

Assigned Seat _____

Name _____

ECO202: PRINCIPLES OF MACROECONOMICS

SECOND MIDTERM EXAM

SPRING 2007

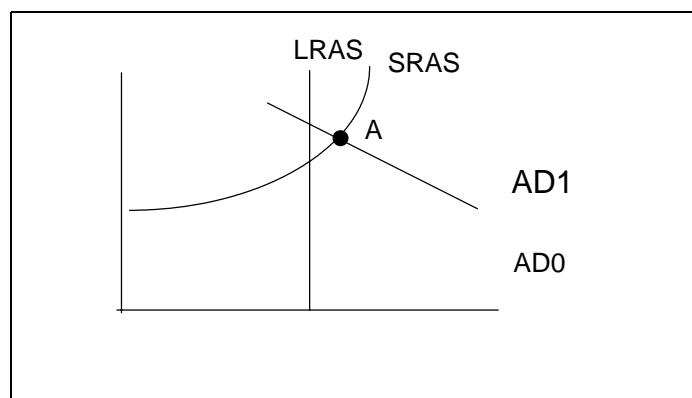
Prof. Bill Even

FORM 1

Directions

1. There are 39 questions on the exam. You will receive a 2 percentage point bonus for properly filling in your unique id on the scantron. Your grade is determined entirely by the answers you record on the scantron.
2. You may use a calculator. No cell phones or devices capable of storing text are allowed.
3. You have until the end of the period to finish the exam. No extra time will be allowed.
4. Academic dishonesty is a serious offense. If I find someone behaving in a dishonest manner, I will ask that the maximum penalty allowed by the university be imposed.

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- 1) Which of the following combination of events would **ALL** shift the long run aggregate supply curve to the right?
- an increase in labor demand, an increase in labor supply, or an upward shift in the production function.
 - an increase in labor demand, a decrease in labor supply, or an upward shift in the production function.
 - a decrease in labor demand, a decrease in labor supply, or a downward shift in the production function.
 - none of the above.
- 2) When the price level rises and the economy moves along the **short run** aggregate supply curve, the real wage _____, employment _____ and real GDP _____.
- does not change; rises; rises.
 - falls; rises; rises.
 - rises; rises; rises.
 - none of the above.
- 3) When the price level rises, the aggregate quantity of goods and services demanded:
- falls because there is an intertemporal substitution effect that causes people to save more and consume less.
 - rises because there is an intertemporal substitution effect that causes people to save less and consume more.
 - rises because people's real wealth rises causing them to consume more.
 - both b and c.
- 4) Which of the following would ALL contribute to a leftward shift of the AD curve?
- a weaker dollar in foreign exchange markets; a tax cut; and higher interest rates.
 - a stronger dollar in foreign exchange markets; a tax increase; and higher interest rates.
 - a stronger dollar in foreign exchange markets; a tax increase; and lower interest rates.
 - none of the above.



- 5) Suppose the economy is at the point A in the above diagram. At this point, the unemployment rate is (above, below) the natural rate and there is (upward, downward) pressure on real wages.
- above; downward.
 - above; upward.
 - below; downward.
 - below; upward.
- 6) Suppose that the economy is at the point A in the above diagram. As the economy returns to its long run equilibrium, we should expect to see the price level (*rise, fall*), real wages (*rise, fall*) and the unemployment rate (*rise, fall*).
- rise; rise; rise.
 - rise; fall; rise.
 - rise; fall; fall.
 - none of the above.
- 7) Suppose that the economy is currently at a long run equilibrium. If consumers become less confident of their job security and adjust their spending habits accordingly, the short run effect would be that prices would (*rise, fall*), real wages would (*rise, fall*), and the unemployment rate would (*rise, fall*).
- rise; fall; fall.
 - rise; fall; rise.
 - fall; rise; rise.
 - none of the above.
- 8) Suppose that the economy is at a long run equilibrium. If the Federal Reserve lowers interest rates, we should expect that in the LONG RUN,
- nominal wages and prices would rise, but real wages would be unchanged
 - the unemployment rate would remain at the natural rate of unemployment.
 - real GDP would remain at potential GDP.
 - all of the above.
- 9) A bank panic
- occurs when bank depositors begin to suspect that banks have loans that will not be paid back.
 - can cause M1 to drop and interest rates to rise.
 - can cause AD to decrease and lead to a decline in real GDP.
 - all of the above.
- 10) Money has several functions, but not all are unique to money. Which of the following functions is unique to money?
- unit of account.
 - medium of exchange.
 - store of value.
 - precious metal backing.

