Midterm 2 Spring 2010

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Frictional unemployment is
   a. not inevitable; rather, it can be reduced to zero by well-designed public policies.
   b. inevitable, because in some industries, wages are always set above the level that brings supply and demand into equilibrium.
   c. not inevitable; rather, it could be reduced to zero if by the elimination of unemployment insurance.
   d. inevitable, because at any given time, jobs are being created in some firms and destroyed in other firms.

2. The source of the supply of loanable funds
   a. and the demand for loanable funds is saving.
   b. is saving and the source of demand for loanable funds is investment.
   c. is investment and the source of demand for loanable funds is saving.
   d. and the demand for loanable funds is investment.

3. Suppose that in a closed economy GDP is equal to 11,000, taxes are equal to 1,500, consumption equals 7,500, and government purchases equal 2,000. What is national saving?
   a. 1,500
   b. 0
   c. -500
   d. None of the above is correct.

4. Acarapi is a full-time homemaker not currently searching for other work. Ximena is a full-time student who is not looking for a job. Who is included in the labor force by the Bureau of Labor Statistics?
   a. neither Acarapi nor Ximena
   b. only Acarapi
   c. both Acarapi and Ximena
   d. only Ximena

5. If in the past Congress had taken additional actions to make saving more rewarding, then today it is likely that the equilibrium interest rate
   a. would be lower and the equilibrium quantity of loanable funds would be higher.
   b. and the equilibrium quantity of loanable funds both would be lower.
   c. and the equilibrium quantity of loanable funds both would be higher.
   d. would be higher and the equilibrium quantity of loanable funds would be lower.

6. Other things the same, a government budget deficit
   a. reduces both public and national saving.
   b. reduces national saving, but not public saving.
   c. reduces neither public saving nor national saving.
   d. reduces public saving, but not national saving.

7. It is claimed that a secondary advantage of mutual funds is that
   a. an investor can avoid investment charges and fees.
   (b.) they give ordinary people access to the skills of professional money managers.
   c. they give ordinary people access to loanable funds for investing.
   d. they usually outperform stock market indexes.

8. A budget surplus is created if
   a. the government spends more than it receives in tax revenue.
   b. private saving is greater than zero.
   c. the government sells more bonds than it buys back.
   (d.) None of the above is correct.

9. Which of the following is human capital?
   (a.) understanding how to repair cars
   b. textbooks
   c. hand held power tools
   d. All of the above are correct.

10. Which of the following equations will always represent GDP in an open economy?
    (a.) $Y = C + I + G + NX$
    b. $S = I - G$
    c. $I = Y - C + G$
    d. $Y = C + I + G$

Table 28-2

2009 Labor Data for Wrexington

Number of adults	20,000
Number of adults who are paid employees	8,000
Number of adults who work in their own businesses	1,600
Number of adults who are unpaid workers in a family member's business	1,000
Number of adults who were temporarily absent from their jobs because of an earthquake	400
Number of adults who were waiting to be recalled to a job from which they had been laid off	200
Number of adults who do not have a job, are available for work, and have tried to find a job within the past four weeks	1,400
Number of adults who do not have a job, are available for work, but have not tried to find a job within the past four weeks	780
Number of adults who are full-time students	3,000
Number of adults who are homemakers or retirees	3,620

11. **Refer to Table 28-2.** How many people were employed in Wrexington in 2009?
    a. 9,600
    b. 11,200
    c. 10,600
    (d.) 11,000

    $8,000 + 1600 + 400 + 1000$

12. **Refer to Table 28-2.** How many people were unemployed in Wrexington in 2009?
    a.   2,000
    b.   1,400
    c.   1,600
    d.   2,780

13. **Refer to Table 28-2.** What was Wrexington's labor-force participation rate in 2009?
    a.   66.9 percent
    b.   87.3 percent
    c.   55 percent
    d.   63 percent

$$\frac{Labor\ Force}{Adults} = \frac{12600}{20000}$$

14. **Refer to Table 28-2.** How many people were in Wrexington's labor force in 2009?
    a.   11,000
    b.   20,000
    c.   12,600
    d.   13,380

15. **Refer to Table 28-2.** What was Wrexington's unemployment rate in 2009?
    a.   22.1 percent
    b.   12.7 percent
    c.   15.9 percent
    d.   8.0 percent

$$\frac{1600}{12600}$$

16. When a large, well-known corporation wishes to borrow directly from the public, it can
    a.   sell shares of stock.
    b.   sell bonds.
    c.   go to a bank for a loan.
    d.   All of the above are correct.

