the output when

(a) $x = 0$

☐ "no thing will be printed" ☐ default,4,2, ☐ default,4,2,10, ☐ 4,2, ☐ 10, ☐ 10,default,

(b) $x = 2$

☐ "no thing will be printed" ☐ default,4,2, ☐ default,4,2,10, ☐ 4,2, ☐ 10, ☐ 10,default,

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

(a) n is between 0 and 20 but not odd

(b) n is divisible by 7 or divisible by 3

3. Assuming $\text{int } x = 4$, what is the value of x after executing each of the following (each one should be run individually)?

(a) $x+ = 2+ ++ x;$

☐ 12 ☐ 14 ☐ 13 ☐ 11

(c) $x = 10/x \ \&\& \ x - 7;$

☐ 1 ☐ 0 ☐ True ☐ False

(b) $x = x\%3 * 5;$

☐ 10 ☐ 5 ☐ 0

(d) $x = x\%5 \parallel x ++ -5;$

☐ 1 ☐ 0 ☐ True ☐ False ☐ 6

4. Consider the following program

```
int input;
cin >> input;
if (input < 10) {
    if (input != 8)
        cout << "wow_";
    else
        input++;
} else {
    if (input == 12)
        input += 10;
    else
        cout << "whoa_";
}
cout << input << endl;
```

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

(a) 8

(b) 12

(c) 11

5. What is the output of the following

```
int x = 10;
if (x > 0)
    if (x < 8)
        cout << "Here_you_go_\t";
    cout << "WOW. ";
```

Good luck!!!