Name: _____ Days/Times Class Meets: _____ Today's
Date:_____

Macroeconomics, Fall 2007, Final Exam, several versions, December

Read these Instructions carefully! You must follow them exactly!
I) On your Scantron card you <u>must</u> 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 answer on Scantron line 27.**) Here are several statements which may or may not be true about "models", as discussed in lecture, not the text:
1) Models are used in the sciences (including the social sciences) but not in day-to-day life.
2) The best model for a given situation is always the most accurate one, since it is most likely to get the right answer.
3) The ideal model would be accurate, timely and easy (including inexpensive) to use.
4) Models are always necessary, no matter what real world problem is being solved.
   a.   Only statements 1, 2 and 3 are true.
   b.   Only statements 2 and 3 are true.
   c.   Only statement 2 is true.
   d.   Only statements 2 and 4 are true.
   e.   Only statements 3 and 4 are true.

_____   2. (**Repeat your answer on Scantron line 28.**) If the economy is in full employment equilibrium, and the money supply is increased 12%, then we expect:
   a.   the economy to grow.
   b.   prices to rise by more than 12%
   c.   prices to rise 12%
   d.   prices to rise by less than 12%
   e.   nothing will happen

_____ 3. **(Repeat your answer on Scantron line 29.)** If the price of oil rises 9% while the cost of living (the price index) falls 7% then real oil prices have
   a. fallen about 2%.
   b. fallen considerably more than 2%.
   c. risen by about 9%.
   d. risen by about 2%.
   e. risen by about 16%.

_____ 4. Which of the following periods would be considered a period of good monetary policy?
   a. 1930s
   b. 1940s
   c. 1960s
   d. 1970s
   e. 1990s

_____ 5. **(Repeat your answer on Scantron line 30.)** When economists say that there is a time lag in the effect of monetary policy, what do they mean?
   a. that it takes time to observe the effects of fiscal policy on the economy
   b. that the Fed takes awhile to figure out what it wants to do
   c. that the Congress takes awhile to figure out what it wants to do
   d. that it takes time to observe the effects of monetary policy on the economy
   e. that the public needs time to decide how to respond to monetary policy changes

_____ 6. **(Repeat your answer on Scantron line 31.)** According to the text, which of the following all would shift the aggregate demand curve to the right?
   a. increases in government purchases, investment spending, autonomous consumption, taxes, or the money supply
   b. increases in government purchases, investment spending, autonomous consumption, or the money supply
   c. decreases in government purchases, investment spending, autonomous consumption, taxes, or the money supply
   d. increases in government purchases, investment spending, autonomous consumption or taxes
   e. decreases in government purchases or investment spending, and increases in autonomous consumption, taxes, or the money supply

_____ 7. Which of the following occurs during a recession?
   a. Output falls, employment rises, and unemployment rises.
   b. Output rises, employment falls, and unemployment falls.
   c. Output falls, employment falls, and unemployment rises.
   d. Output rises, employment rises, and unemployment falls.
   e. Output falls, employment falls, and unemployment falls.

_____ 8. Which of the following will cause a movement along the aggregate demand curve?
   a. a decrease in the price level
   b. an increase in government purchases
   c. a decrease in taxes
   d. an increase in investment spending
   e. an increase in the interest rate

