

**ECON 102/100**

April 28, 2004

Section	Day	Time	Location	GSI
101	F	2:30-4	B239 EH	Jan
102	W	11:30-1	373 Lorch	Justin
103	W	1-2:30	B239 EH	Naomi
104	W	4-5:30	B239 EH	Mato
105	W	2:30-4	B239 EH	Mato
106	W	4-5:30	1068 EH	Naomi
107	F	1-2:30	1372 EH	Nalin
108	W	8:30-10	330 DENN	Justin
109	F	11:30-1	205 DENN	Nalin

- Do NOT open this exam booklet until instructed to do so!
- Please take a moment to complete the identification information on the scantron. Indicate your NAME, discussion SECTION number, FORM number, and UM ID number. THIS, and showing up in the correct exam room are WORTH TWO POINTS ON THE EXAM!
- The exam has 100 points and is designed to take about 90 minutes to complete. However, you'll have approximately 120 minutes. Check that you have all 15 pages of the exam.
- Read the questions and these instructions carefully!
- Use the space provided in this booklet and the back of the pages to work out the answers to the multiple choice problems. Use the space provided on the actual page for the short answer questions.
- You can use only NON-graphing calculators.
- For multiple choice questions, you get 2 points for a correct answer, 0 points for a blank, and 0 points for a wrong answer. There are NO penalties for guessing.
- Sign the honor code below!

Honor Code: I did not use any unauthorized aid on this exam.

Name: (PRINT) \_\_\_\_\_

UM ID #: \_\_\_\_\_

Signature: \_\_\_\_\_

**Multiple Choice: (39 questions, 2 pts each = 78 pts)**

Pick the best answer among the given choices.

1. Which of the following statements is FALSE in an economy with flexible prices (long run), but is TRUE in an economy with sticky prices (short run)?
  - a. Fiscal policy has no effect on real variables.
  - b. Monetary policy does affect real variables.**
  - c. Changes in aggregate demand do not affect employment.
  - d. Changes in aggregate demand do not affect real wages.
  - e. None of the above.
  
2. If the dollar value of a country's exports is greater than the value of its imports, then in equilibrium
  - a. net foreign investment must be positive.**
  - b. net foreign investment can be positive, zero, or negative.
  - c. net foreign investment must be negative.
  - d. no investment is flowing into the country.
  - e. both a. and d. are true.
  
3. When a country's central bank increases the money supply, a unit of money \_\_\_\_\_ value in terms of the domestic goods and services it can buy and \_\_\_\_\_ value in terms of the foreign currency it can buy.
  - a. gains; gains
  - b. gains; loses
  - c. loses; gains
  - d. loses; loses**
  - e. loses; gains or loses
  
4. Which of the following is NOT one of the effects of inflation?
  - a. Firms incur costs associated with changing their prices.
  - b. It redistributes wealth in an arbitrary way between borrowers and lenders.
  - c. It causes tax distortions with respect to interest income and capital gains.
  - d. It systematically robs most people of their purchasing power.**
  - e. It creates confusion and inconvenience.

5. Which of the following is a necessary attribute for something to be used as money?
- It must have intrinsic value.
  - It must hold its value indefinitely.
  - It must be readily accepted as a medium of exchange.**
  - All of the above.
  - None of the above.
6. A demand shock will cause the price level and the unemployment rate to move in \_\_\_\_\_ direction(s). A supply shock will cause the price level and the unemployment rate to move in \_\_\_\_\_ direction(s).
- opposite; opposite
  - opposite; the same**
  - the same; opposite
  - the same; the same
  - Not enough information is given to answer the question.
7. Suppose that, after a period in which the inflation rate was higher than people had expected, people begin to revise their expectations of inflation upward. If the inflation rate itself (as opposed to the expected inflation rate) does not change, we should expect the unemployment rate to...
- fall.
  - rise.**
  - remain steady.
  - fluctuate.
  - return to the natural rate immediately.
8. Suppose that wages become more flexible and that firms become better informed about the general price level. In the short run, a given increase in government purchases will have a \_\_\_\_\_ effect on the price level and a \_\_\_\_\_ effect on output than it did before.
- equal; equal
  - larger; larger
  - larger; smaller**
  - smaller; larger
  - smaller; smaller