17. Which of the following items plays a role in determining productivity?
    a.   natural resources
    b.   physical capital
    c.   technological knowledge
    d.   All of the above are correct.

18. A certificate of indebtedness that specifies the obligations of the borrower to the holder is called a
    a.   stock.
    b.   mutual fund.
    c.   bond.
    d.   All of the above are correct.

19. The level of real GDP person
    a.   and the growth rate of real GDP per person are similar across countries.
    b.   is very similar across countries, but the growth rate of real GDP per person differs widely across countries.
    c.   differs widely across countries, but the growth rate of real GDP per person is similar across countries.
    d.   and the growth rate of real GDP per person vary widely across countries.

20. Which of the following would increase productivity?
    a. an increase in natural resources per worker
    b. an increase in human capital per worker
    c. an increase in the physical capital stock per worker
    d. All of the above are correct.

21. When a country saves a larger portion of its GDP than it did before, it will have
    a. less capital and lower productivity.
    b. more capital and lower productivity.
    c. less capital and higher productivity.
    d. more capital and higher productivity.

22. Interest rates fall and investment falls. Which of the following could explain these changes?
    a. The government repeals an investment tax credit.
    b. The government goes from a surplus to a deficit.
    c. The government replaces a consumption tax with an income tax.
    d. None of the above is correct.

23. Which of the following would *not* be considered physical capital?
    a. a computer used to help Mercury Delivery Service keep track of its orders
    b. a new factory building
    c. on-the-job training
    d. a desk used in an accountant's office

24. If national saving in a closed economy is greater than zero, which of the following must be true?
    a. $Y - C - G > 0$
    b. Investment is positive.
    c. Either public saving or private saving must be greater than zero.
    d. All of the above are correct.

25. If the government's expenditures exceeded its receipts, it would likely
    a. buy bonds directly from the public.
    b. sell bonds directly to the public.
    c. lend money to a bank or other financial intermediary.
    d. borrow money from a bank or other financial intermediary.

26. Which of the following is a determinant of productivity?
    a. physical capital per worker
    b. natural resources per worker
    c. human capital per worker
    d. All of the above are correct.

27. Suppose that in a closed economy GDP is 11,000, consumption is 7,500, and taxes are 2,000. What value of government purchases would make national savings equal to 1,000 and at that value would the government have a deficit or surplus?
    a. 2,500, surplus
    b. 2,500, deficit
    c. 1,000, deficit
    d. 1,000, surplus

$NS \equiv I = 1000$
$I = GDP - C - G$
$1000 = 11000 - 7500 - G$
$G = 2500$

$Pu\ Savings = T - G$
$= 2000 - 2500$
$= -500,$
deficit

4

28. Suppose the economy is closed with national saving of $2 trillion, consumption of $7 trillion, and government purchases of $1 trillion. What is GDP?
    a. $8 trillion
    b. $10 trillion
    c. $9 trillion
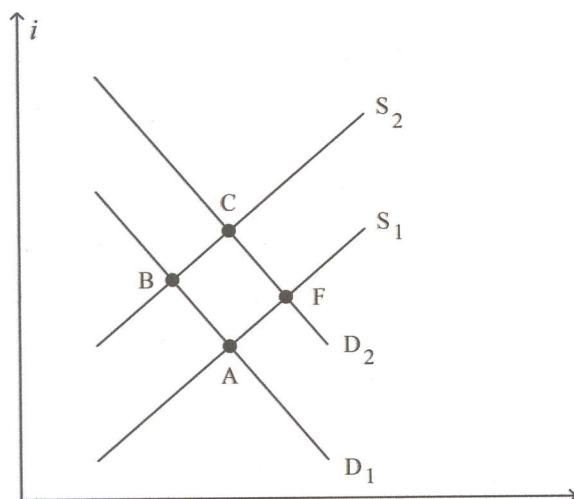   d. $11 trillion

    $NS \equiv I$
    $GDP = C + I + G$
    $10 = 7 + 2 + 1$

29. In a closed economy, what does $(T - G)$ represent?
    a. investment
   b. public saving
    c. national saving
    d. private saving

Figure 26-3. The figure shows two demand-for-loanable-funds curves and two supply-of-loanable-funds curves.

