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Test 1
Economics 322
February 11, 2010

Instructions

Part I Multiple Choice. (2.666 points each, 64 points total).

Answer each multiple choice question on the form provided provided. Please fill in your name and also bubble in the grid below your name on the answer sheet. In the field for student number, fill in only the last 5 digits on your student number and bubble in the grid below those numbers.

Part II Analytical Questions (12 points each, 36 points total)

Answer the analytical questions directly on this test sheet.

6) The trough of a business cycle occurs when _____ hits its lowest point. 6) _____
A) aggregate economic activity. B) the unemployment rate.
C) the money supply. D) inflation.

7) An economic variable that moves in the same direction as aggregate economic activity (up in expansions, down in contractions) is called 7) _____
A) procyclical. B) a leading variable.
C) countercyclical. D) acyclical.

8) An adverse supply shock would 8) _____
A) shift the production function up and decrease marginal products at every level of employment.
B) shift the production function up and increase marginal products at every level of employment.
C) shift the production function down and decrease marginal products at every level of employment.
D) shift the production function down and increase marginal products at every level of employment.

9) The fact that the production function relating output to capital becomes flatter as we move from left to right means that 9) _____
A) the marginal product of capital is positive.
B) the marginal product of labor is positive.
C) there is diminishing marginal productivity of capital.
D) there is diminishing marginal productivity of labor.

10) The marginal product of labor (measured in units of output) for Expando Corp. is given by 10) _____

$$MPN = A(400 - N)$$

where A measures productivity and N is the number of labor hours used in production. Suppose the price of output is \$3 per unit and A = 2.0. What will be the demand for labor if the nominal wage is \$18?

- A) 107 B) 397 C) 197 D) 57

11) The tendency of workers to supply more labor in response to a larger reward for working is called the _____ of a higher real wage on the quantity of labor supplied. 11) _____
A) homogeneous labor supply effect
B) substitution effect
C) negative correlation effect
D) income effect

- 12) Suppose the marginal product of labor is 12) _____
 $MPN = 200 - 0.5N$
 where N is aggregate employment. The aggregate quantity of labor supplied is $300 + 8w$, where w is the real wage. What is the equilibrium quantity of employment?
 A) 12 B) 760 C) 190 D) 380
- 13) Desired national saving equals 13) _____
 A) $I^d + G$. B) $Y - C^d - G$.
 C) $C^d + I^d + G$. D) $Y - I^d - G$.
- 14) The desire to have a relatively even pattern of consumption over time is 14) _____
 known as
 A) the consumption-smoothing motive.
 B) forced saving.
 C) excess sensitivity.
 D) the substitution effect.
- 15) When a person gets an increase in current income, what is likely to 15) _____
 happen to consumption and saving?
 A) Consumption increases and saving decreases.
 B) Consumption decreases and saving increases.
 C) Consumption increases and saving increases.
 D) Consumption decreases and saving decreases.
- 16) The Ricardian equivalence proposition suggests that a government 16) _____
 deficit caused by a tax cut
 A) doesn't affect consumption.
 B) raises interest rates.
 C) causes inflation.
 D) causes a current account deficit.
- 17) Calculate the user cost of capital of a machine that costs \$100,000 and 17) _____
 depreciates at a rate of 25%, when the nominal interest rate is 4% and
 the expected inflation rate is 1%.
 A) \$29,000 B) \$28,000 C) \$3000 D) \$25,000
- 18) A technological improvement will 18) _____
 A) decrease the desired capital stock.
 B) have no effect on the desired capital stock.
 C) increase the desired capital stock.
 D) have the same effect on the desired capital stock as an increase in
 corporate taxes.

