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**Fall 2009, Intermediate Macroeconomics, section 1**

## **ECON 219 Quiz IV**

**General recommendations:**

- Read questions thoroughly.
- Please respond on this copy.
- You have 20 minutes.
- Work individually.
- There are two pages.
- Good luck!

**Your name:**

1. Circle the appropriate answer on each of the following items. Circle multiple items if necessary:
  - (a) Which of these stylized facts is (are) replicated in the Solow growth model with technology growth at the steady-state? 1) the capital/output ratio is steady; 2) capital per worker is increasing; 3) output per worker is steady; 4) growth rates differ a lot across countries.
  - (b) The following are ways to obtain endogenous growth: 1) inflation; 2) human capital accumulation; 3) research and development; 4) physical capital accumulation.
  - (c) If the population growth rate increases, in the Solow growth model steady-state: 1) capital grows more slowly; 2) output per person is unchanged; 3) savings per capita are higher; 4) the standard of living is higher.
  - (d) In the endogenous growth model with human capital, spending more time on education 1) increases the growth rate; 2) decreases the growth rate; 3) increases output in the short-term; 4) increases output in the long-term.
2. Define precisely and in words the Golden Rule savings rate.

3. In the Solow growth model, how can we obtain in the long run sustained growth in output per person? Explain.
4. What is the key difference between endogenous and exogenous growth theory?
5. Explain why there is a steady-state in the Solow growth model.

**Bonus question:** In the Solow growth model, suppose that households can choose the savings rate. Compared to the model with an exogenous savings rate, what consequences would this have?