_____ 9. **(Repeat your answer on Scantron line 32.)** A zero inflation rate is not the Fed's objective because
   a. that would cause prices to rise
   b. that would cause price to fall
   c. it knows that it cannot attain a zero rate
   d. it believes that the true rate of inflation is lower than what is measured by the Consumer Price Index (CPI)
   e. high rates of inflation may help labor markets adjust more easily
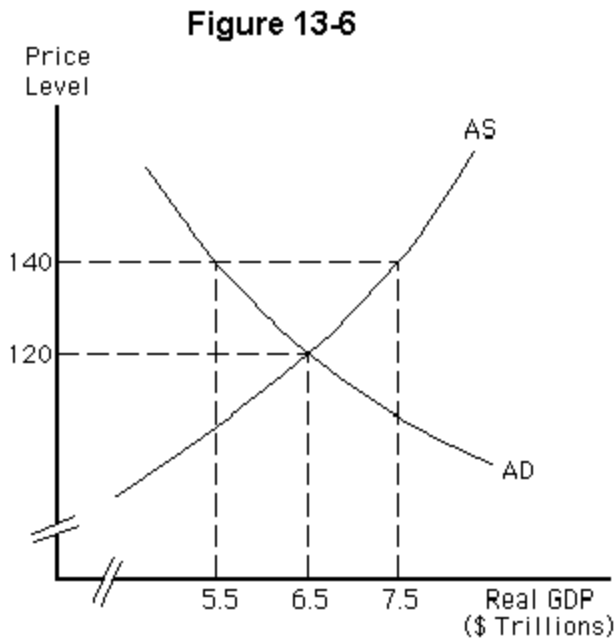
Figure 13-6

_____ 10. Refer to **Figure 13-6**. Short-run macroeconomic equilibrium occurs at a price level of
   a. 120 and real GDP of $5.5 trillion
   b. 140 and real GDP of $5.5 trillion
   c. 120 and real GDP of $6.5 trillion
   d. 120 and real GDP of $7.5 trillion
   e. 140 and real GDP of $7.5 trillion

_____ 11. All of the following are examples of demand shocks, except one. Which is the exception?
   a. a spontaneous decrease in money demand
   b. a tax increase
   c. a contraction of the money supply by the Fed
   d. an increase in the price level
   e. a reduction in government spending

_____ 12. **(Repeat your answer on Scantron line 33.)** If the inflation rate is 3 percent and the nominal wage is frozen for one year, by how much will the real wage change?

    a.   It will decrease by about 3 percent.
    b.   It will not change.
    c.   It will increase by 3 percent.
    d.   It will triple.
    e.   We do not have enough information to determine this answer.

_____ 13. **(Repeat your answer on Scantron line 34.)** 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) Even if it was not discussed in lecture, there is no reason to believe a recession will be caused by this experiment, since the money supply is still growing, just at a slower rate.
2) Just before the experiment begins, nominal interest rates will be about 9%.
3) After the experiment begins, there will probably be a long period of time during which lenders become better off while borrowers are becoming worse off.

    a.   Only statements 1 and 2 are correct.
    b.   Only statements 2 and 3 are correct.
    c.   Only statements 3 and 1 are correct.
    d.   Only one of the statements are correct.
    e.   None of the statements are correct.

_____ 14. **(Repeat your answer on Scantron lines 35 and 36.)** 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%.

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

_____ 15. Refer to the Keynesian equation just above if it helps you. Also, **please make the unusual assumption that 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.
    a.   Under these assumptions, interest rates will rise but the economy will not be stimulated.
    b.   Under these assumptions, interest rates definitely will remain unchanged and also the economy will not be stimulated.
    c.   Under these assumptions the economy will actually go into a recession.
    d.   Under these assumptions, interest rates definitely will remain unchanged and also the economy will stimulated.
    e.   Under these assumptions, interest rates will rise and the economy will be stimulated.

_____ 16. **(Repeat your answer on Scantron lines 37 and 38.)** (You may refer to the equation above.) In the Keynesian multiplier model, if exports rise by $50 billion per year and government spending declines by $80 billion per year the economy will
    a.   expand
    b.   not change
    c.   may expand or contract
    d.   contract

_____ 17. **(Repeat your answer on Scantron line 39.)** (You may refer to the equation above.) In the Keynesian multiplier model, if the marginal propensity to consume falls, the economy will
    a.   expand
    b.   contract
    c.   not change
    d.   may either expand or contract

_____ 18. Consider the following statements about inflation, expected inflation and interest rates.
    a.   If actual inflation turns out lower than was expected at the time the loan was made, the lender loses and the borrower benefits.
    b.   if the expected inflation rate for the coming year rises from 3 percent to 6 percent, but the Fed prevents nominal interest rates from rising, then the real interest rate must have risen.
    c.   if the real interest rate is 10% for a 4 year auto loan, and expected inflation for the next four years is 5% per year, then auto loans will have an interest rate of 15%.
    d.   the real interest rate plus the nominal interest rate equals the expected rate of inflation.
    e.   none of the other answers is correct.

