

Name: \_\_\_\_\_ Days/Times Class Meets: \_\_\_\_\_ Today's  
Date: \_\_\_\_\_

## Macroeconomics, Spring 2007, Exam 3, several versions, Late April-Early May

**Read these Instructions carefully! You must follow them exactly!**

**I) On your Scantron card you must print three things:**

- 1) Print your full name clearly;
- 2) Print the day and time of your section (for example TTh 7 AM);
- 3) Print the number I have written in ink on the upper right corner of your copy of this test. (This number tells me which version of the test you have. Without it your test cannot be graded properly and you get no credit for your answers.)

**II) Answer on your Scantron card, using a #2 pencil.**

Warning: SOME QUESTIONS MUST BE ANSWERED SEVERAL TIMES! Such questions will begin with a phrase such as this:

**(Repeat your answer on Scantron lines 37, 38 and 39)**

---Remember to do it!

**III) You must turn in this printed exam along with your Scantron card, otherwise your score on this exam is "F".**

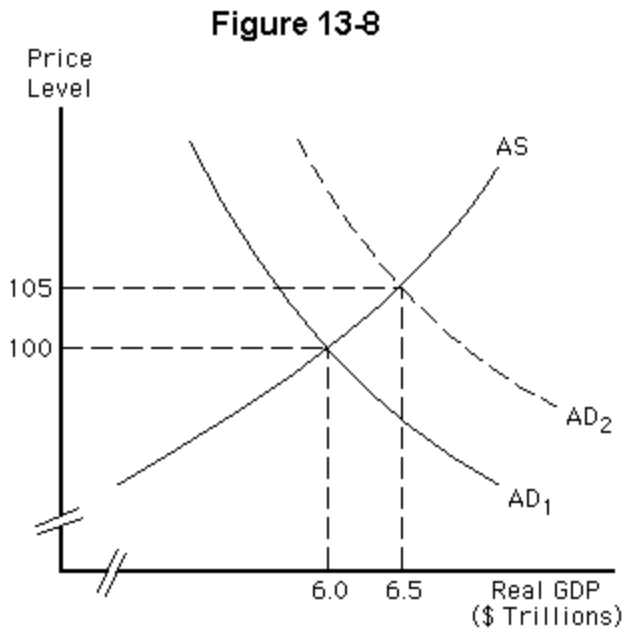
### Questions:

- \_\_\_\_\_ 1. **(Repeat your answer on Scantron line 28.)** Choose the **most complete** answer: An example of "derived demand" is,
- a. the demand curve you are able to derive from analysis of the impact of own price on the demand for a product.
  - b. the increased demand for oranges caused by a rise in the price of a substitute such as apples.
  - c. both d) and e) are correct.
  - d. an increase in the demand for nails because of an increase in the demand for new houses.
  - e. an increase in the supply of dog food in response to an increase in the number of families who have dogs as pets.
- \_\_\_\_\_ 2. **(Repeat your answer on Scantron lines 29 and 30.)** Assume an economy has a natural rate of unemployment of about 5%, which means that unemployment cannot be lower than 5% without creating inflation. Assume the economy is in macroeconomic equilibrium with 10% unemployment. If the Federal Reserve increases the money supply by 15% then roughly the following will happen:
- a. the economy will grow to full employment and prices will rise by 15%.
  - b. employment will remain stagnant and prices will rise by 15%
  - c. employment will rise by 15% and prices will not rise.
  - d. prices will decline and the economy will grow by 10%.
  - e. the economy will grow to full employment and prices will rise by 10%.

