Instructions:

This is the on-line Multiple Choice Quiz for Chapter 7. Please do the following:

Step 1: Go to the special codes section on your score sheet

- Write your section number (1 or 3) under the letter K. Also fill out the appropriate bubble corresponding to your section number in column K.
- Go to the columns O and P. Enter for this chapter, 0 in the O column, and 7 in the P column. Also fill out the appropriate bubbles below in columns O and P.

Step 2: Enter your university identification number, using numbers and corresponding bubbles.

Step 3: Enter your name, using letters and corresponding bubbles.

Step 4: Answer all 35 questions.

Step 5: Check the important dates link on the class home page for the availability and closing dates for the successive on-line multiple choice quizzes.

Step 6: Hand in your score sheets in class, to your TA’s or to myself, in class, or outside my office, Heady Hall 281, no later than the posted closing date and hour (5 p.m.)

We will use the following grading scale:

- A = 35, 34, 33, 32, 31, 30
- B = 29, 28, 27, 26, 25, 24
- C = 23, 22, 21, 20, 19, 18
- D = 17, 16, 15, 14, 13, 12
- F = less than 12

Note: All MC quizzes will be discussed in detail in class for each section (1 or 3) prior to the posted Friday 5 p.m. closing date and hour. Bring your printed test and score sheet to that class session for that purpose.
MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) Which of the following correctly describe the PPF between leisure and real GDP?
   I. The PPF shows the boundary between amounts of goods and services that can be produced versus those that cannot be produced.
   II. The PPF displays decreasing opportunity costs.
   A) II only B) either I nor II C) I only D) both I and II

2) Because the leisure-real GDP production possibilities frontier is bowed outward, then
   A) each additional unit of real GDP costs a decreasing amount of forgone leisure.
   B) the marginal product of labor is increasing as real GDP increases.
   C) as more real GDP is produced, increasingly more productive labor is being used.
   D) the slope of the economy's production function decreases as real GDP increases.

3) An increase in labor hours will lead to
   A) a shift of the production function but no movement along it.
   B) a movement along the production function but no shift in it.
   C) neither a movement along nor a shift in the production function.
   D) both a movement along and a shift in the production function.

4) Becky has a part-time job at Wendy's after school. When she started Becky could cook only 20 hamburgers per hour; but after the first month of work she was able to cook 30 hamburgers per hour. The most likely explanation for her increased productivity is
   A) technological change. B) the law of increasing returns.
   C) efficiency wages. D) learning-by-doing.

5) Over the past 30 years, the U.S. production function has shifted ______ and labor productivity has ______.
   A) upward; increased B) upward; decreased
   C) downward; increased D) downward; decreased

6) U.S. labor productivity
   A) increases an average of about 50 percent per year.
   B) increases an average of almost 2 percent per year.
   C) is unpredictable.
   D) is unaffected by the amount of capital used.

7) The money wage rate measures the
   A) constant dollar level of real disposable income.
   B) quantity of goods and services that can be bought with an hour of labor.
   C) 1996 dollar value of a unit of labor supplied by a worker.
   D) number of dollars earned by an hour of labor.
8) If the money wage rate is $15.00 per hour and the price level is 120, the real wage rate is
   A) $15.00 per hour.  B) $8.50 per hour.  C) $10.75 per hour.  D) $12.50 per hour.

9) The real wage rate falls if the money wage rate
   A) rises more slowly than the price level.
   B) is constant and the price level falls.
   C) and the price level change by the same proportion.
   D) rises more rapidly than the price level.

10) Which of the following is (are) TRUE regarding the demand for labor?
    I. The quantity of labor demanded depends on the real wage rate.
    II. If the money wage rate increases and the price level remains the same,
       the quantity of labor demanded decreases.
    III. If the money wage rate and the price level increase in the same proportion,
         the quantity of labor demanded decreases.
    A) I          B) I, II, and III      C) I and II      D) II and III

11) The demand for labor curve
    A) slopes upward.  B) slopes downward.  C) is horizontal.  D) is vertical.

12) The marginal product of labor is diminishing because as labor hours
    A) increase, capital and technology are fixed.  B) increase, output increases.
    C) decrease, capital will decrease.  D) decrease, output falls very little.

13) The marginal product of labor curve shows a _______ relationship between ________.
    A) negative; the marginal product of labor and capital
    B) negative; the marginal product of labor and the quantity of labor
    C) positive; the marginal product of labor and capital
    D) positive; the marginal product of labor and the quantity of labor

14) The quantity of labor supplied depends on the
    A) real wage rate, not the money wage rate.
    B) money wage rate, not the real wage rate.
    C) price of output, not the money wage rate nor the real wage rate.
    D) level of profits.

15) If workers' money wage rates increase by 5 percent and the price level remains constant, the workers'
    A) quantity of labor supplied will not change.  B) quantity of labor supplied will increase.
    C) quantity of labor supplied will decrease.  D) demand for jobs will decrease.