____ 19. (**Repeat your answer on Scantron lines 40 and 41.**) If the Fed buys Treasury bills (which increases reserves available to the banking system),
  a. no answer is any good except this one.
  b. either c. or d. is likely to be true, but we don't have enough information to choose between them.
  c. the impact on the real economy is likely to be very small, since the classical assumptions are probably fairly realistic.
  d. 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.
  e. the money supply will actually decline along with the supply of money, leading to a reduction either in economic activity or prices.

Equation for the Money Supply

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

____ 20. (**Repeat your answer on Scantron line 42.**) 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
  a. will increase interest rates and have no impact on economic activity.
  b. will increase economic activity because under these assumptions interest rates will not change and so the Keynesian model gives accurate predictions.
  c. 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).
  d. will reduce interest rates and have no impact on economic activity.
  e. will actually reduce economic activity because the rise in interest rates will reduce borrowing and therefore spending.

____ 21. (**Repeat your answer on Scantron line 43.**) 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.

____ 22. (**Repeat your answer on Scantron line 44.**) Choose the best answer. When the government spends more than its tax proceeds the result is a deficit, and government borrowing. Your instructor believes:
   a. government borrowing is never desirable.
   b. borrowing is perhaps appropriate if the government will spend the money on something yielding benefits for a long time, for example winning an important war or creating a national park.
   c. government borrowing caused by tax cuts can be an important stimulus to help bring the economy out of a recession.
   d. borrowing is always desirable because if the government runs a surplus it is creating a deflationary gap.
   e. borrowing is desirable if the proceeds will be spent on an important annual activity, such as the annual fireworks display.

____ 23. (**Repeat your answer on Scantron lines 45 and 46.**) 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 an important fact, namely: when interest rates rise, this causes the demand for money to decline. Now my question to you is this: If you take that additional fact into account, now an increase in government spending (or a tax cut):
   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. will increase economic activity.
   d. will reduce economic activity.
   e. will still leave total economic activity unchanged, since the supply of money is still being held constant.

____ 24. (**Repeat your answer on Scantron line 47.**) Unlike an increase in the "quantity demanded" of a good, an increase in demand for a good
   a. can be caused by a reduction in the price of an input used to produce the good.
   b. can be caused by a decline in the "own price" of that good.
   c. can be caused by an increase or decrease in the incomes of customers.
   d. can be caused by a change in the price of a substitute for the good.
   e. both c. and d.

_____ 25. **(Repeat your answer on Scantron lines 48 and 49.)** Choose the best answer. According to lecture, inflation, even if fully anticipated by everyone,
- a. is harmful because it is more difficult for people to make rational economic decisions when prices are changing over time
- b. is harmful primarily because it causes sellers' costs to increase
- c. is harmful primarily because it causes nominal wages to fall
- d. is harmful primarily because it causes consumers' purchasing power to decline
- e. is not harmful, since fully anticipated inflation does not redistribute purchasing power in haphazard ways

Recall:
FR = IR * (FN/IN)*(II/FI)

_____ 26. **(Repeat your answer on Scantron line 50.)** Between 1960 and 1983 the price index rises from 80 to 120. Over the same period your nominal wage rises from $10/hour to $12/ hour. Assume your real wage was $20 in 1960. Then in 1983 your real wage becomes:
- a. $16
- b. $11.11
- c. $36
- d. $20
- e. $24

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Answer Section

MULTIPLE CHOICE

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