11) Recent evidence reviewed in recent Wall Street Journal articles suggests that:

- a. productivity growth in the U.S. may be rising and this could increases inflationary pressures in the economy.
- b. there is evidence that the Fed's estimate of NAIRU has been reduced implying that the unemployment rate can drop lower than previously thought before the Fed starts raising interest rates,
- c. there is evidence that the Fed's estimate of NAIRU has been increased implying that the unemployment rate can drop lower than previously thought before the Fed starts cutting interest rates.
- d. both a and b.

12) Which of the following is FALSE?

- a. Ben Bernanke is the current chair of the Federal Reserve Board of Governors.
- b. There are 12 districts in the U.S. Federal Reserve System.
- c. The Federal Open Market Committee makes the main policy decisions for the Federal Reserve.
- d. The federal funds rate is the interest rate that the Federal Reserve charges a member bank for a loan of reserves.

To answer the next 4 questions, assume that the banking system starts with the following "base case" balance sheet and that

* the public initially holds \$2,000 billion of cash outside the bank.

* the reserve ratio is 5%

* banks always loan out the maximum amount allowed.

BALANCE SHEET (all figures are in billions of \$)

Loans	\$225,000	Demand Dep.'s	\$200,000
Reserves	\$10,000		
Govt. Secur.'s	<u>\$15,000</u>	Owner's Equity	<u>\$50,000</u>
	\$250,000		\$250,000

13) Start with the base case balance sheet. M1 is _____ and the monetary base is _____. (You may assume there are no travelers checks in circulation.)

- a. \$10,000 billion; \$20,000 billion
- b. \$200,000 billion; \$12,000 billion.
- c. \$200,000 billion; \$2,000 billion.
- d. none of the above.

14) **Start with the base case balance sheet and the 5% reserve ratio.** If the Fed buys \$10 billion of government securities to banks and the banking system completely adjusts to this change in their balance sheet, loans will _____ and M1 will _____.

- a. increase \$10 billion; increase \$200 billion.
- b. increase \$200 billion; increase \$200 billion.
- c. decrease \$10 billion; decrease \$200 billion.
- d. none of the above.

15) **Start with the base case balance sheet and the 5% reserve ratio.** If the Fed lowers the reserve ratio from 5% to 4% and the bank system completely adjusts to this change, loans would _____.

- a. increase \$25,000 billion.
- b. decrease \$25,000 billion.
- c. increase \$5,000 billion.
- d. none of the above.

16) **Start with the base case balance sheet and the 5% reserve ratio.** If people decide to hold \$1 billion more as cash outside of the bank and hold \$1 billion less as demand deposits, after the banking system fully adjusts to the change, demand deposits would _____.

- a. decrease \$1 billion.
- b. decrease \$20 billion.
- c. not change.
- d. none of the above.

