University of Connecticut College of Arts and Sciences Department of Economics Christian Zimmermann

Spring 2003, Intermediate Macroeconomics, section 3

ECON 219 Quiz V

General recommendations:

Read questions thoroughly.
Please respond on this copy.
Work individually.
There are two pages.

• You have 20 minutes. • Good luck!

Your name:

- 1. Circle the appropriate answer on each of the following items. Circle multiple items if necessary:
 - (a) In an exogenous growth model, grwoth is caused by a) capital accumulation; b) government policies; c) human capital accumulation; d) forces that are not explained by the model itself.
 - (b) The Solow residual attempts to measure the amount of output **not** explained by:
 - a) technological progress; b) labor; c) physical capital; d) human capital.
 - (c) In Solow's exogenous growth model, the principal obstacle to continuous growth in output per capital is due to:
 - a) the declining marginal product of labor; b) the declining marginal product of capital; c) the limits of the ability of government policy makers; d) too little savings.
 - (d) The most common type(s) of money in circulation in the United States today consist(s) of:
 - a) commodity-backed paper currency; b) transaction deposits at banks; c) personal and business cheques; d) fiat money.
- 2. In the stable equilibrium of Solow's exogenous growth model, explain what happens when the rate of population growth increases: What happens to K, k, and their respective growth rates.

3. Below are various economic activities. Put a \mathbf{X} for each activity in the column of the role of money it exemplifies:

| | medium of | store of | unit of | none |
|--|-----------|----------|---------|------|
| | exchange | value | account | |
| Buying an item with cash | | | | |
| Saving money for future cash purchases | | | | |
| Putting price tags on goods for purchase | | | | |
| Making a cash gift | | | | |
| Using a credit card | | | | |

4. Explain why there is an optimal savings rate in the Solow growth model. What are the trade-offs in having a higher or lower savings rate?

5. Taking the human capital model of Paul Romer, explain what increasing the efficiency of the schooling system would bring in terms of the growth rates of human capital and output.

Bonus question: Explain how the requirement that people need a minimum amount of consumption can lead to a development trap.