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Fall 2004, Intermediate Macroeconomics, section 4

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) What are characteristics of human capital?
 - a) Rivalry; b) rapid accumulation; c) it is owned by people; d) it is concave.
 - (b) How can we obtain sustained growth in the Solow growth model? By assuming growth in:
 - a) total factor productivity; b) capital per worker; c) population; d) capital.
 - (c) Which of the following factors increase total factor productivity?
 - a) A higher growth rate of population; b) an increase in public infrastructures; c) longer patent protection; d) lower depreciation rate of capital.
 - (d) According to the endogenous growth model with human capital, countries with more efficient schools:
 - a) are poorer; b) are richer; c) grow slower; d) grow faster.
- 2. Explain why, at the Golden Rule savings rate, the slope of the production function equals to the population growth rate plus the depreciation rate

3. How can we measure the Solow residual?

4. Explain what the impact of more time dedicated to education is on the short and long term growth rate of output in a simple human capital growth model.
5. Explain why the steady-state capital per capita under the modified Golden Rule is lower than under the Golden Rule.
Bonus question : Explain how a development trap can occur in the simple human capital growth model.