Name (Please print) _________________________________________________________

Assigned Seat

Circle your section time:  12:30  2:00

ECO202: PRINCIPLES OF MACROECONOMICS
SECOND MIDTERM EXAM
SPRING 2003
Prof. Bill Even

Directions

1. There are 40 questions on the exam each worth 2.5 points. You will receive a 2.5 point bonus for properly filling in your unique id on the scantron.

2. You may use a calculator.

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. In the event I found someone behaving in a dishonest manner, I will ask that the maximum penalty allowed by the university be imposed.
To answer the next 2 questions, refer to the diagram below.

1. A shift of the production function from $Q=f_1(K,L)$ to $Q=f_2(K,L)$
   a. could be caused by either technological innovations or capital improvements and would increase worker productivity.
   b. could be caused by either technological innovations or capital improvements and would decrease worker productivity.
   c. could be caused by a failure to replace deterioriating capital and would increase worker productivity.
   d. could be caused by a failure to replace deterioriating capital and would decrease worker productivity.

2. Suppose that the economy is faced with the above labor demand and labor supply curves and the production function labeled $Q=f_1(K,L)$. Based on this information:
   a. the total amount paid in wages is $1 billion.
   b. productivity in the economy is $20
   c. full employment output is $2 billion.
   d. all of the above.

3. In the 1800s, a sudden rush by bank customers to convert their checking account balances into cash would be most likely to be caused by:
   a. a sudden increase in the reserve requirement mandated by the Federal Reserve.
   b. a sudden decrease in the reserve requirement mandated by the Federal Reserve.
   c. a drought.
   d. rapid increases in stock market prices.

4. Which of the following is TRUE?
   a. the monetary base equals bank reserves and non-bank cash.
   b. M1 equals demand deposits plus nonbank cash.
   c. bank reserves equal bank cash plus member bank deposits at the Federal Reserve.
   d. all of the above are true.
5. Suppose that the Federal Reserve is concerned that the economy is below full employment and wants to implement policies to move the economy back to full employment. Which of the following combination of policies would be most consistent with the Fed's goals?
   a. The Fed buys government securities and raises the required reserve ratio.
   b. The Fed buys government securities and lowers the required reserve ratio.
   c. The Fed sells government securities and raises the required reserve ratio.
   d. The Fed sells government securities and lowers the required reserve ratio.

To answer the next 3 questions, assume that the banking system starts with the following "base case" balance sheet and that
   * the public initially holds $20 billion of cash outside the bank.
   * the reserve ratio is 10%
   * banks always loan out the maximum amount allowed.

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

<table>
<thead>
<tr>
<th></th>
<th>$1000</th>
<th>Demand Dep.'s</th>
<th>$10,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reserves</td>
<td>$1000</td>
<td>Demand Dep.'s</td>
<td>$10,000</td>
</tr>
<tr>
<td>Loans</td>
<td>$6000</td>
<td>Owner's Equity</td>
<td>$2000</td>
</tr>
<tr>
<td>Govt. Secur.'s</td>
<td>$5000</td>
<td>Owner's Equity</td>
<td>$2000</td>
</tr>
<tr>
<td></td>
<td>$12000</td>
<td>Owner's Equity</td>
<td>$12,000</td>
</tr>
</tbody>
</table>

6. **Start with the base case balance sheet.** If the Fed buys $500 billion of government securities from banks and the banking system completely adjusts to this change in their balance sheet, the demand deposits will ______ and loans will ______.
   a. increase $500 b.; increase $500 b.
   b. decrease $500 b; decrease $500 b.
   c. increase $500 b; increase $5000 b.
   d. none of the above.

7. **Start with the base case balance sheet.** If people decide to cash out some $1 billion of demand deposits and hold it as cash instead, after the banking system fully adjusts to the change, the monetary base would _____ and M1 would _____.
   a. increase $1 billion; not change.
   b. decrease $1 billion; not change.
   c. not change; decrease $9 billion.
   d. none of the above.

8. **Start with the base case balance sheet.** If the Fed raises the reserve ratio from 10% to 20% and the bank system completely adjusts to this change, the loans will ______ and demand deposits will ______.
   a. decrease to $1000 and demand deposits will decrease to $5000.
   b. increase to $15,000 and demand deposits will increase to $20,000.
   c. increase to $10,000 and demand deposits will increase to $15,000.
   d. none of the above.
9. In prison life, cigarettes are often used as "money". It has often been observed that the best cigarettes (e.g. freshest) will be smoked, and the worst cigarettes will be used as "money" in trading. This is an illustration of:
   a. supply side economics.
   b. Gresham's law.
   c. Okun's law.
   d. prison law.

10. Which of the following would all contribute to a leftward shift in aggregate demand?
   a. a decrease in interest rates, a tax increase, and a strengthening of the dollar in foreign exchange markets.
   b. an increase in interest rates, a tax increase, and a strengthening of the dollar in foreign exchange markets.
   c. an increase in interest rates, a tax increase, and a weakening of the dollar in foreign exchange markets.
   d. a decrease in interest rates, a tax decrease, and a strengthening of the dollar in foreign exchange markets.

