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## Spring 2004, Intermediate Macroeconomics, section 1

## ECON 219 Quiz I

## **General recommendations:**

- Read questions thoroughly.
- Please respond on this copy.
- Work individually.
- 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) The following items are included when computing GDP with the product approach: 1) intermediate goods; 2) wages; 3) profits; 4) value added.
  - (b) Macroeconomists like to use logarithms when using data because: 1) this removes trends; 2) deviations from trend are expressed in%; 3) trends look like a straight line in a time graph; 4) this gets rid of spurrious correlation.
  - (c) Spurrious correlation happens when: 1) one forgets to take logarithms; 2) two series have a common trend; 3) one series leads the other; 4) a series has sometimes negative values.
  - (d) How can we characterize the behavior of investment through the business cycle in the United States? 1) it fluctuates more than GDP; 2) it fluctuates less than GDP; 3) it is procyclical; 4) it is acyclical.
- 2. Suppose we have the following information about a skiing resort: ticket sales \$100M, snow making expenses \$70M, wages \$20M, interest on business loans \$5M, profits \$5M. What is its contribution to GDP using the product approach? If the resort is using water from a lake without further expense, how does this get taken into account?

3. Explain how we can determine whether a series leads or lags the cycle just from correlations.

|                 | coffee | donuts |
|-----------------|--------|--------|
| Year 1 price    | \$4    | \$8    |
| Year 1 quantity | 8      | 6      |
| Year 2 price    | \$5    | \$8    |
| Year 2 quantity | 10     | 5      |

4. Compute the rate of inflation using base year 2 in the following example. Provide the details of your calculations to get partial credit if wrong:

5. Define what the consumption of durables is.

Yt

6. Using the graph below, which represents GDP, draw a series that is more volatile, procyclical, and leading GDP.



Bonus question: Why are imports more procyclical than exports?