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College of Arts and Sciences
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Fall 2006, Intermediate Macroeconomics, section 1

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 9:15 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) Using the static model with the PPF, we find that an increase in total factor productivity:
 - i. increases the wage;
 - ii. decreases the wage;
 - iii. increases labor;
 - iv. decreases labor.
- (b) Labor supply depends on the interest rate because:
 - i. households make a choice between future and current leisure;
 - ii. households make a choice between savings and current leisure;
 - iii. of the opportunity cost of money;
 - iv. the interest rate changes the value of life long wealth.
- (c) If future taxes increase,
 - i. labor demand decreases;
 - ii. labor supply decreases;
 - iii. aggregate demand decreases;
 - iv. aggregate supply decreases.
- (d) Which condition would generate a violation of Ricardian equivalence?
 - i. downward sloping labor supply;
 - ii. underdeveloped credit markets;
 - iii. inflationary monetary policy;
 - iv. deflationary monetary policy.

(e) Looking at long run data, which of the following is true?

- i. there is no link between growth in international trade and growth of output;
- ii. currencies are stronger in richer countries;
- iii. population increases faster in richer countries;
- iv. growth rates vary a lot across countries.

2. [15%] Growth theory

(a) Show graphically what consequences a policy of mandatory birth control would have in the Malthusian model.

(b) Explain what we mean by convergence in growth theory. What does data have to tell about this?

3. **[10%]** Explain why and how investment demand depends on the interest rate and initial capital.

4. **[40%]** Let us analyse a proposal by the current Governor of Connecticut: eliminate the property tax on cars.
 - (a) With the intertemporal model of the business cycle with investment, show what the impact of a reduction in taxes and a same sized reduction in current government expenses would be on all macroeconomic variables.

(b) Can such policy changes be a good explanation of cyclical fluctuations?

(c) Explain why this model is particularly relevant for this type of tax.

(d) Why did we assume that current government expenses had to be reduced by the same amount?

5. **[Bonus: 10%]** Take the intertemporal model of the business cycle with investment. Instead of assuming that the world lasts for two periods, assume it lasts for many. What changes should we expect in the model and its results, in qualitative, but also in quantitative terms?