11. Which of the following statements is most accurate? A recession could be started by a drop in stock prices because:
   a. the effect on consumer wealth could lead to a decrease in consumption and a decline in aggregate demand.
   b. the effect on consumer wealth could lead to a decrease in consumption and a decline in short run aggregate supply.
   c. the lower stock prices would reduce purchases of stocks which represents a decrease in investment demand.
   d. the lower stock prices would lead to less government tax revenues and an increase in the government's budget deficit.

12. Which of the following combination of events would increase long run aggregate supply the most?
   a. increased labor supply, increased labor demand, and an upward shift in the production function.
   b. increased labor supply, decreased labor demand, and an upward shift in the production function.
   c. decreased labor supply, decreased labor demand, and an upward shift in the production function.
   d. increased labor supply, increased labor demand, and a downward shift in the production function.
To answer the next 4 questions, refer to the diagram below and assume that wages are sticky.

13. Suppose that the economy is at point B in the above diagram. If there is sudden improvement in U.S. trading partner's incomes driving up their demand for our exports, the short run effect would be:
   a. lower real wages and reduced productivity.
   b. lower real wages and increased productivity.
   c. higher real wages and reduced productivity.
   d. higher real wages and increased productivity.

14. If the economy is at point A in the above diagram and the economy returns to the long run equilibrium entirely through adjustments in the labor market,
   a. the SRAS curve will shift right as workers take real wage cuts and the economy will settle at C.
   b. the AD curve will shift right as workers take real wage cuts and the economy will settle at B.
   c. the AD curve will shift right as workers realize real wage increases and the economy will settle at B.
   d. none of the above.

15. If the economy is at point A in the above diagram, which of the following would be true?
   a. the unemployment rate is above the natural rate.
   b. there is downward pressure on real wages.
   c. as the labor market adjusts in the long run, the price level will fall.
   d. all of the above.

16. Suppose the economy starts at point B and a change in AD moves the economy to A. As the economy moves from B to A, we should expect to see:
   a. real wages fall and unemployment rise.
   b. real wages and unemployment fall.
   c. real wages and unemployment rise.
   d. real wages rise and unemployment fall.
17. The aggregate demand curve slopes downward because, as prices fall
   a. real wages rise leading to increased consumption.
   b. as price fall, the increased purchasing power of money balances leads to increased consumption.
   c. as prices fall, a decline in firm profitability causes them to cut back on production.
   d. none of the above.

18. Suppose that the chair of the Federal Reserve is replaced and the new chair indicates that
   she will pursue policies that will lead to less inflation than her predecessor. If the public
   believes the stance of the new chair,
   a. the short run Phillips curve will shift up.
   b. the short run Phillips curve will shift down.
   c. the long run Phillips curve will shift right.
   d. the long run Phillips curve will shift left.

To answer the next 2 questions, suppose that the economy is faced with the short run (SRPC) and
   long run (LRPC) Phillips curves drawn below.

![Phillips Curves Diagram]

19. Suppose the current short run Phillips curve is SRPC0. If the Federal Reserve pursues
   policies that lead to inflation of 3 percent,
   a. real wages will fall because workers negotiated wages expecting less than 3% inflation.
   b. real wages will fall because workers negotiated wages expecting more than 3% inflation.
   c. real wages will rise because workers negotiated wages expecting less than 3% inflation.
   d. real wages will rise because workers negotiated wages expecting more than 3% inflation.

20. If the current short run Phillips curve is SRPC0, then the natural rate of unemployment must
   be ____ and the expected rate of inflation must be ______.
   a. 4; 4.
   b. 3; 4
   c. 4; 3
   d. none of the above.
21. The largest category of expenditures for the federal government in 1998 was:
   a. interest on the debt.
   b. transportation.
   c. transfers.
   d. defense.

22. The largest source of revenues for the federal government in 1998 came from:
   a. the corporate income tax.
   b. sales taxes.
   c. Social Security and Medicare taxes.
   d. the personal income tax.

23. Which of the following is true? A short run increase in both prices and unemployment would result from
   a. a tax cut because it will shift aggregate demand right.
   b. a tax increase because it will shift aggregate demand left.
   c. an increase in oil prices because it will shift short run aggregate supply left.
   d. an increase in oil prices because it will shift short run aggregate supply right.

24. Compared to the 1970s, it is believed that the natural unemployment rate in the 1990s is:
   a. higher, partly because the labor force is, on average, younger in the 1990s.
   b. higher, partly because the labor force is, on average, older in the 1990s.
   c. lower, partly because the labor force is, on average, younger in the 1990s.
   b. lower, partly because the labor force is, on average, older in the 1990s.

