

Quiz 1, INFSCI 0020 Program Design and Software Tools, Jan 13, 2004

Names:

Email:

1. Fill in the blank spaces (2):

- In C++ system, a(n) preprocessor program executes before the compiler's translation phase begins.
- The loader transfers the executable image of a C++ program from disk to memory.

2. Write the outputs of the following code (8)

(a)

```
int i;
for ( i= 2; i < 20; i = i + i ) {
    printf("%d, ", i);
    i = i + 1;
}
```

Answer: Output: 2, 6, 14

(b)

```
int sum = 0; int i = 1, j = 1;
while (i = 5) {
    sum = sum + i;
    if (sum == 20) break;
    j++;
}
printf( "%d, %d", i, j);
```

Answer: Output: 5, 4

(c)

```
x = 0; y = 5;
do {
    switch (x) {
        case "2":
        case "3":
            y += 3 * x;
            break;
        default:
            y += x;
    }
} while (++x < 5);
```

Answer: Output: x = 5, y = 25

(d) Consider the condition shown below. For what values of x and y will the values of z be as follows (state your answer in the back of the paper):

- z = 10
- z = 20

Answer: for x = 5 and any value of y
Answer: for x ? 5 and any value of y

Condition: ((x == 5 || 7 < y && (100 - 2*50)) ? z = 10 : z = 20)