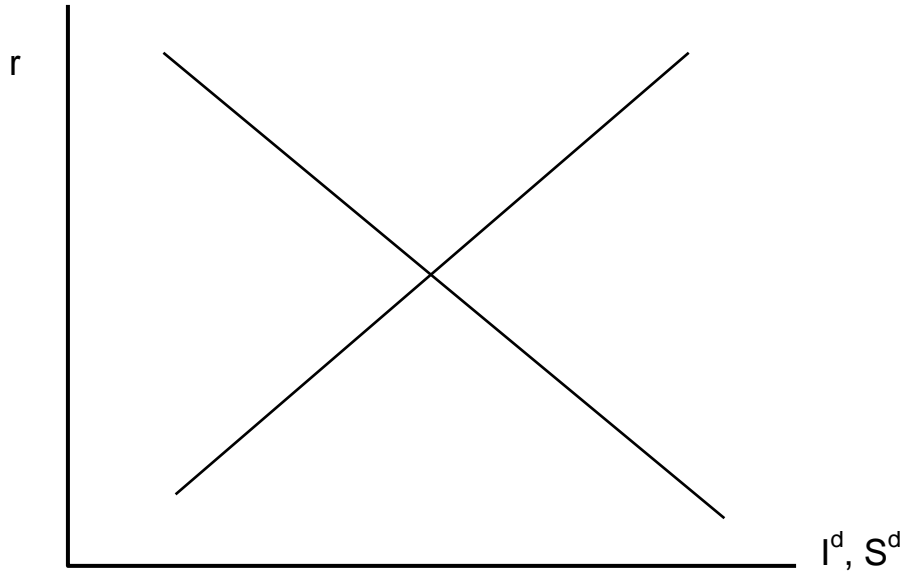
- 19) An economy has full-employment output of 5000. Government purchases are 1000. Desired consumption and desired investment are given by
- $$C^d = 3000 - 2000r + 0.10Y$$
- $$I^d = 1000 - 4000r$$
- where Y is output and r is the real interest rate. The real interest rate that clears the goods market is equal to
- A) 8.33%. B) 1.25%. C) 25.00%. D) 2.50%.
- 19) _____
- 20) A temporary decrease in government purchases would cause
- A) a rightward shift in the saving curve and a rightward shift in the investment curve.
- B) a rightward shift in the saving curve, but no shift in the investment curve.
- C) a rightward shift in the saving curve and a leftward shift in the investment curve.
- D) no shift in the saving curve, but a leftward shift in the investment curve.
- 20) _____
- 21) What's the most common way for a central bank to reduce the money supply?
- A) Buy bonds from the public
- B) Sell bonds to the public
- C) Collect higher taxes
- D) Buy bonds from the government
- 21) _____
- 22) If there is a financial panic and increased uncertainty about the returns in the stock market and bond market, what is the likely effect on money demand?
- A) Money demand declines.
- B) Money demand declines first, then rises when inflation increases.
- C) The overall effect is ambiguous.
- D) Money demand rises.
- 22) _____
- 23) If the nominal money supply doubles while real money demand is unchanged, what happens to the price level?
- A) The price level increases by a factor of four.
- B) The price level is unchanged.
- C) The price level falls by one-half.
- D) The price level doubles.
- 23) _____
- 24) Large differences in inflation rates among countries are almost always the result of large differences in
- A) real income growth.
- B) the growth rates of real money demand.
- C) the growth rates of nominal money supplies.
- D) productivity.
- 24) _____

Part II. Analytical Questions

1. (12 points) Draw a diagram that plots a competitive firm's demand curve for labor (label all curves and axes carefully).

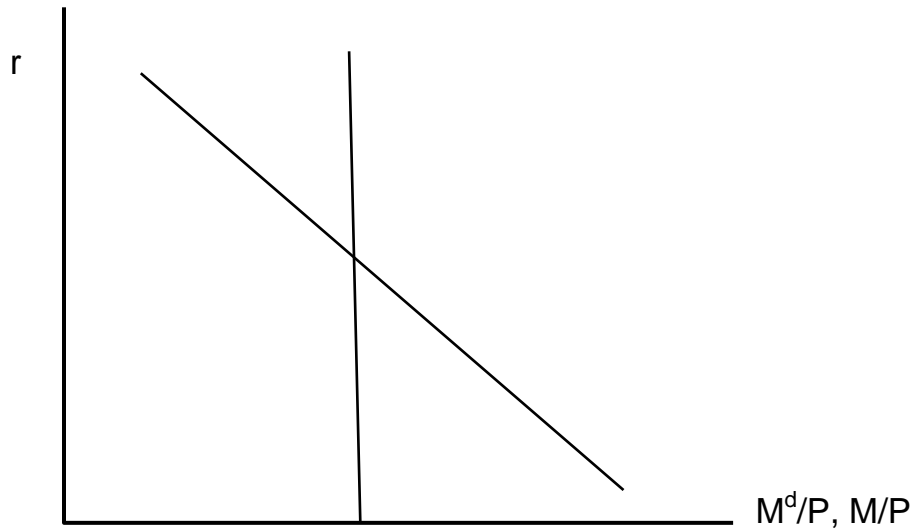
Why is the firm's labor demand schedule downward sloping? (Briefly explain what condition a firm must satisfy to maximize profit in hiring labor, and why satisfaction of this condition implies that the labor demand curve is downward sloping).

2. Answer the questions below that make use of the diagram illustrating desired saving and desired investment curves.



- (a) (4 points) Label the diagram to show which curve is the desired saving curve and which is the desired investment curve.
- (b) (4 points) Briefly explain why the I^d curve has the slope that your diagram shows.
- (c) (4 points) Suppose that real income, Y , rises. In your diagram, show which curve shifts and the direction of the shift. Briefly explain why the curve shifts in this manner.

3. The diagram below shows real money supply and real money demand curves. Answer the questions below the diagram.



(a) (4 points) Label the curves to indicate which is the money demand curve and which is the money supply curve.

(b) (2 points each) For each of the following events, indicate which curve shifts and which direction. Fill in your answers in the table.

- i) Real income, Y , rises.
- ii) The central bank increases the money supply.
- iii) The price level falls.
- iv) The expected rate of inflation rises.

Which curve shifts? (M^d / P or M / P)	Which Direction? (Right or Left)
i)	
ii)	
iii)	
iv)	