

Form A

Name: _____
Section No.: _____
UM ID No.: _____
GSI: _____
Form : _____

**Economics 102
Introduction to Macroeconomics
Prof. Alan Deardorff
Midterm Exam 2
March 20, 2002**

INSTRUCTIONS: READ CAREFULLY!!!

1. Please do not open the exam book until you are told to do so.
2. **PLACE YOUR NAME, FORM NUMBER (A OR B), STUDENT UM ID NO. (ON THE FRONT OF YOUR MCARD, ALL EIGHT DIGITS, DO NOT WRITE SSN), SECTION NUMBER AND FORM NUMBER ON THE EXAM AND ON THE SCANTRON SHEET. *THIS IS WORTH TWO POINTS ON THE EXAM.***
3. This exam has 100 points and is designed to take about 60 minutes to complete. However, you have approximately 75 minutes to complete the test. Check that you have all 10 pages of the exam.
4. **Section A** consists of 26 multiple choice questions worth 3 points each. Answers to all of the questions in Section A should be marked on the scantron sheet using a #2 pencil. There are no penalties for guessing.
5. **Section B** consists of 1 part for which you must provide written answers on these sheets. Point values for questions in Section B are indicated in parentheses. Please try to fit your answer into the space provided.
6. Good luck!

GSI	Section Number(s)	Days and Times
Chris Kurz	201	Thu 10-11:30
Andrew Wogman	202, 203	Thu 11:30-1, 1-2:30
Ed Knotek	205, 213	Thu 2:30-4, 11:30-1
Waldery Rodrigues	208,210	Fri 11:30-1, 1-2:30

Part A: Multiple Choice(78 points)

1. Alan, the chairman of the Fed Board of Governors, lives in a world that adheres to the idea that money is neutral. Which of the following will **not** be affected in the long run if Alan decides to double the amount of the money supply?
 - a. The price of a DVD player.
 - b. The amount of dollars that it takes to purchase wheat.
 - c. Commodity prices.
 - d. The cost, in terms of reading the Wall Street Journal, of your time when taking this exam.
 - e. Nominal GDP.

2. Which of the following **best** illustrates frictional unemployment?
 - a. Chris is unable to find work as a GSI because fewer and fewer people want to watch stand up comedy.
 - b. Andrew refuses to look for a job, preferring to watch pro-wrestling.
 - c. Waldery loses his job at the bank after the bank president replaces him with an ATM.
 - d. Ed is laid off from NASCAR driving for several incidents with curbs.
 - e. Upon finishing his grading for the final exam, Alan quits his job as a Professor at the University of Michigan and actively looks for a job as an extra in action movies.

3. Which of the following is **true** for unexpectedly low inflation?
 - a. Shoe leather costs are higher.
 - b. Lenders gain and borrowers lose.
 - c. The real purchasing power of the country's income rises.
 - d. After tax stock returns are higher.
 - e. Menu costs are higher than expected.

4. Which of the following is most likely to cause a real appreciation of the U.S. dollar relative to the yen (Japan's currency).
 - a. The bank of Japan raises real interest rates.
 - b. US college students all stop going to Florida and start visiting Japan instead.
 - c. Japanese banks begin to invest heavily in US real estate.
 - d. A recession in Japan forces the million-member Ben Afflick Fan Club to postpone a vacation to Hawaii.
 - e. American investors decide that the Japanese stock market is undervalued and begin to buy up Japanese stocks.

