

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

## Macroeconomics, Spring 2008, Final Exam, several versions

**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".**

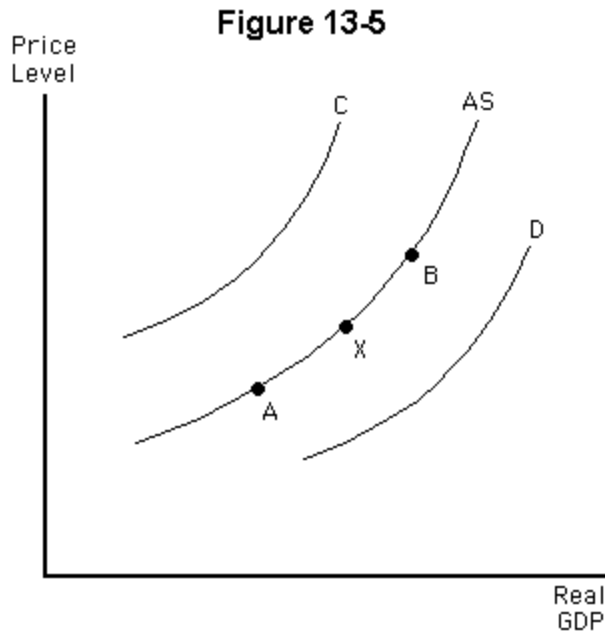
### Questions:

- \_\_\_\_\_ 1. **(Repeat your answer on Scantron lines 29 and 30.)** Assume that the Fed is successful in keeping the money supply constant, and suppose the economy is in an unemployment equilibrium. Earlier in the semester we “learned” that if government spending is increased, or taxes are cut, there will be no change in total economic activity, only interest rates will rise. But in that reasoning we left out two important facts we learned recently, namely: when interest rates rise, this causes the demand for money to decline and the supply of money to rise. If you take these additional facts into account, which of the following is the best answer about impact of increases in government spending or cuts in taxes?
- a. a tax cut will increase economic activity, but an increase in government spending will not
  - b. an increase in government spending will increase economic activity, but a tax cut will not
  - c. both will increase economic activity and/or increase prices
  - d. both will reduce economic activity and/or decrease prices
  - e. both will still leave total economic activity unchanged, since the supply of money is still being held constant.

Recall:

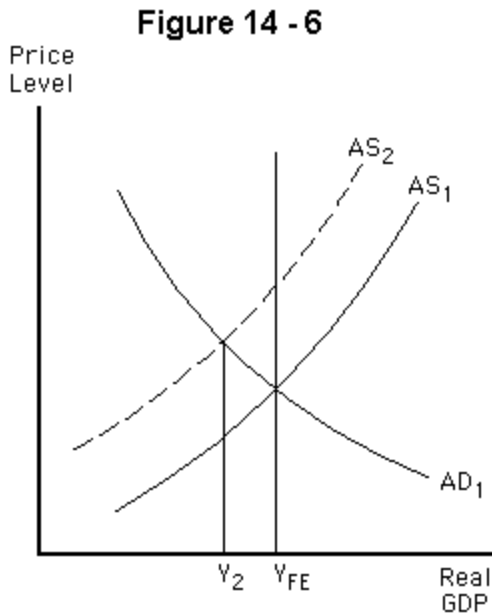
$$FR = IR * (FN/IN)*(IP/FP)$$

- \_\_\_\_\_ 2. **(Repeat your answer on Scantron lines 31 and 32.)** Between 1960 and 1970 the price index rises from 20 to 40. Over the same period your nominal wage rises from \$10/hour to \$30/ hour. Assume your real wage was \$12 in 1960. Then in 1970 your real wage becomes:
- \$8
  - \$2
  - \$18
  - \$60
  - \$24
- \_\_\_\_\_ 3. According to lecture, the aggregate demand curve
- represents the relationship between prices and quantities of all goods produced in an economy
  - is derived from equilibrium conditions in the labor and money markets
  - gives the combinations of real GDP and price level which make the supply and demand for money equal to each other
  - is the sum of an economy's individual demand curves
  - plots the interest rate as a function of output
- \_\_\_\_\_ 4. **(Repeat your answer on Scantron line 33.)** Choose the BEST answer. If the Fed sells bonds in an open market operation, which of the following is most likely to occur?
- the money supply decreases and also, probably, the equilibrium level of GDP
  - the money supply increases
  - the Federal Funds interest rate falls
  - the aggregate spending in the Keynesian model would increase
  - more than one answer is probably correct



