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Fall 2005, Intermediate Macroeconomics, section 3

## ECON 219 Quiz V

## **General recommendations:**

- Read questions thoroughly. Work individually.
- Please respond on this copy. 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) The Modified Golden Rule steady state differs from the Golden Rule steady state by

a) lower consumption; b) lower savings; c) higher consumption; d) higher savings.

(b) We can express the per capita production function only as a function of per capita capital thanks to:

a) the decreasing marginal return of capital; b) the decreasing marginal return of labor; c) the constant returns to scale; d) the impatience of house-holds.

(c) If the population growth rate increases by the same percentage points as the depreciation rate decreases, what happens to the steady state in the exogenous growth model?

a) We reach a higher steady state; b) we reach a lower steady state; c) no change; d) we cannot tell.

(d) The savings rate has the following characteristic in the exogenous growth model:

a) It increases with output; b) it decreases with output; c) it first increases, then decreases with output; d) it is constant.

2. Give examples of physical, human and public capital.

3. Assume that an economy is at the Golden Rule savings rate. Now increase the savings rate. What happens to steady-state consumption? Why?

4. Following up on the previous question, what happens to consumption on the transition path from the old to the new steady state?

5. What is the critical property that is needed to obtain endogenous growth? Explain why.

**Bonus question**: Assume we would let households choose how much time to spend working or going to school. If we were to embed the human capital endogenous growth model in a business cycle model, would school time be procyclical or countercyclal, or neither? Why?