30. **Refer to Figure 26-3.** A shift of the demand curve from D_1 to D_2 is called
    a. a decrease in the demand for loanable funds, and that decrease would originate from people who had some extra income they wanted to lend.
    b. an increase in the demand for loanable funds, and that increase would originate from households and firms who wish to borrow to make investments.
    c. an increase in the demand for loanable funds, and that increase would originate from people who had some extra income they wanted to lend.
    d. a decrease in the demand for loanable funds, and that decrease would originate from households and firms who wish to borrow to make investments.

Short Answer (10 points each)

1. Using a graph representing the market for loanable funds, show and explain what happens to interest rates and investment if the government budget goes from a deficit to a surplus. Explain why the demand for loanable funds slopes downward and why the supply of loanable funds slopes upward.

4 pts
graph
2 shift

$i\downarrow Q_L \uparrow$
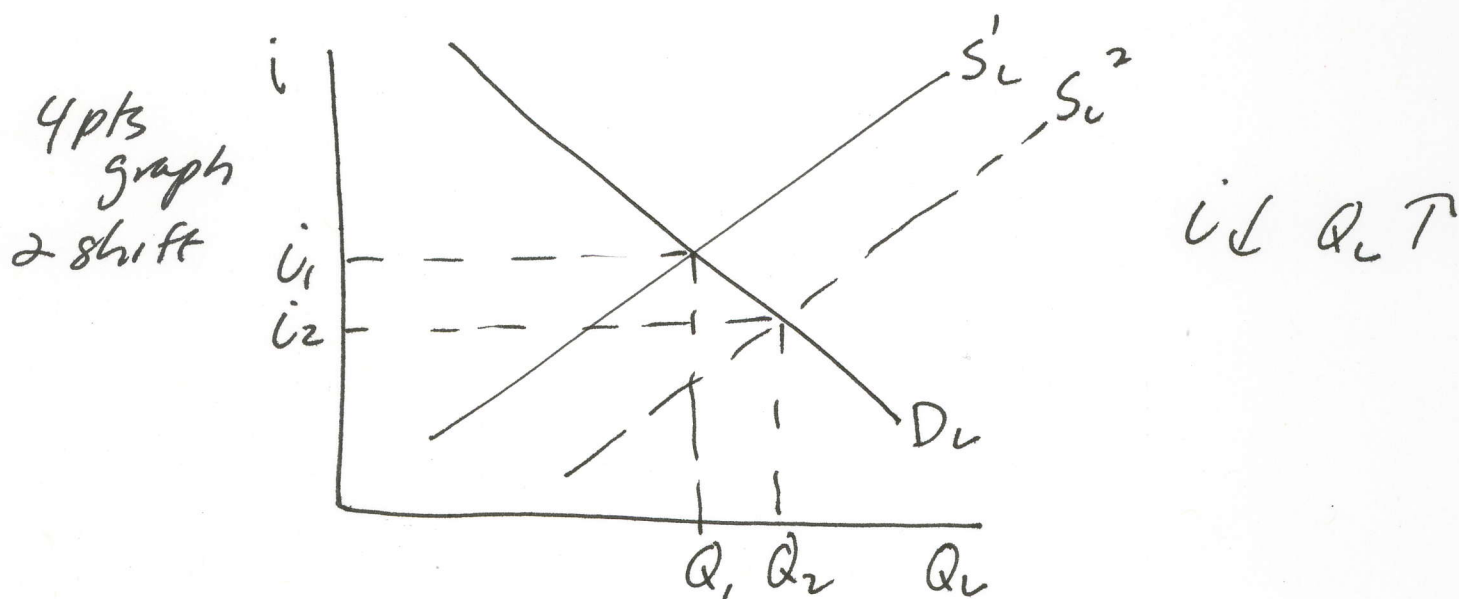
2pts Demand is downward sloping because when i is low, there are more projects that earn a rate of return high enough to make it worth borrowing the money. When i is high, fewer projects will qualify

2pts Supply is upward sloping because when i is high, more people save and i low, fewer people save.