16) Which of the following statements is correct?
    A) When the real wage decreases, the labor supply curve shifts leftward.
    B) When the real wage increases, the labor supply curve shifts leftward.
    C) When the real wage increases, the labor supply curve shifts rightward.
    D) None of the above statements are correct.
17) Which statement concerning the labor supply curve is correct?
A) The quantity of labor supplied responds strongly to changes in the money wage rate.
B) Labor force participation decreases when the real wage rate rises.
C) For most individuals, a higher real wage rate leads to a decrease in the quantity of labor supplied.
D) A small percentage change in the real wage rate brings a small percentage change in the quantity of labor supplied.

18) If at the prevailing real wage rate, the quantity of labor supplied exceeds the quantity demanded,
A) the real wage rate is greater than the equilibrium real wage rate.
B) the real wage rate will rise to restore equilibrium.
C) there is a shortage of labor.
D) None of the above answers is correct.

![Graph showing labor supply (LS) and labor demand (LD) curves.]

19) In the above figure, if the real wage is $10 per hour, a labor
A) surplus will occur and the real wage will rise.  
B) shortage will occur and the real wage will rise.  
C) shortage will occur and the real wage will fall.  
D) surplus will occur and the real wage will fall.

20) An increase in the population and hence the supply of labor causes a
A) surplus of labor at the original real wage rate, and the real wage rate will fall.  
B) shortage of labor at the original real wage rate, and the real wage rate will rise.  
C) shortage of labor at the original real wage rate, and the real wage rate will fall.  
D) surplus of labor at the original real wage rate, and the real wage rate will rise.

21) An increase in physical capital or a technological advance
A) decreases demand for labor.  
B) decreases the quantity of labor employed.  
C) shifts the production function downward.  
D) raises the real wage rate.
22) An advance in technology shifts the production function upward and shifts the labor
   A) supply curve leftward.  B) demand curve rightward.  
   C) demand curve leftward.  D) supply curve rightward.

23) All of the following contribute to raising real wages over time EXCEPT
   A) physical capital accumulation.  B) technological progress. 
   C) human capital accumulation  D) rising labor force participation.

24) If both the supply of labor and the demand for labor increase, then
   A) long-run aggregate supply increases.  B) the real wage rate increases.
   C) full employment decreases.  D) potential GDP decreases.

25) In the United States, real wage rates have risen because the
   A) labor demand curve has shifted leftward more than the labor supply curve has shifted rightward.
   B) labor demand curve has shifted leftward and the labor supply curve has not shifted.
   C) labor demand curve has shifted rightward more than the labor supply curve has shifted rightward.
   D) labor supply curve has shifted rightward and the labor demand curve has not shifted.

26) In the United States, which of the following occurred between 1981 and 2001?
   A) Technological change decreased the demand for labor.
   B) Capital accumulation and technological change both increased the productivity of labor and the demand
      for labor increased.
   C) The real wage rate decreased because the increase in the demand for labor was less than the increase in the
      supply of labor.
   D) The effects on the supply of labor from the increase in population were greater than the effects on the
      demand for labor from capital accumulation and technological change.

27) Job search occurs
   A) only when the quantity of labor supplied exceeds the quantity of labor demanded.
   B) at all times in the labor market.
   C) only when the quantity of labor demanded exceeds the quantity of labor supplied.
   D) only when labor supply increases.

28) Which of the following have an immediate effect on the amount of job search?
   I. real wage being paid
   II. potential GDP
   III. unemployment benefits
   A) I and III  B) I and II  C) II and III  D) I only

29) An important factor changing the U.S. natural rate of unemployment has been
   A) changes in the population's work ethic.  B) demographic change.
   C) changes in labor productivity.  D) changes in the money wage.
30) Which of the following would decrease the unemployment rate?
   A) an increase in unemployment compensation  
   B) a decrease in the efficiency wages firms pay  
   C) an increase in the efficiency wages firms pay  
   D) an increase in the minimum wage  

31) The benefits to a firm of paying efficiency wages include all of the following EXCEPT
   A) the firm's total wage bill will be lower.
   B) the firm might attract more productive workers.
   C) the firm's workers will be less likely to quit.
   D) the firm's workers will be motivated to work harder.

32) In the above figure, in the absence of efficiency wages, if the real wage is $20 per hour, money wages could
   A) rise or the price level could rise to eliminate unemployment given by ab.
   B) fall or the price level could rise to eliminate unemployment given by ab.
   C) fall or the price level could fall to eliminate unemployment given by ac.
   D) rise or the price level could fall to eliminate unemployment given by ac.

33) In the above figure, if the efficiency wage is $20 per hour,
   A) decreasing the efficiency wage would increase unemployment.
   B) increasing the efficiency wage would decrease unemployment.
   C) reducing the efficiency wage would have no impact on unemployment.
   D) decreasing the efficiency wage would decrease unemployment.

34) If both the demand for and the supply of labor increase but the demand for labor increases faster, over time the
   real wage rate _____ and employment _____.
   A) rises; increases  
   B) falls; increases  
   C) falls; decreases  
   D) rises; decreases
35) One possible factor leading to unemployment is that
A) the minimum wage is above the equilibrium wage rate and efficiency wages are below the equilibrium wage rate.
B) the minimum wage is below the equilibrium wage rate and efficiency wages are above the equilibrium wage rate.
C) both the minimum wage and efficiency wages are above the equilibrium wage rate.
D) both the minimum wage and efficiency wages are below the equilibrium wage rate.