- \_\_\_\_\_ 3. **(Repeat this answer on Scantron line 31.)** If people used to expect prices to rise at 2% per year, but expected inflation now has risen to 5% per year,
- nominal interest rates will increase by exactly 3 percentage points, but real interest rates will not be affected very much in the long run.
  - interest rates will decline, since purchasing power now is eroding much faster than before.
  - wealth obviously will be redistributed in haphazard ways, since expected inflation always equals actual inflation--lenders will gain and borrowers will lose.
  - nominal interest rates will be affected far less than real interest rates, which will increase.
  - more than one of these answers is correct.
- \_\_\_\_\_ 4. **(Repeat this answer on Scantron lines 32 and 33.)** If the Fed buys Treasury bills (which increases reserves available to the banking system),
- no answer is any good except this one.
  - either c. or d. is likely to be true, but we don't have enough information to choose between them.
  - the impact on the real economy is likely to be very small, since the classical assumptions are probably fairly realistic.
  - interest rates will tend to decline, the supply of money will tend to rise on balance, and the resulting excess supply of money will cause inventories to drop, therefore increasing either economic activity and/or prices.
  - the money supply will actually decline along with the supply of money, leading to a reduction either in economic activity or prices.
- \_\_\_\_\_ 5. **(Repeat your answer on Scantron line 34.)** If, in the Aggregate Demand/Aggregate Supply model (as presented in the text and lecture), the two curves intersect to the right of Full Employment Output,
- 1) There is a "deflationary gap".
  - 2) Prices and wages will begin to rise, shifting the AS curve upward.
- Only statement 1 is correct.
  - Only statement 2 is correct.
  - Both statements 1 and 2 are correct.
  - Neither statement 1 nor 2 is correct.

- \_\_\_\_\_ 6. **(Repeat your answer on Scantron lines 35 and 36.)** Which of the following statements about measuring prices are true?
- 1) If my "base year basket" costs \$1,000 to purchase this year, and one year from now it costs \$1,200 to purchase the same base year basket, then the price index based on this basket tells you that prices have risen by 10%.
  - 2) If dingbats are one of the goods in the base year basket, and 30% of the base year budget was spent on dingbats, and in some future year all prices are unchanged except the price of dingbats has increased by 20%, then the price index will have risen by 6%.
  - 3) Suppose people are now purchasing more computers and fewer typewriters than in the base year, however we are still using the base year basket to calculate inflation. Suppose also that typewriter prices have been rising and computer prices have been falling. Then the computed price index will show less inflation than actually exists.
- a. All the above statements are correct.
  - b. Only statement 1 is correct.
  - c. Only statement 2 is correct.
  - d. Only statement 3 is correct.
  - e. Only statements 2 and 3 are correct.
- \_\_\_\_\_ 7. According to the text, what is the approximate natural rate of unemployment in the United States at present?
- a. 4.5 percent
  - b. 5.5 percent
  - c. 7 percent
  - d. 8.5 percent
  - e. 2.5 percent
- \_\_\_\_\_ 8. **(Repeat your answer on Scantron line 37.)** In its day-to-day operations, the Fed focuses on
- a. an unemployment rate target
  - b. an inflation rate target
  - c. an interest rate target
  - d. a money demand curve target
  - e. several economic targets together
- \_\_\_\_\_ 9. What is a good historical example of when the Fed created a recession to reduce inflation expectations?
- a. in the early 1980s
  - b. in the early 1960s
  - c. during the Great Depression
  - d. in the late 1920s
  - e. during World War II

- \_\_\_\_\_ 10. **(Repeat your answer on Scantron lines 38 and 39.)** If the Fed conducts open market purchases, we should expect to see the money supply
- decrease, the interest rate increase, autonomous consumption decrease, business investment decrease, and real GDP decrease
  - increase, the interest rate decrease, autonomous consumption decrease, business investment decrease, and real GDP decrease
  - increase, the interest rate decrease, autonomous consumption increase, business investment increase, and real GDP increase
  - decrease, the interest rate decrease, autonomous consumption increase, business investment increase, and real GDP decrease
  - decrease, the interest rate increase, autonomous consumption increase, business investment increase, and real GDP increase
- \_\_\_\_\_ 11. If Congress voted to eliminate the minimum wage, which of the following would most likely occur?
- decrease in unit costs and an upward shift of the aggregate supply curve
  - decrease in unit costs and an upward movement along the aggregate supply curve
  - decrease in unit costs and a downward shift of the aggregate supply curve
  - increase in unit costs and an upward shift of the aggregate supply curve
  - increase in unit costs and an upward movement along the aggregate supply curve
- \_\_\_\_\_ 12. **(Repeat your answer on Scantron line 40.)** When many banks fail simultaneously, this is known as a
- bank run
  - depression
  - recession
  - banking panic
  - Federal Reserve crisis