2.a. Following the recession of 2001, there was a month in which employment and the unemployment rate both rose. Assuming the computations were correct, how is it possible for both to have increased? Be sure to define terms that you use in your answer.

Discouraged workers enter when economy picks up. Employment ↑ due to better economy; UR ↑ because discourage wkers are initiall unemployed.

4pts

b. Name and describe the three different types of unemployment.

2pts structural - mismatch between jobs available + skills of job seekers

2pts frictional - regular shifting between jobs

2pts cyclical - unemployment due to recession

3. What is a production function? Write an equation for a typical production function, and explain what each of the terms represents. Draw a graph of the production function and show what happens if there is a new technology.
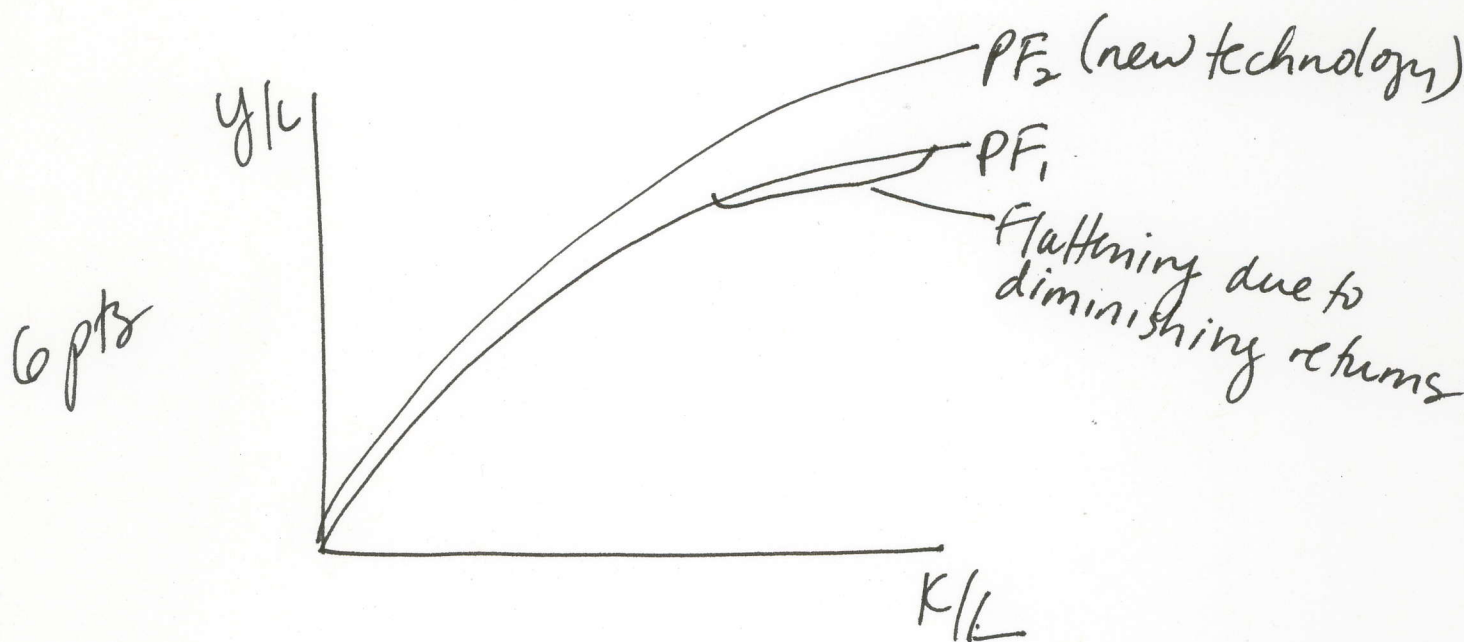
4pts

$$Y = A f(H, L, K, N)$$

$\uparrow$ output $\uparrow$ technology

H = human capital
L = labor
K = capital
N = natural resources

6pts

PF$_2$ (new technology)

PF$_1$

Flattening due to diminishing returns

y/L

K/L

4. Name and describe two factors that might cause the economic growth rates between two countries to differ.

Any number acceptable e.g.
- Human capital differences
- Political stability
- Property rights
- Natural resources . . . _

5 pts
each