9. Which of the following is NOT one of the reasons why the aggregate supply curve slopes up in the short run?
- Wages and other input costs may be slow to adjust to changes in the price level.
  - Some firms may be slow to adjust their prices because of menu costs.
  - A rising price level reduces the real interest rate and therefore encourages production.**
  - Some firms may misread a rise in the general price level as an increase in demand for their own products.
  - None of the above. All four are valid reasons why the SRAS curve slopes up.
10. Suppose that most businesses pay for their employees' health insurance and that health care costs rise sharply. The new short-run equilibrium GDP will be \_\_\_\_\_, and the price level will be \_\_\_\_\_, compared to before the increase in health costs.
- higher; higher
  - higher; lower
  - lower; higher**
  - lower; lower
  - higher; unchanged
11. Suppose the economy gets hit by an adverse supply shock. If policy makers do not interfere, GDP will return to its long run equilibrium level as the \_\_\_\_\_ curve shifts to the \_\_\_\_\_.
- AD; left
  - AD; right
  - LRAS; left
  - SRAS; left
  - SRAS; right**
12. A headline from the April 5, 2004, Wall Street Journal reads "House Approves Highway Bill. Setting Stage for Tax-Break Fight." The article then goes on to discuss the new six-year \$275 billion highway bill that was overwhelmingly passed by the House of Representatives. If we allow for the possibility of crowding-out and a MPC of  $2/3$ , then which of the following best describes the increase in AD?
- More than \$0 but less than \$825 billion**
  - More than \$275 billion but less than \$825 billion
  - More than \$825 billion
  - More than \$275 billion but less than \$412.5 billion
  - Less than \$183.3 billion

13. President Bush has come under fire for allowing the US dollar to depreciate relative to the euro. In 2000, the nominal exchange rate was 1.25 euros to the dollar. By 2004, the nominal exchange rate was 0.83 euros to the dollar. As with most changes in the economy, there are winners and losers due to this depreciation of the dollar. Holding all else constant, who benefits from the depreciating exchange rate out of the following list?
- i. U.S. citizen vacationing in Cinque Terra, Italy.
  - ii. Hotel owner in Paris that caters exclusively to Americans.
  - iii. Spanish Family that is vacationing in Disney World.
  - iv. The American owner of a firm that specializes in importing Italian leather goods.
  - v. Owner of an exclusive Greek spa that exports bath salts to the US.
- a. ii, iii
  - b. iii**
  - c. iii,iv
  - d. i,ii,iv,v
  - e. iv
14. While listening to your favorite radio talk show on the state of the economy, you are surprised to hear one of the invited economists on the show state that the recent increase in unemployment is the result of the recovery of the economy. How can you reconcile this with what you have learned in Econ 102?
- a. The economist on the show is definitely wrong.
  - b. Previously discouraged workers reenter the labor market and begin to look for jobs.**
  - c. AD shifts out in the short run to end the recession, but changes in unemployment occur in the long run.
  - d. It is typical for people to lose their jobs as the economy recovers from a recession.
  - e. People who were unemployed during the recession finally get discouraged and stop looking for jobs.