- \_\_\_\_\_ 5. Refer to **Figure 13-5**. Assuming that the economy starts at point X on the Aggregate Supply curve, a decrease in world oil prices would
- move the economy to point A
  - move the economy to point B
  - shift the aggregate supply curve upward to curve C
  - shift the aggregate supply curve downward to curve D
  - have no impact since the model only shows the relationship between the overall price level and real GDP
- \_\_\_\_\_ 6. (**Repeat your answer on Scantron lines 34 and 35.**) If Congress voted to eliminate the minimum wage, how would this affect the aggregate supply-aggregate demand curve model?
- decrease in unit costs and an upward shift of the aggregate supply curve
  - decrease in unit costs and an upward movement along the aggregate demand curve
  - decrease in unit costs and a downward shift of the aggregate supply curve, also an increase in full employment output
  - increase in unit costs and an upward shift of the aggregate supply curve
  - no other answer is correct
- \_\_\_\_\_ 7. As discussed in the text, a demand shock
- is any event that causes the aggregate demand curve to shift
  - is usually caused by a change in the price level
  - is usually caused by a change in real GDP
  - can be traced back to a shift in the economy's production possibilities frontier
  - is generally a good thing for the economy

- \_\_\_\_\_ 8. If a demand shock causes an “inflationary gap” (this was defined in lecture), resulting in the economy operating above full employment GDP, then:
- the aggregate supply curve will shift downward to return the economy to the original point of equilibrium
  - the economy will correct itself through rising wages and prices, which shifts the aggregate supply curve upward.
  - this short-run equilibrium point will become the new long-run equilibrium GDP
  - the economy will correct itself through falling wage rates and prices
  - the shock is said to be a negative demand shock
- \_\_\_\_\_ 9. *Stagflation*
- is caused by a negative demand shock
  - is theoretically impossible
  - is a long-run phenomenon
  - was rampant during the Great Depression
  - is the combination of rising price levels and negative GDP growth
- \_\_\_\_\_ 10. **(Repeat your answer on Scantron line 36.)** The increase in world oil prices in 1990 initially
- caused the AS curve to shift upward as wage rates quickly adjusted
  - increased the level of GDP associated with high price levels
  - shifted the aggregate expenditure line upward
  - caused the AS curve to shift upward due to higher costs per unit of output
  - caused the AD curve to shift leftward due to an increasing interest rate
- \_\_\_\_\_ 11. At present, what is the approximate natural rate of unemployment in the United States?
- 4.5 percent
  - 5.5 percent
  - 7 percent
  - 8.5 percent
  - 2.5 percent
- \_\_\_\_\_ 12. The historical record of the Fed's success in controlling inflation has been
- consistently strong
  - inconsistent
  - consistently disappointing
  - shaped primarily by supply shocks
  - incapable of measurement



- \_\_\_\_\_ 13. **(Repeat your answer on Scantron line 37.)** Refer to **Figure 14-6**. Suppose a supply shock shifts aggregate supply from  $AS_1$  to  $AS_2$  and decreases output below full employment. Which of the following statements is most accurate?
- By increasing the money supply, the Fed can stabilize the interest rate and price level and return output to its full-employment level.
  - By decreasing the money supply, the Fed can stabilize the interest rate and price level and return output to its full-employment level.
  - By increasing the money supply, the Fed can stabilize the price level but output will remain below the full-employment level.
  - By increasing the money supply, the Fed can return output to its full-employment level but at the expense of a further increase in the price level.
  - By increasing the money supply, the Fed can stabilize the price level and return output to its full-employment level but must sacrifice its interest rate target.
- \_\_\_\_\_ 14. **(Repeat your answer on Scantron line 38.)** Refer to **Figure 14-6**. Suppose a supply shock shifts the aggregate supply curve from  $AS_1$  to  $AS_2$ , and decreases output below full employment. If the Fed then decreases the money supply, this could
- stabilize the price level, but cause a further decline in output
  - return output to its full-employment level, but at the expense of an increase in the price level
  - increase both output and the price level
  - stabilize the price level and return output to its full-employment level
  - decrease the price level and shift the aggregate demand curve to the right until output returns to its full-employment level

- \_\_\_\_\_ 15. According to the Taylor rule,
- the Fed would have the discretion to choose an appropriate inflation rate
  - the Fed would announce targets for the inflation rate and real GDP
  - the Fed would allow the inflation rate to increase by about 0.5 percent per year
  - the Fed would allow the price level to increase by about 0.5 percent per year
  - Congress would set an annual inflation rate target
- \_\_\_\_\_ 16. The precise definition of *GDP* is the total value of all
- goods and services produced by a nation, minus household labor
  - goods and services produced by a nation, minus depreciation
  - goods and services produced for the marketplace during a given period
  - final goods and services produced for the marketplace during a given period, within a nation's borders
  - final goods and services produced within a nation's borders during a given period
- \_\_\_\_\_ 17. Assume that the telephone company built a new plant this year. The value of the new plant is
- counted in GDP as public investment
  - not counted in GDP
  - not included in private investment spending
  - an intermediate good, but it is not counted in GDP
  - included in GDP
- \_\_\_\_\_ 18. Inventories — goods produced but not sold — are included in GDP because
- we want to measure total production, not just what is purchased
  - they are an important component of consumption in later periods
  - stores count their inventories as part of their profits
  - they are needed for planning for next year's production levels
  - firms need to know when to lower prices
- \_\_\_\_\_ 19. The factor payments measure of GDP
- can be expressed as  $GDP = C + I + G + NX$
  - is found by summing all expenditures on final goods and services during the year
  - calculates how much value was added at each stage of production
  - is found by summing all interest, rent, profit, and wages and salaries generated during the year
  - calculates how much workers paid for goods and services during the year
- \_\_\_\_\_ 20. (**Repeat your answer on Scantron lines 39 and 40.**) Consider the following “formula” and then provide the best possible answer.
- The formula  $(\%Ch \text{ in } Real \text{ GDP}) = (\%Ch \text{ in } Nominal \text{ GDP})$
- cannot be correct
  - is correct provided prices are decreasing slowly
  - is correct provided prices are rising slowly
  - plus  $(\%Ch \text{ in } Prices)$  [This would correctly complete the formula.]
  - minus  $(\%Ch \text{ in } Prices)$  [This would correctly complete the formula.]

