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Fall 2003, Intermediate Macroeconomics, section 2

## 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 1:50 and can leave early, if you wish.
- 1. **[40%]** Circle the correct answer to each of the following questions:
  - (a) In the intertemporal model with investment, the response of output following an increase in current total factor productivity is (circle all that apply):
    - i. an increase in aggregate demand;
    - ii. a decrease in aggregate demand;
    - iii. an increase in aggregate supply;
    - iv. a decrease in aggregate supply.
  - (b) In the Solow growth model, the economy reaches a stable steady state because (circle all that apply):
    - i. the marginal return of capital is decreasing;
    - ii. the Ricardian equivalence is holding;
    - iii. households save a constant fraction of their income;
    - iv. capital is growing at a constant rate.
  - (c) Which of the following stylized facts of growth is verified by the Solow growth model as we saw it in class? (circle all that apply):
    - i. the capital output ratio is steady;
    - ii. capital per worker shows continuing growth;
    - iii. output per worker shows continuing growth;
    - iv. the return of capital is steady.

- (d) Which of these stylized facts of growth are generally accepted as true (circle all that apply):
  - i. interest rates have a trend;
  - ii. the more an economy is based on industry, the richer it is;
  - iii. growth of exports is positively related to growth of output;
  - iv. growth rates of output differ widely across countries.
- (e) The Ricardian equivalence indicates that (circle all that apply):
  - i. government spending does not matter;
  - ii. the timing of government spending does not matter;
  - iii. taxes do not matter;
  - iv. the timing of taxes does not matter.
- (f) If a household wins in the lottery and the payout is to occur only in the future, macroeconomic theory predicts that (check all that apply):
  - i. current consumption decreases;
  - ii. current consumption stays constant;
  - iii. current consumption increases;
  - iv. the behavior of current consumption is indeterminate.
- 2. [20%] Malthus recommended abstinence as a means to counter misery. Show graphically why.

## 3. [40%]

(a) Suppose that a power blackout affects the economy. What does this to total factor productivity?

(b) Take the intertemporal model with investment. Show graphically how the macroeconomic equilibrium is modified.

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

4. **[Bonus: 10%]** Suppose the government decides to subsidize investment. What curve(s) would be affected in the intertemporal model with investment, and how?