

Place your name on the back of this sheet of paper and nowhere else. Staple your answers on the front of this sheet of paper. Failure to follow these directions will cost you 1 point. Your assignment will be typed, except graphs can be drawn by hand and mathematical equations can be done by hand. Failure to type it will cost you 10 points. If you use double-sided printing or print on the back of scrap paper, I will give you one additional point.

I am sorry to disappoint you, but the only equations in this material were already covered, so there is no equation to explain on this assignment.

- 1) (15 points) Explain  $c = f(k) - (n+d)k$ . Explain both of the  $k$ s,  $n$ , and  $d$ .
- 2) (20 points) Draw the Solow Model diagram. Illustrate the effects of an increase in productivity. Explain why the curve(s) moved as drawn. What happens to the per-worker level of savings and to the capital-labor ratio?
- 3) (20 points) Draw the Solow Model diagram. Illustrate the effects of an increase in population growth rate. Explain why the curve(s) moved as drawn. What happens to the per-worker level of savings and to the capital-labor ratio?
- 4) (20 points) Draw the Solow Model diagram. Illustrate the effects of an increase in depreciation rate of capital. Explain why the curve(s) moved as drawn. What happens to the per-worker level of savings and to the capital-labor ratio?
- 5) (10 points) In the endogenous growth theory, explain how an increase in the savings rate causes GDP to grow faster.
- 6) (15 points) What is meant by “human capital”? What can the government do to increase it?