15. While digging through the pockets of an old pair of jeans, you discover a \$20 bill. Since you happen to be walking by an ATM machine, you decide to deposit it into your checking account. With fractional reserve banking, where the reserve ratio is 3%, your original \$20 deposit eventually increases loans by \_\_\_\_\_ and the money supply by \_\_\_\_\_.
- a. \$667, \$667
  - b. \$667, \$647
  - c. **\$647, \$647**
  - d. \$19.40, \$19.40
  - e. \$19.40, -\$0.60
16. Suppose the Federal Reserve follows a policy of stabilizing output (as opposed to prices) and believes that the natural rate of unemployment is 5%. Following a stock market boom, people's desire to consume rises and as a result, actual unemployment drops to 4.5%. What will the Fed do and what impact does the Fed's action have on the economy?
- a. **The Fed will decrease the money supply, which implies a movement along the SR Phillips curve.**
  - b. The Fed will increase the money supply, which implies a movement along the SR Phillips curve.
  - c. The Fed will increase the money supply, which will change people's expectations of inflation and, as a result, shift the SR Phillips curve to the right.
  - d. The Fed will decrease the money supply, which will change people's expectations of inflation and, as a result, shift the SR Phillips curve to the left.
  - e. The Fed will decrease the money supply, which implies a shift in the LR Phillips curve.
17. Which of the following was NOT a macroeconomic lesson from the period 1960-1985?
- a. An attempt to keep unemployment below its natural rate causes accelerating inflation.
  - b. **Policy makers learned how to use monetary policy to lower the natural rate of unemployment.**
  - c. Reducing inflation costs the economy jobs and output in the short run.
  - d. There is no tradeoff between inflation and unemployment in the long run.
  - e. The negative relationship between inflation and unemployment broke down in the 1970s.

18. The 49th state to be added to the United States was Alaska, a state abundant in renewable resources. According to the long run growth model, how does the very long run state of the economy after the addition of Alaska compare to the long run state before the addition of Alaska?
- Labor productivity remains unchanged
  - Permanent decrease in labor productivity
  - Permanent increase in the growth rate of real GDP
  - Permanent decrease in real, per capita GDP
  - Permanently higher level of real GDP**
19. The natural rate of unemployment is 5%. Suppose that Alan Greenspan, chairman of the Federal Reserve, commits to keeping unemployment at 4%, and believes he can accomplish this by actively controlling the money supply. The result of this policy will be:
- An inflation rate of 5%.
  - An inflation rate of 4%.
  - A constant inflation rate that is proportional to the change in money supply.
  - Accelerating inflation.**
  - The available information is insufficient to answer this question.
20. If Congress passed a tax increase at the request of the president to reduce the budget deficit, but the Fed held the money supply constant, then the two policies together would generally lead in the short run to \_\_\_\_\_ income and a \_\_\_\_\_ interest rate.
- lower; lower**
  - lower; higher
  - higher; no change
  - no change in; lower
  - no change in; higher
21. Suppose that the central bank is required to stabilize prices. If the economy starts in long-run equilibrium and then experiences a cost-reducing supply shock, the central bank should respond by
- increasing the money supply, which causes output to move closer to its natural level.
  - increasing the money supply, which causes the unemployment rate to rise.
  - increasing the money supply, which causes output to move further from its natural level.**
  - decreasing the money supply, which causes unemployment to rise.
  - decreasing the money supply, which causes output to move further from its natural level.

22. The banking system has \$20 million in reserves and has a reserve requirement of 20 percent. The public holds \$10 million in currency. If banks decide to increase reserves from 20 to 25 percent of deposits, by how much does money supply change?
- a. **-\$20 million**
  - b. -\$10 million
  - c. -\$5 million
  - d. -\$1 million
  - e. By none of the above.
23. Initially, the natural rate of unemployment in Macro-Land is 5 percent. Then union membership increases. As a result, it now takes longer to find a job in Macro-Land. What is the effect on the short-run Philips curve (SRPC) and on the long-run Philips curve (LRPC)?
- a. Both LRPC and SRPC shift to the left.
  - b. **Both, LRFC and SRFC shift to the right.**
  - c. LRFC shifts to the right, while there is no change in SRPC.
  - d. LRFC shifts to the left, while there is no change in SRPC.
  - e. None of the curves shifts.
24. Fourteen years ago, Mato put money into a savings account at First National Bank. Mato now decides to withdraw all his deposits and is told that his money has quadrupled. Approximately what rate of interest did Mato earn on average?
- a. 5
  - b. 7
  - c. **10**
  - d. 14
  - e. 16



