Name: _____ Date: _____

This is a closed book exam. You are required to abide all the rules of the Student Conduct Code of the University of Connecticut.

1. If the steady-state rate of unemployment equals 0.10 and the fraction of employed workers who lose their jobs each month (the rate of job separation) is 0.02, then the fraction of unemployed workers who find jobs each month (the rate of job findings) must be:
   A) 0.02.
   B) 0.08.
   C) 0.10.
   D) 0.18.

2. If currency held by the public equals $100 billion, reserves held by banks equal $50 billion, and bank deposits equal $500 billion, then the monetary base equals:
   A) $50 billion.
   B) $100 billion.
   C) $150 billion.
   D) $600 billion.

3. In a large open economy, the interest rate adjusts so that domestic saving equals:
   A) domestic investment.
   B) net exports.
   C) net capital outflow.
   D) domestic investment plus net capital outflow.

4. If the demand for real money balances is proportional to real income, velocity will:
   A) increase as income increases.
   B) increase as income decreases.
   C) vary directly with the interest rate.
   D) remain constant.

5. According to the model developed in Chapter 3, when government spending increases without a change in taxes:
   A) consumption increases.
   B) consumption decreases.
   C) investment increases.
   D) investment decreases.

6. In equilibrium, total investment equals:
   A) private saving.
   B) public saving.
   C) national saving.
   D) household saving.

7. In a steady state:
   A) no hiring or firings are occurring.
   B) the number of people finding jobs equals the number of people losing jobs.
   C) the number of people finding jobs exceeds the number of people losing jobs.
   D) the number of people losing jobs exceeds the number of people finding jobs.

8. An increase in the trade surplus of a small open economy could be the result of:
   A) a domestic tax cut.
   B) an increase in government spending.
   C) a decrease in the world interest rate.
   D) the implementation of an investment tax-credit provision.

9. Economic profit is zero if:
   A) all factors are paid their marginal products and the law of diminishing returns is valid.
   B) all factors are paid their marginal products and there are constant returns to scale.
   C) all firms maximize profits and none are competitive.
   D) all firms maximize profits and all factors are paid their marginal products.

10. The one-to-one relation between the inflation rate and the nominal interest rate, the Fisher effect, assumes that the:
    A) money supply is constant.
    B) velocity is constant.
    C) inflation rate is constant.
    D) real interest rate is constant.

11. An important factor in the evolution of commodity money to fiat money is:
    A) a desire to reduce transaction costs.
    B) a desire to increase transaction costs.
    C) the fact that gold is no longer highly valued.
    D) a desire to use gold for jewelry.

12. If the number of employed workers equals 200 million and the number of unemployed workers equals 20 million, the unemployment rate equals _____ percent (rounded to the nearest percent).
    A) 0
    B) 9
    C) 10
    D) 20

13. In the Baumol-Tobin theory of the transactions demand for money, the average money holding will:
    A) increase as the interest rate increases.
    B) increase as wealth increases.
    C) decrease as transaction costs per trip to the bank increase.
    D) increase as expenditure increases.

14. In a small open economy, when foreign governments reduce national saving in their countries, the equilibrium real exchange rate:
    A) rises and net exports fall.
    B) rises and net exports rise.
    C) falls and net exports fall.
    D) falls and net exports rise.

15. The money supply will decrease if the:
    A) monetary base increases.
    B) currency-deposit ratio increases.
    C) discount rate decreases.
    D) reserve-deposit ratio decreases.

16. Which of the following is an example of frictional unemployment?
    A) Dave searches for a new job after voluntarily moving to San Diego.
    B) Elaine is willing to work for less than the minimum wage, but employers cannot hire her.
    C) Bill is qualified and would like to be an airline pilot, but airlines do not find it profitable to hire him at the wage established by the airline pilot's union.
    D) Joan is willing to work at the going wage, but there are no jobs available.

Use paper provided to answer the following questions. Keep your answers short and precise. Do not asnwer what you have not been asked.

Choose 3 questions ONLY out of questions 17-20. You are required to do questions 21 and 22. Question 23 is extra credit.

17. Assume that the monetary base (B) is $100 billion, the reserve-deposit ratio (rr) is 0.1, and the currency-deposit ratio (cr) is 0.1.
    a. What is the money supply?
    b. If rr changes to 0.2, but cr is 0.1 and B is unchanged, what is the money supply?

18. Assume that GDP (Y) is 6,000. Consumption (C) is given by the equation $C = 600 + 0.6(Y - T)$. Investment (I) is given by the equation $I = 2,000 - 100r$, where r is the real rate of interest in percent. Taxes (T) are 500 and government spending (G) is also 500.
    a. What are the equilibrium values of C, I, and r?
    b. What are the values of private saving, public saving, and national saving?
    c. If government spending rises to 1,000, what are the new equilibrium values of C, I, and r?
   d. What are the new equilibrium values of private saving, public saving, and national saving?

19. Assume that in a small open economy with full employment, consumption depends only on disposable income. National saving is 300, investment is given by $I = 400 - 20r$, where r is the real interest rate in percent, and the world interest rate is 10 percent.
    a. If government spending rises by 100, does investment change? What is the level of investment after the change?
    b. Does the trade balance change if G rises by 100? If it changes, does it increase or decrease, and by how much?
    c. Does net capital outflow change if G rises by 100? If it changes, does it increase or decrease, and by how much?
    d. Will the real exchange rate rise, fall, or remain constant as a result of the change in G?

20. Suppose that the large industrial countries of the world are concerned about the depreciating currencies of a number of small open economies.
    a. What type of fiscal policies must the large industrial countries undertake in order to promote currency appreciation in the small open economies?
    b. Illustrate graphically the impact of the industrial countries' policies on the exchange rate of the small open economies.
    c. What will happen to the trade balance of the typical small open economy, assuming that it starts from a position of balanced trade?

21. Why economists have so many measures of money?

22. What is the basic idea of the Cagan Model and its implications?

23. Extra credit: In terms of the Chapter 3 model of economy, define an equilibrium in the Financial Market. Show, that an equilibrium in the Financial Market implies an equilibrium in the Goods Market and vice versa.

Answer Key

1. D
2. C
3. D
4. D
5. D
6. C
7. B
8. C
9. B
10. D
11. A
12. B
13. D
14. D
15. B
16. A
17. a. The money supply is $550 billion. b. The money supply is $366.67 billion. c. The money supply is $400 billion.
18. a. 3,900; 1,600; 4 percent b. 1,600; 0; 1,600 c. 3,900; 1,100; 9 percent d. 1,600; -500; 1,100
19. a. No. 200 b. Yes. It decreases by 100.   c. Yes. It decreases by 100. d. It will rise.
20. a. The large economies must execute contractionary fiscal policy (decreasing government spending and/or increasing taxes) to generate a lower world interest rate.
    b. The lower world interest rate increases investment in the small open economy, which reduces the supply of currency going into the foreign exchange market and increases the exchange rate of the small open economy.
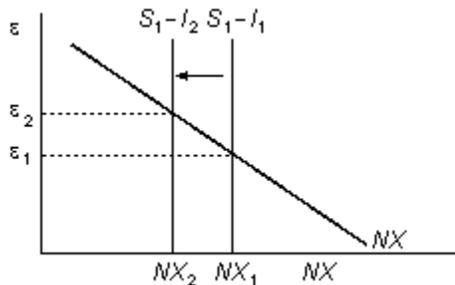
    c. The trade balance of the small open economy will move into deficit.
21.
22.
23.