- \_\_\_\_\_ 13. Refer to **Figure 13-8**. Suppose that the economy is at the full-employment level of output of \$6 trillion when a demand shock increases real GDP to \$6.5 trillion. In the long run, we would expect the
- economy to remain at the new level of output of \$6.5 trillion
  - aggregate demand curve to shift leftward until the economy returns to full employment at the original price level
  - aggregate supply curve to shift upward until the economy returns to full employment, but at a higher price level
  - aggregate supply curve to shift downward until the price level returns to its original level
  - aggregate demand curve to shift further to the right as the multiplier effect occurs
- \_\_\_\_\_ 14. If the Fed lowered the required reserve ratio,
- excess reserves would decrease
  - banks would reduce their loans
  - the money supply would increase
  - banks would borrow more from the Fed
  - loans would earn more interest
- \_\_\_\_\_ 15. (**Repeat your answer on Scantron line 41.**) Which of the following Federal Reserve policy tools is used most often?
- open market operations
  - changing the required reserve ratio
  - changing the discount rate
  - changing the prime lending rate
  - moral suasion

- \_\_\_\_\_ 16. **(Repeat your answer on Scantron line 42.)** One of the most serious effects of a banking panic is that
- banks will not earn as much profit
  - banks will no longer be trusted by the public
  - people will not place their excess money in banking accounts
  - people may lose any accrued interest on their accounts
  - large withdrawals of cash lead to a severe decrease in reserves and ultimately in the money supply
- \_\_\_\_\_ 17. Which of the following best describes the history of bank failures in the U.S. from 1863 to the present?
- Bank failures were eliminated after 1913.
  - Bank failures were common until 1940 but were almost nonexistent until the late 1980s.
  - Bank failures have always been rare events.
  - Bank failures were common until 1940 and were eliminated thereafter.
  - Bank failures have always been common.
- \_\_\_\_\_ 18. Which of the following is a cost of providing federal deposit insurance?
- Banks have more incentive to monitor loans with the result that their profits have declined and many have failed.
  - There are no significant costs to the insurance, only benefits.
  - Banks have less incentive to act responsibly with the result that they have made riskier loans and some have failed.
  - The insurance makes it more difficult to regulate banks.
  - The insurance makes it more difficult for the fed to run open market operations.
- \_\_\_\_\_ 19. According to classical economists,
- the economy is always at full employment
  - no government action is needed to ensure full employment
  - if the economy is to reach full employment, government action is needed to correct labor market imperfections
  - the economy will be at full employment if government provides jobs to those who need them
  - cyclical unemployment, once it occurs, will not go away without government intervention
- \_\_\_\_\_ 20. **(Repeat your answer on Scantron line 43.)** If a lender wants a real return of 6 percent and she expects inflation to be 4 percent, which of the following is the correct nominal interest rate to charge?
- 4 percent
  - 6 percent
  - 2 percent
  - 10 percent
  - 2 percent

- \_\_\_\_\_ 21. **(Repeat your answer on Scantron line 44.)** *Gross domestic product (GDP)* is
- the total value of all goods and services produced for the marketplace during a given period, within a nation's borders
  - the total value of all final goods and services produced for the marketplace during a given period, by a nation's citizens and businesses
  - the total value of all final goods and services produced for the marketplace during a given period, within a nation's borders
  - the total value of all goods and services produced for the marketplace during a given period, by a nation's citizens and businesses
  - the total value of all goods, services and inputs produced for the marketplace during a given period, within a nation's borders
- \_\_\_\_\_ 22. A firm's *value added* is
- the revenue it receives by selling its output
  - usually not included in GDP
  - the revenue it receives for its output, minus the cost of all the inputs of production it buys
  - the revenue it receives for its output, plus the cost of all the inputs of production it buys
  - the revenue it receives for its output, minus the cost of the resources of production it uses producing that output