25. The unemployment rate calculated by the Bureau Labor Statistics tends to
- understate unemployment, because individuals receiving unemployment compensation are counted as employed.
  - understate unemployment, because discouraged workers are not counted as unemployed.**
  - overstate unemployment, because workers who are involuntarily working part time are counted as being employed.
  - include cyclical and structural unemployment, but not frictional unemployment.
  - include frictional and structural unemployment, but not natural unemployment.
26. An article in The Wall Street Journal has the following headline: "Real GDP falls again as the economy slumps." This situation is most likely to produce what type of unemployment?
- frictional
  - structural
  - cyclical**
  - natural
  - All of the above.
27. An unanticipated increase in inflation tends to penalize
- people who have saved money in financial institutions.**
  - individuals who have borrowed money from financial institutions.
  - businesses that have borrowed money from financial institutions.
  - governments that have a progressive personal income tax.
  - firms that must increase nominal wages in response.
28. Assume that purchasing power parity (PPP) holds. In the long run, if the U.S. price level rises faster than the price level abroad, then
- foreign goods and services become cheaper relative to U.S. output.
  - foreign goods and services become more expensive relative to U.S. output.
  - the U.S. dollar will depreciate.**
  - the U.S. balance of trade will decrease.
  - the U.S. money supply must increase in proportion to the price level.

29. Assume that PPP holds. In the long run, if U.S. government purchases increase, then
- foreign goods and services become cheaper relative to U.S. output.
  - foreign goods and services become more expensive relative to U.S. output.
  - the U.S. dollar will depreciate.
  - the U.S. trade deficit will increase.**
  - the U.S. money supply must increase proportionally to government purchases.
30. Suppose you expect the Fed to increase the money supply to a new higher level. Which of the following would it be better for you to do before, rather than after, the change in the money supply?
- Consolidate your student loans.
  - Take out a mortgage.
  - Sell stocks.
  - Buy a car on credit.
  - Buy bonds.**
31. The "crowding-out effect" suggests that
- tax increases are paid primarily out of saving and therefore are not an effective fiscal device.
  - increases in government spending financed through borrowing will increase the real interest rate and reduce private investment.**
  - it is very difficult to have excessive aggregate spending in the economy.
  - domestic investment increases when consumption decreases to keep output more stable.
  - the multiplier effect is economically insignificant.
32. Which of the following is CORRECT? In the long run, an increase in the budget deficit will
- increase  $r$
  - decrease NFI
  - decrease  $I$
  - decrease  $C$
  - decrease  $NX$
- (i), (ii) only
  - (i), (ii), (v) only
  - (i), (ii), (iii) only
  - (i), (ii), (iii), (v) only
  - (i), (ii), (iii), (iv), and (v)**

33. Ensei Tankado, a Japanese software developer, has developed an unbreakable code called "Digital Fortress." The software protects electronic information from being snooped. As a result, there is a substantial and sustained increase in Research and Development in the world, because competitors cannot steal inventions as easily as before. This will
- Decrease economic growth temporarily, because firms will not share their inventions with each other and thus cannot learn from each other.
  - Decrease economic growth permanently, because firms will not share their inventions with each other and thus cannot learn from each other.
  - Decrease economic growth permanently, because firms will be more powerful monopolies forever.
  - Increase economic growth temporarily, because the rate of technological progress increases.
  - Increase economic growth permanently, because the rate of technological progress increases.**
34. The OECD
- Is the Oil Exporting Countries Directorate.
  - Is an association of the world's rich countries.**
  - Has recently advocated that the United States should raise interest rates.
  - Favors cuts in income taxes in order to stimulate long-run investment.
  - Is critical of U.S. tax cuts for having reduced aggregate demand in the short run, extending the recession.
35. The objective of the European Central Bank, in its conduct of monetary policy, is
- To maintain a level of investment equal to at least 10% of GDP.
  - To keep unemployment no more than 90% of its natural rate.
  - To transfer money from high-income countries of Europe to low-income countries.
  - To keep the rate of inflation at or below 2% per year.**
  - To keep European government budget deficits below 3% of GDP.

