

Name:  
Econ 112

Test 3  
Spring 2005

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**Directions:** Please read the specific directions at the beginning of each section.

Please ensure that all responses are clear and concise, yet comprehensive.

Graphs are mandatory whenever appropriate.

Properly label and record all answer.

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**Part I:** Please choose the most appropriate answer (4 points each).

List responses on the scantron sheet.

*Use the following to answer the next five questions.*

	<b>Consumer Bundle</b>	<b>Prices 1990</b>	<b>Prices 1999</b>
<b>cereal</b>	90	\$2.00	\$3.00
<b>jewelry</b>	5	\$40.00	\$50.00
<b>floppy discs</b>	30	\$2.00	\$1.00

1. Assuming the table represents a typical consumer bundle, use 1990 as the base year to calculate the CPI for 1999.

- A. 1.00      B. 1.25      C. 1.10      D. 0.80      E. None of the above

2. Assuming the table represents a typical consumer bundle, use 1990 as the base year to calculate the CPI for 1990.

- A. 1.00      B. 1.25      C. 1.10      D. 0.80      E. None of the above

3. Use the CPI to calculate the inflation rate between 1990 and 1999 when 1990 is the base year.

- A. 25%      B. 20%      C. 10%      D. 1%      E. None of the above

4. Assuming the table represents a typical consumer bundle, use 1999 as the base year to calculate the CPI for 1990.

- A. 1.00      B. 1.25      C. 1.10      D. 0.80      E. None of the above

5. Use the CPI to calculate the inflation rate between 1990 and 1999 when 1999 is the base year.

- A. 25%      B. 20%      C. 10%      D. 1%      E. None of the above

6. "Arbitrage" occurs:

A. when people move their funds into the asset with the highest interest rates, causing coupon rates to move together.

B. when people move their funds into the asset with the highest rate of return, causing rates of return for comparable assets to "equalize."

C. when people move their funds into the asset with the highest coupon rates, causing rates of return to increase.

D. Both A&B.

E. None of the above

7. If a \$100 bond, with a coupon payment of \$5, that matures in one year is purchased for \$92, the rate of interest on the bond is:

- A. 5%      B. 8.7%      C. 8%      D. 14.1%      E. None of the above

8. The supply of loanable funds is:
- A. the quantity of savings that the banking system is willing to loan at various rates of interest.
  - B. the quantity of money that individuals or firms are willing to borrow at various rates of interest.
  - C. the quantity of money that the Fed is willing to loan at various rates of interest.
  - D. None of the above
9. Economists say that additional government spending reduces ("crowds out") private investment. This is evident because:
- A. If there is a budget surplus, a decline in the surplus would reduce the supply of loanable funds.
  - B. In a deficit situation, any increase in spending will require additional government borrowing, increasing the demand for loanable funds.
  - C. In equilibrium, leakages equal injections. Thus, given  $NX$ ,  $S$  &  $T$ , if  $G \uparrow$ , then  $I \downarrow$ .
  - D. All of the above
  - E. None of the above
10. Assume that originally,  $C = 350 + .75Y_d$  billion \$,  $G = 150$  billion \$,  $T = 100$  billion \$ and  $I = 250$  billion \$ in the republic of Fruchtreich. Autonomous expenditures are:
- A. 400.
  - B. 350.
  - C. 675.
  - D. 750.
11. When banks anticipate an increase in the rate of inflation we notice:
- A. an increase in the nominal interest rate.
  - B. a decrease in the nominal interest rate.
  - C. an increase in the real interest rate.
  - D. a decrease in the real interest rate.
  - E. None of the above
12. Nominal GDP in 1992 was \$6.04 trillion. Nominal GDP in 1993 was \$6.38 trillion. The GDP deflator was 121 in 1992 and 124 in 1993. If applicable, during which year was real GDP greatest?
- A. 1992
  - B. 1993
  - C. Real GDP was constant.
  - D. Real GDP fell.
  - E. None of the above
13. You have won \$1000 in the KY lottery. You have the option of receiving a fraction of your winnings (cash option) now, or all of it in two \$500 yearly payments, beginning next year. If interest rates are currently 2% annually, what's the minimum amount the state must offer to get you to take the cash option now?
- A. \$971
  - B. \$991
  - C. 951
  - D. 1031
  - E. None of the above
14. In Benjastan, where  $I$ ,  $G$ , and  $T$  are autonomous, there is currently a \$120 "recessionary gap." That is, current output is less than desired (full-employment) output. If the MPC is 0.75, ceteris paribus, which of the following changes in taxes would move the economy to the desired equilibrium?
- A. an increase of \$40
  - B. an increase of \$30
  - C. a decrease of \$120
  - D. a decrease of \$40
  - E. None of the above
15. In Christobia, where  $I$ ,  $G$ , and  $T$  are autonomous, there is currently a \$120 "expansionary gap." That is, current output is more than desired (full-employment) output. If the MPC is 0.75, ceteris paribus, which of the following changes in government spending would move the economy to the desired equilibrium under a balanced budget policy?
- A. an increase of \$120
  - B. a decrease of \$30
  - C. a decrease of \$120
  - D. an increase of \$40
  - E. None of the above

**Part II:** Answer each of the next 6 questions concisely by providing a graph and a one to three sentence explanation. Label each part. Complete and properly labeled graphs are mandatory whenever appropriate. (6 points each)

Suppose that you are given the following information for an economy:

$C = 2000 + 0.9Y_d$ ,  $I = 600$ ,  $G = 400$ ,  $T = 300$ , and  $EX = 100$ . All dollar amounts are in billions.

1. Calculate equilibrium income. Illustrate this outcome on an appropriate and completely labeled graph. Be certain to indicate the value of autonomous expenditures on your graph.
2. Calculate equilibrium consumption and equilibrium savings.
3. Determine the impact on income of an increase in investment of 300. Illustrate graphically.

Assume that people have the option of dividing their wealth into savings or buying bonds.

4. In general, what three things permanently distinguish the return on assets?
5. What is the precise relationship between the price of bonds and the interest rate for bonds? What happens to these interest rates as bond prices rise?
6. Assume that people are becoming more conservative spenders. As a result, they save much more of their income. What will ultimately happen to interest rates in the market for loanable funds and in the bond market? Illustrate and explain.

(Bonus:+6) Now assume that people can also buy shares of stock. If investors are optimistic about corporate profits and expect share prices to rise, how will all three markets (L.F., Bond, Stock) adjust? Illustrate and explain.