

**ECO 402. Assignment 2.**  
(Reading: Chs. 4 and 6)

Name \_\_\_\_\_ ID \_\_\_\_\_

*(Due Monday, July 18)*

1. Money market mutual fund shares are included in:
  - a. L but not M3.
  - b. M3 but not M2.
  - c. M2 but not M1.
  - d. M1 but not currency.
2. If income velocity is assumed to be constant, but no other assumptions are made, the level of \_\_\_\_ is determined by money supply.
  - a. prices
  - b. income
  - c. transactions
  - d. nominal GDP
3. If the money supply increases 12 percent, velocity decreases 4 percent, and the price level increases 5 percent, then the change in real GDP must be \_\_\_\_ percent.
4. “Inflation tax” means that as the price level rises, the real value of money held by the public decreases. T/F
5. The opportunity cost of holding money is the real interest rate and the real return on holding money is minus the inflation rate. T/F
6. According to the classical theory of money, inflation does not make workers poorer because wage increase:
  - a. faster than the overall price level.
  - b. more slowly than the overall price level.
  - c. in proportion to the increase in the overall price level.
  - d. in real terms during periods of inflation.
7. Inflation \_\_\_\_ the variability of relative prices and \_\_\_\_ allocative efficiency.
8. In order to stop a hyperinflation, in addition to stopping monetary growth, the government must:
  - a. lower taxes and raise government spending.
  - b. raise taxes and reduce government spending.
  - c. change from one kind of currency to another.
  - d. call for a new election.
9. An example of a nominal variable is the:
  - a. money supply
  - b. quantity of goods produced in a year
  - c. relative price of bread
  - d. real wage

10. Frictional unemployment is unemployment caused by \_\_\_\_\_.
11. A typical worker in the United States who is covered by unemployment insurance receives \_\_\_\_\_ percent of his or her former wages for \_\_\_\_\_ weeks.
12. When there is wait unemployment, the real wage is rigid at a level below the market-clearing level. T/F?
13. All of the following are causes of wait unemployment except: (i) minimum-wage laws; (ii) the monopoly power of unions; (iii) unemployment insurance; (iv) efficiency wages. Answer \_\_\_\_\_.
14. Permitting a lower minimum wage for teenagers would likely raise unemployment among unskilled adults. T/F?
15. In the case of unions, the conflict of interest between different groups of workers results in insiders wanting \_\_\_\_\_, while outsiders want \_\_\_\_\_.
16. Efficiency-wage theories suggest that a firm may pay workers more than the market-clearing wage for all of the following reasons except to (i) reduce labor turnover; (ii) improve the quality of the firm's labor force; (iii) increase worker efforts; (iv) reduce firm's wage bill. Answer \_\_\_\_\_.
17. If the steady-state rate of unemployment equals 0.10 and the fraction of employed workers who lose their job each month (the rate of job separation) is 0.02, then the fraction of unemployment workers who find jobs each month (the rate of job findings) must be \_\_\_\_\_.
18. (Mankiw 3-6) Consider an economy described by the following equations:

$$\begin{aligned}
 Y &= C + I + G \\
 Y &= 5,000 \\
 G &= 1,000 \\
 T &= 1,000 \\
 C &= 250 + 0.75(Y-T) \\
 I &= 1,000 - 50r
 \end{aligned}$$

- a. Compute private saving, public saving, and national saving.
  - b. Find the equilibrium interest rate.
  - c. Now suppose that  $G$  rises to 1,250. Compute new private saving, public saving, and national saving. Find the new equilibrium interest rate.
19. (Variation of Mankiw 3-9.) Suppose that consumption depends negatively on the interest rate. If government purchase increases, what happens to (i) the interest rate, (ii) investment, (iii) private saving, and (iv) national saving?

20. A hypothetical economy is described by the following set of equations:

Real GDP:	$Y = 5000$
Consumption:	$C = 1000 + 0.3 (Y-T)$
Investment:	$I = 1500 - 50 r$
Taxes:	$T = 1000$
Government purchases	$G = 1500$

- What are the equilibrium values of investment and the interest rate? Show your work.
- Government increases its taxes to 1500. What are the new equilibrium values of investment and the interest rate? Draw a diagram for the loanable funds market and mark the initial and new equilibrium of the economy by (1) and (2). Show your work.
- (Bonus: 2 points) Assume that there is a technological innovation that makes business want to invest more. (Assume that taxes remain as before at 1000.) It raises the investment function to  $I = 1800 - 50r$ . What are the new equilibrium values of investment and the interest rate? Show your work.