36. As compared to the year 2000, the amount collected in taxes by the U.S. federal government today is
- Larger, because of the amount needed by the military.
  - Larger, because expansion of the economy has increased the amounts paid in income tax.
  - About the same, because the Bush tax cuts have just offset the increased spending on health care.
  - Smaller, because the Internal Revenue Service is no longer trying to collect taxes owed by corporations.
  - Smaller, because a larger part of worker compensation takes the form of untaxed health care and pension benefits.**
37. According to Alan Greenspan
- The conduct of monetary policy is made difficult by uncertainty about the growth of productivity.**
  - The conduct of monetary policy is made easier when the public is uncertain about future inflation.
  - The conduct of fiscal policy is made difficult by its indirect effect on GDP.
  - The conduct of fiscal policy is made easier by the President's direct control over tax rates.
  - Fiscal deficits are desirable because they expand the money supply without the need for action by the Fed.
38. In recent years in the U.S., \_\_\_\_\_ people are paying the Alternative Minimum Tax (AMT) because \_\_\_\_\_.
- Fewer; incomes are rising above the level for people would be eligible.
  - Fewer; tax advisors have become more adept at circumventing it through loopholes.
  - More; they prefer the lower tax burden that it provides.
  - More; inflation has increased nominal incomes, and the AMT is not indexed.**
  - Middle-income; the deduction for mortgage-interest payments has been eliminated.

39. When there is an increase in outsourcing of jobs to other countries, this causes measured productivity in the U.S. economy to
- a. Fall, because fewer workers are employed in the U.S.
  - b. Rise, because reported employment is reduced while output is not.**
  - c. Fall, because there is less for the remaining workers to do.
  - d. Rise, because wages are worth more in terms of the imported goods they can purchase.
  - e. There is no effect on measured productivity. Outsourcing only matters for the profits of firms.

## SHORT ANSWER QUESTIONS (20pts)

### PART 1 (8 pts)

Answer the following questions (*answers outside the boxes will **not** be considered for grading*).

- a) What are the costs of high unemployment? State two costs of high unemployment and explain briefly.

- **Waste of resources**
- **Government is paying more unemployment benefits and receiving less money in tax revenues.**
- **Economic hardship on unemployed and their families...**

- b) What are the consequences of a huge budget deficit in the short run and the long run? Explain briefly.

**Government is accumulating debt, which needs to be paid eventually. Upon repayment, in the short-run we have a decrease in AD which results in unemployment. In the long-run, the supply of loanable funds decreases which increases the interest rate and so crowds out investment. As a result GDP grows at the slower rate.**

- c) What is a trade deficit and when is it problematic? Explain briefly.

**Trade deficit is an excess of imports over exports i.e.  $NX < 0$ . Trade deficits means that the domestic country is borrowing from foreign countries. As long as foreigners are willing to lend and the domestic country is able to repay, trade deficit is not problematic.**

- d) State **four** costs of inflation and briefly (in 1 or 2 sentences) explain **two** of them? Are there any benefits to a rising price level? Explain in one sentence

**See textbook pages 251-257 and 248.**

**PART 2 (12pts)**

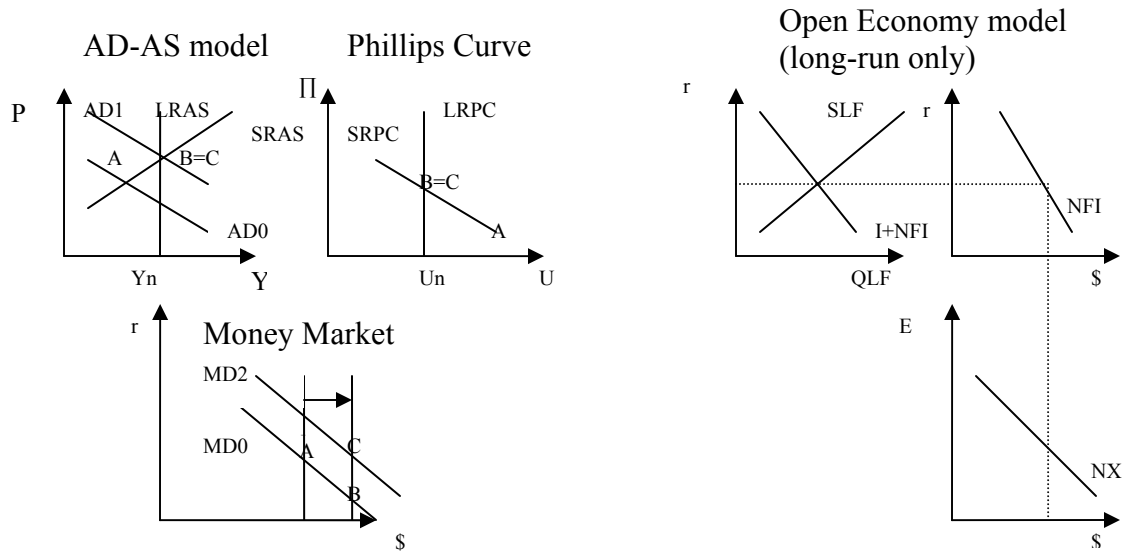
Suppose that the presidential candidates observe that our economy currently faces

