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Spring 2003, Intermediate Macroeconomics, section 3

## ECON 219 Quiz II

## **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 principle that consumers and firms optimize
    - is not helpful because some economic agents may behave irrationally;
      is helpful because it allows us to analyze how economic agents respond to changes in their environment;
       only applies to perfectly competitive markets;
       is helpful because it determines the available technology.
  - (b) A utility function

1) is a stand-in for a more complicated function; 2) is useful only in microeconomics, not macroeconomics; 3) captures the preferences of the representative household over consumption and leisure, captures the representative firm's ability to produce goods and services.

(c) A good is normal for a consumer if

1) it is always consumed in a consistent manner; 2) its consumption rises when income rises; 3) its consumption falls when income rises; 4) some minimum level of the good is needed to assure the consumer's survival.

(d) Of the following, which are good example(s) of an increase in total factor productivity?

1) the invention of the personal computer; 2) good weather; 3) a company reducing its workforce; 4) a tax cut.

2. Describe what a rise in the quantity of labor implies for production, capital, and the marginal product of labor.

3. Take the production schedule of the Widget Company below. What is the marginal product of the second worker? If the real wage is 7, the company should hire how many workers (integer only)?

Number of	
Workers	Widgets
0	0
1	12
2	22
3	30
4	36
5	40

4. Take the household problem. Should graphically what the impact on the optimal consumption bundle is when a constant subsidy is distributed to every household.

5. Say that overtime pay is higher that pay for "normal" working hours. Show graphically how the budget constraint then looks like.

**Bonus question**: Take again the overtime pay graph. Show that even with indifference curves of the usual shape, two very different bundles could yield the same utility and be optimal.