25. During the 1960s, increases in government spending on defense and transfers
   a. helped move the economy up and to the left along its short run Phillips curve.
   b. helped move the economy down and to the right along its short run Phillips curve.
   c. shifted the long run Phillips curve to the left.
   d. shifted the long run Phillips curve to the right.

26. Which of the following is most likely to move the economy up and to the left along a short run Phillips curve?
   a. an increase in aggregate demand.
   b. a decrease in aggregate demand.
   c. a decrease in long run aggregate supply.
   d. an increase in long run aggregate supply.

27. According to the “majority view” of deficits, an increase in the federal government’s budget deficit will lead to
   a. an increase in both loan demand and loan supply.
   b. an increase in loan demand but no change in loan supply.
   c. an increase in loan supply but no change in loan demand.
   d. a decrease in loan demand and no change in loan supply.
28. According to the minority view of deficits, an increase in the federal government's budget
deficit will lead to:
   a. higher interest rates and less private investment.
   b. higher interest rates and more private investment.
   c. lower interest rates and less private investment.
   d. no change in interest rates or private investment.

29. According to the “minority view” of deficits, an increase in the federal government’s budget
deficit will lead to
   a. an increase in both loan demand and loan supply.
   b. an increase in loan demand but no change in loan supply.
   c. an increase in loan supply but no change in loan demand.
   d. a decrease in loan demand and no change in loan supply.

30. The Bush Administration has proposed tax cuts to help improve the supply side of the
economy. Some point out that the tax cuts could have negative effects on the supply side of the
economy. Which of the following points would make the most sense in arguing that the tax cuts
could have a negative effect on the supply side of the economy?
   a. the tax cuts lead to a larger budget deficit and the majority view of deficits is correct.
   b. the tax cuts lead to a larger budget deficit and the minority view of deficits is correct.
   c. the tax cuts lead to a smaller budget deficit and the majority view of deficits is correct.
   d. the tax cuts lead to a smaller budget deficit and the minority view of deficits is correct.

31. Suppose the federal government currently has a budget deficit. If growth in the economy
speeds up, we would expect that:
   a. the deficit would shrink as tax revenues and transfer spending both increase.
   b. the deficit would shrink as tax revenues rise and transfer spending falls.
   c. the deficit would grow as tax revenues and transfer spending both fall.
   d. the deficit would grow as tax revenues fall and transfer spending rises.

32. If the economy is currently on the downward sloping portion of the Laffer curve,
   a. an increase in the tax rate would reduce tax revenue.
   b. an increase in the tax rate would increase tax revenue.
   c. an increase in the inflation rate would reduce unemployment.
   d. an increase in the inflation rate would increase unemployment.
33. The Social Security system
a. is a pay-as-you-go system meaning that the benefits received by today's retirees are financed by the taxes they paid when they were working.
b. is currently realizing a budget surplus.
c. is currently realizing a budget deficit.
d. a and b.

34. Recently, the Senate voted to:
a. approve the tax cut proposed by Bush in its entirety.
b. increase the size of the tax cut proposed by Bush.
c. reduce the size of the tax cut proposed by Bush.
d. none of the above.

35. "Automatic stabilizers" are government programs that lead to:
a. increased transfers or decreased tax rates during a recession.
b. increased transfers or increased tax rates during a recession.
c. decreased transfers or decreased tax rates during a recession.
d. decreased transfers or increased tax rates during a recession.

36. Quoting from a 3/21/2000 article posted on CNNFN: "Inflation remains remarkably tame. Consumer prices outside of food and energy increased just 1.9 percent in 1999, the slowest in 34 years. ... Part of the reason inflation has remained so low is because of worker productivity. Productivity increased at a 6.4 percent annual rate in the fourth quarter -- the fastest pace in seven years." In terms of the AD/AS framework, the source of the low inflation is that (holding employment levels constant) improved productivity:
a. causes AD to shift left.
b. causes AD to shift right.
c. causes AS to shift left.
d. causes AS to shift right.

37. A "supply side" economist tends to be in favor of:
a. tax cuts to encourage labor supply.
b. tax cuts to encourage businesses to invest in more capital.
c. reform of transfer programs to encourage labor supply.
d. all of the above.

38. Much of the national debt is "held by the public". Other groups that hold a large share of the debt include:
a. commercial banks in the U.S.
b. the Social Security trust funds and the Federal Reserve.
c. foreign banks.
d. the U.S. Treasury.
39. Compared to an income tax, a consumption tax tends to:
   a. generate less saving, thus driving up interest rates and reducing private investment.
   b. generate less saving, thus driving down interest rates and reducing private investment.
   c. generate more saving, thus driving up interest rates and increasing private investment.
   d. generate more saving, thus driving down interest rates and increasing private investment.

40. Which of the following makes the income tax system in the U.S. more like a consumption tax?
   a. pensions and IRAs.
   b. the marriage tax penalty.
   c. the day care tax credit.
   d. the deductibility of state income taxes in computing federal taxes.