## Very Short Answer:

(1) [2] What is the point of 201 A , as stated in class?
(2) [1] Do benchmarks remain valid indefinitely?
(3) [3] Write down the 3-term CPU performance equation developed in class. Indicate which terms relate to what (technology, etc.)
(4) [2] What is Amdahl's law (in words)?
(5) [4] What were the 4 types of benchmarks?
(6) [2] What are the two primary goals of a compiler (in order)?
(7) [2] What does MTTF stand for?
(8) [2] The clock rates of Intel processors are only increasing approximately $1 \%$ per year. When did that start?
(9) [2] What two instructions are executed the most on the x86 (based on measurements on the 5 SPECint92 programs)?

## Short Answers:

(10) [3] Why are there multiple dies per silicon wafer? Why not just fabricate one huge die per wafer?
(11) [4] What are the two main ways to define performance? How do they differ? Give an example task for each.
(12) [3] Are wire delays or transistors more likely to be the most significant limit on clock frequency in the future? Explain your answer (briefly)

