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**Fall 2005, Intermediate Macroeconomics, section 3**

## **ECON 219 Mid-term exam II**

**Name:**

**General recommendations:**

- Read questions thoroughly and answer each.
- Work individually.
- There are four pages.
- No documentation, cell phones, pagers, calculators and bathroom breaks.
- You have until 10:45 and can leave early, if you wish.

1. **[35%]** Circle the correct answer to each of the following questions. Note that there may be several correct answers.

(a) The Solow growth model is called a model of exogenous growth because:

- i. only exogenous variable grow;
- ii. nothing explains the growth rate;
- iii. one assumes growth;
- iv. there is no endogenous variable.

(b) Which of the following is true

- i. the capital income share is increasing;
- ii. the capital/output ratio is steady;
- iii. growth in trade is independent from growth in output;
- iv. skilled workers migrate to rich countries.

(c) If future total factor productivity ( $z'$ ) increases,

- i. labor demand increases;
- ii. labor supply increases;
- iii. consumption demand increases;
- iv. investment demand increases.

(d) Labor demand depends on the interest rate because:

- i. household savings depend on the interest rate;
- ii. firms discount future profits;
- iii. of Ricardian equivalence;
- iv. labor demand actually does not depend on the interest rate.

(e) Which stylized fact does the Solow growth model satisfy at equilibrium?

- i. the rate of return of capital is steady;
- ii. capital per worker shows continued growth;
- iii. there are wide differences of productivity growth across countries;
- iv. population growth rates are negatively related to income.

2. **[40%]** Let us think about the destruction due to the various hurricanes this year.

(a) In terms of the exogenous variables of the intertemporal model of the business cycle with investment, which one is affected? Why?

(b) With this model, show what the impact ought to be on all macroeconomic variables.

(c) Can such shocks (of course of lesser amplitude) be a good explanation of cyclical fluctuations?

3. **[10%]** Explain why shifting of government expenses through time has a different impact than shifting of taxes through time. Explain in words only.

4. **[15%]** Growth theory

(a) Using the Malthus theory, explain what would happen as a consequence of the eradication of a disease.

(b) Explain why there is convergence in the Solow model.

5. **[Bonus: 10%]**

(a) Does the Malthus theory lead to convergence?

(b) What does the Solow theory have to say in terms of the eradication of a disease?