- \_\_\_\_\_ 21. **(Repeat your answer on Scantron line 41.)** Which of the following annual real GDP growth rates would be needed to prevent the U.S. unemployment rate from rising?
- 3.5 percent
  - 2.5 percent
  - 10 percent
  - 5 percent
  - 1 percent
- \_\_\_\_\_ 22. Some of the inaccuracies in measuring GDP are attributable to
- monopolization
  - ignoring production by U.S.-owned plants abroad
  - the underground economy and quality changes
  - tax evasion and inflation
  - short-term changes in spending
- \_\_\_\_\_ 23. An example of a frictionally unemployed individual is
- Sylvia, who quit her job to spend more time with her children
  - Rod, the lifeguard, who cannot find a job because the temperature is too low in October
  - Ileana, a college student who quits her job to return to school
  - Steve, an individual does not have skills to keep his job as an aerospace engineer
  - Samantha, who quits her job to look for better one
- \_\_\_\_\_ 24. **(Repeat your answer on Scantron line 42.)** Dennis is an excellent typist. However, because he has been unable to adapt to his company's new computer system, he has lost his job. He is currently seeking another secretarial position, but it is likely that he will have to acquire new skills to become employable as a secretary again. Dennis would best be described as
- frictionally unemployed
  - seasonally unemployed
  - structurally unemployed
  - cyclically unemployed
  - not in the labor force
- \_\_\_\_\_ 25. **(Repeat your answer on Scantron line 43.)** Choose the best answer. "The accelerator effect"
- all of these other answers are correct.
  - occurs because just as the economy reaches full capacity and needs to decelerate, there may be a large increase in demand for net investment expenditures.
  - has very little effect on any economy which is at the lowpoint of a recession, with lots of idle capacity.
  - makes it kind of silly to assume that investment expenditures are autonomous, as in the simple Keynesian model.
  - is difficult to manage because a small change in the expected growth rate can have a large effect on the demand for investment goods.

## Equation for the Money Supply

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

- \_\_\_\_\_ 26. **(Repeat your answer on Scantron lines 44 and 45.)** 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.
- \_\_\_\_\_ 27. **(Repeat your answer on Scantron lines 46 and 47.)** Suppose the economy is in an unemployment equilibrium and the Fed keeps all its policy variables unchanged (does nothing which might change the money supply). Based on recent lectures concerning the U.S. banking system, the supply and demand for money, and monetary and fiscal policy, which of the following statements agree with the views of your instructor?
- a. A tax cut will increase interest rates but will not stimulate the economy.
  - b. A tax cut will increase interest rates, and may cause an excess supply of money and therefore slightly stimulate the economy.
  - c. A tax cut will increase interest rates, which will reduce private borrowing for the purchase of houses and cars, and therefore slightly depress the economy.
  - d. A tax cut will stimulate the economy but leave interest rates unchanged.
  - e. A tax cut will leave interest rates unchanged because the economy is in a recession but will not stimulate the economy.



- \_\_\_\_\_ 28. **(Repeat your answer on Scantron lines 48, 49 and 50.)** Think about an “experiment” in which the economy begins in a macroeconomic equilibrium, except that the money supply is growing for many years at the rate of 5% per year more than is needed, so prices have been rising at the rate of 5% per year. The economy is at full employment. The “real” interest rate,  $r$ , is about 4%. Now the experiment begins. Telling nobody, the Fed begins buying government securities more slowly than before, permanently reducing the rate of excessive money growth from 5% per year down to 2% per year. Evaluate the following statements, and then choose the best answer.
- 1) Before the experiment begins, the nominal interest rate is 6%.
  - 2) Immediately after the experiment begins, both nominal and real interest rates will rise, by the same amount.
  - 3) As time passes, both real and nominal interest rates will decline, but real interest rates will decline by more than nominal rates.
- a. All three statements are correct.
  - b. None of the three statements are correct.
  - c. Only statement 2 is correct.
  - d. Only statements 2 and 3 are correct.
  - e. Only statement 1 is correct.

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Answer Section**

**MULTIPLE CHOICE**

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