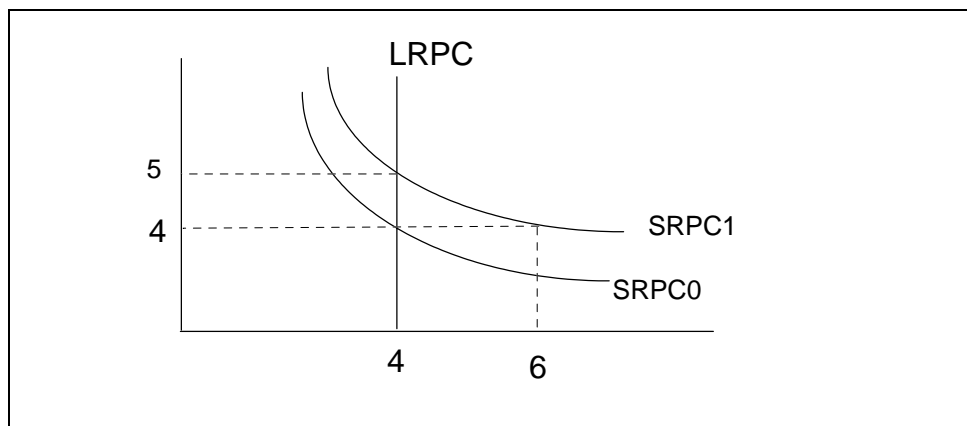
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- 17) According to the equation of exchange, inflation would increase if any of the following occurred.
- the velocity of money rises, growth in real GDP falls, or the growth rate of the money supply falls.
 - the velocity of money rises, growth in real GDP falls, or the growth rate of the money supply rises.
 - the velocity of money falls, growth in real GDP falls, or the growth rate of the money supply rises.
 - a. the velocity of money rises, growth in real GDP rises, or the growth rate of the money supply falls.
- 18) Suppose that the Federal Reserve decides that it wants to lower interest rates. Which of the following combination of policies would all support the Fed's goals?
- The Fed sells government securities and lowers the discount rate.
 - The Fed buys government securities and raises the required reserve ratio.
 - The Fed buys government securities and lowers the discount rate.
 - The Fed sells government securities and lowers the required reserve ratio.
- 19) Which of the following statements is FALSE?
- In the U.S. today, the dollar is no longer backed by gold.
 - The Federal Reserve system serves as the clearinghouse for checks in the U.S.
 - The federal funds rate is the interest rate that the Fed charges a bank for a loan of reserves.
 - The Federal Reserve sets a higher reserve ratio for demand deposits than CDs (certificates of deposit).
- 20) Suppose that there is a bi-metallic standard. A one dollar gold coin contains 20 grains of gold and a one dollar silver coin contains 100 grains of silver. If the free market price of one grain of gold is six times as high as that for one grain of silver, we should expect that:
- gold coins will circulate as money and silver coins will not be used as money.
 - silver coins will circulate as money and gold coins will not be used as money.
 - neither silver or gold coins will circulate as money.
 - both silver and gold coins will circulate as money.
- 21) Suppose that a one year bond has a coupon rate of 6% and a maturity value of \$1000. If the bond is purchased today for \$980, its yield if held to maturity would be:
- 5.7%
 - 6.0%
 - 7.6%
 - 8.2%
- 22) Suppose that a 10 year zero coupon bond with a maturity value of \$1000 sells for \$500 today. What is the annual yield on this bond?
- 100%
 - 9.3%
 - 7.2%
 - 5.1%
- 23) Suppose that the yield curve is currently downward sloping. This implies that:
- interest rates are higher on short term than long term bonds
 - interest rates are higher on long term than short term bonds
 - interest rates are higher on BB than AA bonds.
 - interest rates are higher on AA than BB bonds.

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- 24) Evidence suggests that
- an inverted yield curve frequently signals that inflationary pressures are higher than when the yield curve slopes upward..
 - an inverted yield curve signals that a future recession is more likely than when the yield curve slopes upward..
 - an upward sloping yield curve signals that the risk of default on government bonds is higher than when the yield curve is inverted.
 - an upward sloping yield curve signals that a future recession is more likely than when the yield curve is inverted.
- 25) An inverted yield curve suggests that financial markets believe that,
- in the future, short term interest rates will fall below their current level.
 - in the future, short term interest rates will rise above their current level.
 - in the future, inflation rates will rise above their current level.
 - in the future, unemployment rates will fall below their current level.
- 26) During a hyper-inflation:
- the money supply is growing at a very rapid pace.
 - there is a flight from money as barter becomes a more attractive means of trading.
 - borrowers win and lenders lose.
 - all of the above.
- 27) A hyper-inflation is typically caused by:
- a rapid increase in commodity prices, such as oil.
 - a rapid increase in the money supply associated with government financing operations by printing money.
 - a sudden breakdown in financial markets' faith in the ability of borrowers to repay their loans.
 - a sudden increase in AD caused by a tax cut or increase in government spending.
- 28) Suppose that everyone expects 5% inflation and the Federal Reserve implements a policy that restrains inflation to be only 3%. In the short run, this would cause
- real wages to rise and unemployment to fall.
 - real wages and unemployment to rise.
 - real wages to fall and unemployment to rise.
 - real wages and unemployment to fall.
- 29) Suppose there is a news release indicating that inflationary pressures are growing in the U.S. economy beyond what anyone had expected. This is likely to cause:
- bond prices to rise because this causes financial markets to believe that it is more likely that the Fed will raise interest rates in the near future.
 - bond prices to rise because this causes financial markets to believe that it is less likely that the Fed will raise interest rates in the near future.
 - bond prices to fall because this causes financial markets to believe that it is less likely that the Fed will raise interest rates in the near future.
 - bond prices to fall because this causes financial markets to believe that it is more likely that the Fed will raise interest rates in the near future.

- 30) According to the *Wall Street Journal* article describing Ben Bernanke's recent testimony before Congress,
- recent declines in the demand for housing have increased the risk of a recession.
 - recent declines in business investment demand have increase the risk of a recession.
 - a scarcity of skilled workers and accelerating labor costs have increased the risk of inflation.
 - all of the above.