- (i) an unemployment rate that far exceeds the natural rate of unemployment;
- (ii) a severe budget deficit;
- (iii) a severe high trade deficit; and
- (iv) zero inflation.

You are called upon to evaluate the following policies to improve the state of the economy.

1) Monetary policy.

- a) Label all diagrams.
- b) Mark the starting point (A) and the short-run (B) and long-run (C) equilibria.

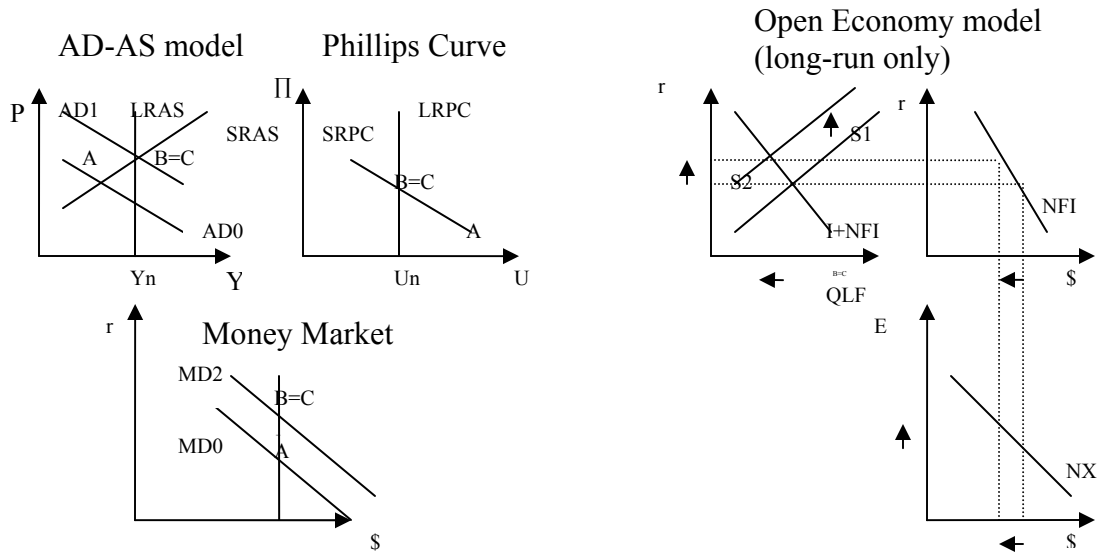


- c) Will this policy have any effects on real variables in the very long-run? Explain in one sentence.

**Monetary policy does not have any effects on real variables in the very long-run. Money is neutral in the very long-run.**

2) Fiscal policy.

- a) Label all diagrams.
- b) Mark the starting point (A) and the short-run (B) and long-run (C) equilibria.



- c) Will this policy have any effects on real variables in the very long-run? Explain in one sentence.

**Yes, fiscal policy has an effect on real variables in the very long run. Expansionary fiscal policy will cause a decrease in the supply of loanable funds which results in a higher interest rate. Hence I will decrease, NX will decrease and E will increase.**