Australian Graduate School of Management

MNGT5200 Economics

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Sample Questions on GDP, Price Indices, Growth and Money

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1. In a simple economy, people consume only 2 goods, food and clothing:

	Food	Clothing
2000 price	$4	$10
2000 quantity	50	100
2001 price	$10	$15
2001 quantity	50	100

a. What is the percentage increase in the price of food and in the price of clothing?
b. What is the percentage increase in the overall price level?
c. Do these price changes affect all consumers to the same extent? Explain.

2. Henry and Ellen meet George, the banker, to work out the details of a loan. George, Ellen and Henry all expect that inflation will be 5% over the term of the loan, and they agree on a nominal interest rate of 10%. In actuality, the inflation rate is 8% over the term of the loan.
a. What is the expected real interest rate?
b. What is the actual real interest rate?
c. Who benefits and who loses because of the unexpected inflation?

3. Les buys a house in 1998. He obtains a fixed 10% mortgage interest rate, and makes payments of $1000 per month. The 1998 CPI is 90, the 1999 CPI is 90, the 2000 CPI is 100, the 2001 CPI is 110, and the 2002 CPI is 120.
a. What is the real mortgage interest rate Les pays in 1999, 2000, 2001 and 2002?
b. What are the values in 1998 dollars of Les's monthly mortgage payments in 1999, 2000, 2001 and 2002?

4. Suppose that the average income in a nation is $1000 in 1900, and the growth rate of average income is 3.5% per year. About how high will average income be in this nation in 2000? (*Hint*: Use the rule of 70.)

5. Is there statistical evidence that shows correlations between investment and economic growth, and between population growth and economic growth across countries, where growth is defined in terms of per-capita GDP? Does this evidence prove a causal relationship?

6. Countries have tried various methods to increase their living standards by reducing population growth. As an economist interested in incentives rather than coercion, what kind of policy would you recommend to slow population growth?

7. If $5000 of new reserves are deposited in the banking system, what is the maximum amount of money that can be generated by the banking system if the reserve ratio is:
a. 100%
b. 50%
c. 40%
d. 25%
e. 10%
f. 1%

8. Explain what will happen to the money supply under each of the following circumstances:
a. The public decides to increase the amount of currency it holds.
b. Banks decide to hold fewer excess reserves.

9. Using a graph representing the market for loanable funds, show and explain what happens to interest rates and investment if the investment tax credit is abolished.