- 31) If there is inflation and real incomes are unchanged, "bracket creep"
- causes after tax nominal income to fall if there is a progressive income tax system that is not indexed.
 - causes after tax real income to fall if there is a progressive income tax system that is not indexed.
 - causes after tax real income to fall if there is a proportional income tax system.
 - causes after tax nominal income to fall if there is a proportional income tax system.

To answer the next 3 questions, consider the short run (SRPC) and long run (LRPC) Phillips curves drawn below.



- 32) Suppose that expected inflation is 5 percent. If the Federal Reserve pursues a monetary policy that leads to 4 percent inflation, we should expect the unemployment rate to be:
- 5%
 - 4%
 - 6%
 - less than 4%
- 33) Suppose that the current Phillips curve is given by SRPC1 in the above diagram. This suggests that
- expected inflation is 5% and if inflation is less than 5%, the unemployment rate will be above the natural rate.
 - expected inflation is 5% and if inflation is more than 5%, the unemployment rate will be above the natural rate.
 - expected inflation is 4% and if inflation is more than 4%, the unemployment rate will be above the natural rate.
 - expected inflation is 4% and if inflation is less than 4%, the unemployment rate will be above the natural rate.
- 34) Which of the following would cause the short run Phillips curve to shift from SRPC0 to SRPC1?
- a decrease in expected inflation.
 - an increase in expected inflation.
 - an increase in the unemployment rate.
 - a decrease in the unemployment rate.

35) Suppose that a war breaks out in the Middle East and oil prices rise dramatically. Assuming that the Federal Reserve and the fiscal authorities do nothing to offset the economic impact of this, we should expect that, in the short run, this would cause

- a. the unemployment and inflation rate to both increase.
- b. the unemployment rate to decrease, but the inflation rate to increase.
- c. the unemployment and inflation rate to decrease.
- d. the unemployment rate to increase, but the inflation rate to decrease.

36) We have discussed on several occasions the state of the “sub-prime” loan market in the U.S. and how this could make it more difficult for people to get loans to purchase homes. In the short run, this could lead to:

- a. a decrease in AD, an increase in real wages, and higher unemployment.
- b. a decrease in AD, a decrease in real wages, and higher unemployment.
- c. a decrease in SRAS, an increase in real wages, and higher unemployment.
- d. a decrease in SRAS, a decrease in real wages, and higher unemployment.

37) Suppose that you have the choice between two bonds that both mature in 10 years. Both are selling at par. The first is a TIPS (Treasury inflation protected security) that has a coupon rate of 3% and the second is a regular government bond that has a coupon rate of 7%. Based on this information, you should prefer:

- a. the TIPS if and only if inflation is expected to be greater than 4%.
- b. the TIPS if and only if inflation is expected to be less than 4%.
- c. the TIPS no matter what inflation is expected to be.
- d. the regular government bond no matter what inflation is expected to be.

38) If you make a loan at a 10 year loan at a 5% nominal interest rate and inflation averages 7% over the next 10 years,

- a. the real interest rate earned on your loan is 12%.
- b. the real interest rate earned on your loan is 2%.
- c. the real interest rate earned on your loan is -2%.
- d. none of the above.

39) If everyone becomes more uncertain about inflation in the future, we might expect that:

- a. lenders would want to shift towards ARMs to reduce their exposure to inflation risk.
- b. contracts that set prices would become shorter to reduce exposure to inflation risk.
- c. prices of long term bonds would fall relative to short term bonds to compensate for the higher inflation risk of long term bonds.
- d. all of the above.

Eco202
Spring 2007
Key to Midterm #2

	Form 1	Form 2	Form 3
1	a	d	b
2	b	a	b
3	a	d	d
4	b	c	d
5	d	b	b
6	a	d	b
7	c	a	c
8	d	a	c
9	d	b	c
10	b	b	d
11	b	b	a
12	d	d	b
13	d	d	b
14	b	b	d
15	d	c	a
16	b	b	b
17	b	c	d
18	c	d	b
19	c	c	d
20	b	b	a
21	d	a	a
22	c	b	b
23	a	d	b
24	b	d	a
25	a	omitted	a
26	d	a	a
27	b	c	c
28	b	b	c
29	d	a	d
30	d	a	b
31	omitted	c	a
32	c	a	d
33	a	c	c
34	b	b	d
35	a	d	c
36	a	a	a
37	a	b	b
38	c	b	omitted
39	d	d	d