$$Y = \left( \frac{1}{1 - c(1 - t) + \alpha} \right) (a + I_g + G - cT_f + X)$$

- \_\_\_\_\_ 23. **(Repeat your answer on Scantron lines 45 and 46.)** Refer to the equation just above if it helps you, and assume the Keynesian model is accurate because changes in interest rates do not change any of the variables. Also assume that the marginal propensity to import equals zero, and also “t” in the equation = 0. Now the government increases both government spending and taxes by \$100 billion. Then choose the best answer.
- Under these assumptions, interest rates will rise but the economy will not be stimulated.
  - Under these assumptions, interest rates definitely will remain unchanged and also the economy will not be stimulated.
  - Under these assumptions the economy will actually go into a recession.
  - Under these assumptions, interest rates definitely will remain unchanged and also the economy will be stimulated.
  - Under these assumptions, interest rates will rise and the economy will be stimulated.
- \_\_\_\_\_ 24. **(Repeat this answer on Scantron line 47.)** Which of the following statements are true about "the multiplier" and "autonomous spending"?
- If the Keynesian model is correct, if the multiplier gets larger GDP will get smaller.
  - If the Keynesian model is correct, if the multiplier gets larger autonomous spending will get smaller.
  - Government spending is part of autonomous spending in a simple Keynesian model, but exports are not.
  - no other answer is true.
  - all other answers are true (except “no other answer is true”).

## Equation for the Money Supply

$$M_S = (C_T + T_f + L_f) \frac{\left(1 + \frac{1}{r_{cd}}\right)}{\left(1 - \frac{x_d}{r_{cd}} + \frac{x_t}{r_{ct}}\right)}$$

- \_\_\_\_\_ 25. **(Repeat this answer on Scantron line 48.)** Suppose that two major U.S. banks unexpectedly fail. Many citizens lose access to their checking accounts for several weeks. Also assume the Fed stupidly does nothing--does not buy or sell Government securities, does not lend at the discount window, does not change reserve requirements. Evaluate each of the following statements and select the best answer. (Refer to the money supply equation given just above if this helps you.)
- 1)  $x_d$  and  $x_t$  in the equation will increase because many bankers will fear a banking panic.
  - 2) the public's desired ratios of currency to demand deposits, and currency to time deposits, will increase.
  - 3) the money supply will increase because people will want to hold more cash than before, as a safety factor.
- a. all three statements are correct.
  - b. all three statements are false.
  - c. only statements 1 and 2 are correct.
  - d. only statements 2 and 3 are correct.
  - e. only statement 2 is correct.
- \_\_\_\_\_ 26. **(Repeat your answer on Scantron line 49.)** In the money supply equation just above, assume that  $C_T = 50$ ;  $T_f = 130$ ,  $L_f = 20$ ;  $r_d = .4$  and  $r_t = .1$ ,  $s_d = .3$  and  $s_t = .6$ ;  $r_{cd} = 1$  and  $r_{ct} = 1$ . Then
- a. the "money multiplier" is 1.34
  - b. the "money multiplier" is 1.00
  - c. the "money multiplier" is some other number than given in a) or b) above
  - d. if  $C_T$  increases to 75, the money supply will grow by more than 25
  - e. both c) and d) are correct



- \_\_\_\_\_ 27. **(Repeat this answer on Scantron line 50.)** Refer to the above equation for the money supply. Assume the following: 1) that changes in interest rates do not significantly alter the public's desired ratios of currency to demand deposits and currency to time deposits; 2) the Fed does not change any of the variables over which it exercises control; 3) the demand for money is inversely related to interest rates (interest rates up causes demand for money to fall). Then, an increase in government spending or a reduction in taxes
- will increase interest rates and have no impact on economic activity.
  - will increase economic activity because under these assumptions interest rates will not change and so the Keynesian model gives accurate predictions.
  - will result in both an increase in interest rates and also an increase in prices and/or economic activity (the latter because of an excess supply of money).
  - will reduce interest rates and have no impact on economic activity.
  - will actually reduce economic activity because the rise in interest rates will reduce borrowing and therefore spending.

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Answer Section**

**MULTIPLE CHOICE**

1. ANS: D
2. ANS: E
3. ANS: A
4. ANS: D
5. ANS: B
6. ANS: C
7. ANS: A
8. ANS: C
9. ANS: A
10. ANS: C
11. ANS: C
12. ANS: D
13. ANS: C
14. ANS: C
15. ANS: A
16. ANS: E
17. ANS: B
18. ANS: C
19. ANS: B
20. ANS: D
21. ANS: C
22. ANS: C
23. ANS: E
24. ANS: D
25. ANS: C
26. ANS: B
27. ANS: C