

201 Computer Science I Comprehensive Final. Maximum score = 200pts (40%)

Closed-book. You should have a single "cheat sheet" of notes and a calculator. You may not use any computers or access the internet. No cell phones or wireless communication may be used.

Print Name _____ Last four digits of SID. _____

Question	1	2	3	4	5	6	7	8	9	10
Score										

There are 10 questions each worth a maximum of 20 points. Attempt as many questions as you can. Partial answers count. Blank answers score the same as wrong ones -- zero. Answer as much of every question as you can and do not erase your working.

Put all your answers in the spaces provided on these sheets of paper.

1 Your Vector/Array Project + Algorithms

2. Look at the following deliberately obscure program.

(a) Find and correct the *one syntax error* and fix it.

(b) Find *one variable* that has not been initialized before it is used. Change the program so that it is set to ... initially.

(c) Walk through the resulting program using a calculator and the table below. Put the instructions and values of variables in the correct columns. Do not erase any working.

}

3. Strings

What is output by this program...

4. The following program compiles and runs. Work out what it does in...

5. Booleanas and Functions

6. Work out, carefully, what the following program with functions etc outputs when run.

7. This was once a working program that output ...

I have replaced certain pieces by blanks of random length like this _____. Fill in the blanks with the things I deleted (4 points per blank).

8. Classes, objects, and member functions`

9. Fill in the blanks in the code below so that it implements the class shown in the UML diagram.

10. Vectors and/or arrays... Complete the program below (2 points per blank, 20 max).