

Test 1
Economics 322
Chappell
February 14, 2007

Name _____

Last 4 Digits _____

This test has two parts. There are 25 multiple choice questions at 3 points each (75 points total) . There are three analytical questions, counting for a total of 25 points.

Exam

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Short-run contractions and expansions in economic activity are called 1) _____
A) deficits. B) expansions.
C) recessions. D) the business cycle.

- 2) Because government services are not sold in markets, 2) _____
A) the government tries to estimate their market value and uses this to measure the government's contribution to GDP.
B) taxes are used to value their contribution.
C) they are excluded from measurements of GDP.
D) they are valued at their cost of production.

- 3) The number of unemployed divided by the labor force equals 3) _____
A) the misery index. B) the unemployment rate.
C) the inflation rate. D) the labor force participation rate.

- 4) The country of Old Jersey produces milk and butter, and it has published the following macroeconomic data, where quantities are in gallons and prices are dollars per gallon. 4) _____

	2003		2004	
Good	Quantity	Price	Quantity	Price
Milk	500	\$2	900	\$3
Butter	2000	\$1	3000	\$2

- Between 2003 and 2004, the percent change in real GDP (based on 2003 as a base year) was
A) 60%. B) 190%. C) 130%. D) 58%.

- 5) The country of Old Jersey produces milk and butter, and it has published the following macroeconomic data, where quantities are in gallons and prices are dollars per gallon. 5) _____

	2003		2004	
Good	Quantity	Price	Quantity	Price
Milk	500	\$2	900	\$3
Butter	2000	\$1	3000	\$2

- Between 2003 and 2004, the GDP deflator (based on 2003 as a base year) rose
A) 60.00%. B) 123.00%. C) 83.33%. D) 81.25%.

- 6) The expected real interest rate (r) is equal to 6) _____
A) expected nominal interest rate minus inflation rate.
B) nominal interest rate plus expected inflation rate.
C) nominal interest rate minus expected inflation rate.
D) nominal interest rate minus inflation rate.
- 7) The low point in the business cycle is referred to as the 7) _____
A) trough. B) boom. C) peak. D) expansion.
- 8) A variable that tends to move later than aggregate economic activity is called 8) _____
A) an acyclical variable. B) a lagging variable.
C) a leading variable. D) a coincident variable.
- 9) Which of the following macroeconomic variables is acyclical? 9) _____
A) Unemployment B) Consumption
C) Real interest rates D) Money supply
- 10) The two main characteristics of the production function are 10) _____
A) it slopes upward from left to right, and the slope becomes steeper as the input increases.
B) it slopes downward from left to right, and the slope becomes steeper as the input increases.
C) it slopes upward from left to right, and the slope becomes flatter as the input increases.
D) it slopes downward from left to right, and the slope becomes flatter as the input increases.
- 11) Economists often treat the economy's capital stock as fixed because 11) _____
A) it takes a long time for new investment and the scrapping of old capital to affect the overall quantity of capital.
B) labor is a more important factor of production than capital, so economists ignore capital.
C) unless the interest rate changes, the capital stock doesn't change.
D) there is very little capital in the economy compared to the amount of labor.

12) The Widget Company has the following production function.

12) _____

Number of Workers	Number of Cases Produced
0	0
1	9
2	17
3	24
4	30
5	35

If widgets sell for \$6 each and the wage rate is \$33, how many workers will the company hire?

- A) 2 B) 1 C) 4 D) 0

13) If Jeff's wage rate rises, he decides to work fewer hours. From this, we can infer that

13) _____

- A) for Jeff, the substitution effect is less than the income effect.
B) Jeff is a nitwit.
C) for Jeff, the substitution effect is equal to the income effect.
D) for Jeff, the substitution effect is greater than the income effect.

14) The equilibrium level of employment, achieved after the complete adjustment of wages and prices, is known as the

14) _____

- A) full-employment level of employment.
B) invisible handshake.
C) zero-unemployment level of employment.
D) natural state.

15) Desired national saving equals

15) _____

- A) $Y - I^d - G$. B) $Y - C^d - G$. C) $I^d + G$. D) $C^d + I^d + G$.

16) With no inflation and a nominal interest rate (i) of .03, a person can trade off one unit of current consumption for _____ units of future consumption.

16) _____

- A) .03 B) 0.97 C) -.03 D) 1.03

17) An increase in expected future output while holding today's output constant would

17) _____

- A) increase today's desired consumption and decrease desired national saving.
B) decrease today's desired consumption and decrease desired national saving.
C) decrease today's desired consumption and increase desired national saving.
D) increase today's desired consumption and increase desired national saving.

- 18) The Ricardian equivalence proposition suggests that a government deficit caused by a tax cut 18) _____
A) causes inflation. B) causes a current account deficit.
C) doesn't affect consumption. D) raises interest rates.
- 19) You are trying to figure out how much capacity to add to your factory. You will increase capacity 19) _____
as long as
A) the expected marginal product of capital is positive.
B) the expected marginal product of capital is greater than or equal to the user cost of capital.
C) the expected marginal product of capital is greater than or equal to the expected marginal
product of labor.
D) the expected marginal product of capital is greater than or equal to the marginal product of
capital.
- 20) A temporary decrease in government purchases would cause 20) _____
A) a rightward shift in the saving curve, but no shift in the investment curve.
B) a rightward shift in the saving curve and a rightward shift in the investment curve.
C) no shift in the saving curve, but a leftward shift in the investment curve.
D) a rightward shift in the saving curve and a leftward shift in the investment curve.
- 21) Why do people keep currency in their pockets when bank deposits pay interest? 21) _____
A) Because bank deposits lose value due to inflation.
B) Because currency is more liquid.
C) Because banks might steal your money.
D) Because bank deposits lose value due to changes in interest rates.
- 22) What's the most common way for a central bank to reduce the money supply? 22) _____
A) Buy bonds from the government B) Sell bonds to the public
C) Buy bonds from the public D) Collect higher taxes
- 23) The opportunity cost of holding currency decreases when 23) _____
A) wealth decreases. B) the interest rate on bonds decreases.
C) the interest rate on money decreases. D) income decreases.
- 24) If real GDP is \$4 billion, the price level is 1.25, and the nominal money stock is \$500 million, then 24) _____
velocity is
A) 100. B) 10. C) 1. D) 0.1.

25) If the nominal money supply doubles while real money demand is unchanged, what happens to the price level?

25) _____

- A) The price level falls by one-half.
- B) The price level increases by a factor of four.
- C) The price level is unchanged.
- D) The price level doubles.

Short Analytical Questions

Question 1 (5 points)

Suppose a firm's hourly marginal product of labor is given by $MPN = A(200 - N)$. If $A = 0.2$ and the real wage rate is \$10 per hour, how much labor will the firm want to hire?

Question 2 (10 points)

Use a saving-investment diagram to explain what happens to saving, investment, and the real interest rate when current output rises due to a temporary productivity increase.

Question 3 (10 points)

Suppose the money demand function is:

$$\frac{M^d}{P} = 1000 + 0.2Y - 1000(r + p^e)$$

(a) Write the definition for velocity in equation form. Then calculate velocity if $Y = 2000$, $r = 0.06$, and $p^e = 0.04$ (Hint: Assume that $M = M^d$)

(b) If the money supply is $M = 2600$, what is the equilibrium price level?