91.406/534 Compiler Construction:
Pre-Course Test Questions

The 91.406/534 class will adopt an NSF-sponsored system-oriented approach of using robot systems to teach compiler construction. To gather research data on the effectiveness of the method, we would like you take the following pre-class test. Your participation is completely voluntary and will <u>not</u> in any form affect your standing or grade in the class. If you don't know the answer of the question, you can simply write N/A.

Untraceable ID Code

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1	2	3		4	5	6

(For research purposes only)

Instructions for creating your Untraceable ID Code

Box 1 – Your middle initial
Box 2 – The first initial of your mother's first name
Box 3 – The first initial of your father's first name

If any of these are not applicable use an X

Boxes 4 & 5 – Your two digit birth month
Box 6 – The number of older siblings you have

1. Define what is a compiler, as precisely as you can?

2. Why is compiler considered an important technology in modern systems?

3. What is the typical structure of compiler?

4. How does compiler understand input programs?

5. How does compiler generate output?

6. What are the key parts of the compiler front-end?

7. How is the compiler front-end constructed?

8. Why does modern compiler design focus on compiler back-end?

9. What is compiler optimization?

10. What information does compiler get in control flow analysis?