5. In the country of Boblandia, the velocity of money is constant. Real GDP grows by 5% per year, the money stock grows by 14% per year, and the nominal interest rate is 11%. What is the real interest rate?
- a. 2%
 - b. 3%
 - c. -3%
 - d. 6%
 - e. 9%
6. If the nominal exchange rate is .333 dollars per pound, the U.S. price level is 110, and the British price level is 220, what is the real exchange rate (defined as amount of British goods per unit US goods)?
- a. 6.00
 - b. 1.50
 - c. .47
 - d. .50
 - e. .333
7. Because he is a smooth talker, Ed is able to convince the mayor of Stuckeyville to raise the minimum wage in the town from \$7.50 to \$12 and average wages rise. As a result, we would expect the change in the unemployment rate to be...
- a. positive, because of additional structural unemployment.
 - b. positive, because of unemployment insurance.
 - c. negative, because discouraged workers will reenter the labor force.
 - d. positive, because of additional frictional unemployment.
 - e. negative, because of the people that would want to work in Stuckeyville.
8. After graduating from the University of Michigan, you take a job at First Waldery Bank in the lending department and you're in desperate need of impressing your boss. On Thursday night, you call up your best friend who works at the Fed and he/she tells you that the Fed just secretly decided to start dropping money out of helicopters. At your meeting on Friday to decide what the bank will do with its nominal interest rates for the next year, you should:
- a. vote to leave interest rates unchanged, because the Fed's decision doesn't affect interest rates.
 - b. vote to lower interest rates, because of the coming inflation.
 - c. vote to lower interest rates, because of the coming deflation.
 - d. vote to raise interest rates, because of the coming inflation.
 - e. vote to raise interest rates, because of the coming deflation.

9. Andrew and Ed are about to get into a fight in the back of MLB over who knows more about inflation. Andrew believes that inflation in itself isn't as bad as most people think because of inflation indexing. Ed says that inflation is bad because it distorts relative prices and thus consumer decisions. Chris, who knows everything about inflation, is awakened by their fighting and, after listening to both sides, declares that
- Ed is right and Andrew is wrong.
 - Andrew is right and Ed is wrong.
 - Both Andrew and Ed are right.
 - Both Andrew and Ed are wrong; inflation is only bad because of the inflation tax.
 - Both Andrew and Ed are wrong; inflation never harms anybody.
10. Waldery, who has always been interested in deflation, was also listening in on Andrew and Ed's conversation. He asks the other three GSIs why deflation is so bad. Chris (who still knows everything about inflation but not much about deflation) replies correctly that
- falling prices will increase the real burden of his student loans, making him worse off.
 - deflation stimulates people to consume more now and less later, which will lead to recession.
 - the liquidity trap is the cause of deflation.
 - deflation is not bad because wages will adjust accordingly.
 - none of the above.

Wogzania is a small nation in Europe with an open economy. The Wog is Wogzania's national currency. Use the following table to answer the next question.

Year	Real GDP (Wogzania)	M1 (Wogzania)	Velocity (Wogzania)	US GDP deflator
1990	420,000 Wogs	350,000 Wogs	6	40
2000	441,000 Wogs	420,000 Wogs	6	52

11. Assume that Purchasing Power Parity holds for these two nations between 1990 and 2000 and that the nominal exchange rate in 1990 was 60 Wogs per US dollar. In the year 2000 the nominal exchange rate should be approximately _____.
- 69 Wogs per US dollar.
 - 51 Wogs per US dollar.
 - 75 Wogs per US dollar.
 - 60 Wogs per US dollar.
 - 57 Wogs per US dollar.

12. Accordingly to the pattern of recent unemployment in the U.S., most people who _____ unemployed are unemployed for a _____ time.

- I. become, short
- II. are, long
- III. become, long
- IV. are, short

(Select the letter with the best correct alternative)

- a. I and IV
- b. II and III
- c. I and II
- d. None of the alternatives I-IV are correct.
- e. I

13. All of the following are examples that would increase structural unemployment **EXCEPT**:

- a. The government no longer funding employment agencies which help to match firms and workers.
- b. Increasing the minimum wage.
- c. The government increasing the rights of workers to organize into a collective bargaining unit.
- d. A company operating in a developing country paying higher wages to workers to increase their level of health.
- e. A company paying higher than equilibrium wages.

14. Assuming velocity is constant, an inflation rate of 10% implies that

- a. the quantity of money grows by 10%
- b. real GDP grows by 10%
- c. money growth is greater than real GDP growth
- d. nominal GDP grows by 10%
- e. nominal GDP is unchanged

15. Suppose the dollar strengthens (appreciates) in value against the yen. This means

- I. a dollar can buy more yen
- II. Japanese goods become relatively cheaper for Americans
- III. American goods become relatively more expensive for the Japanese

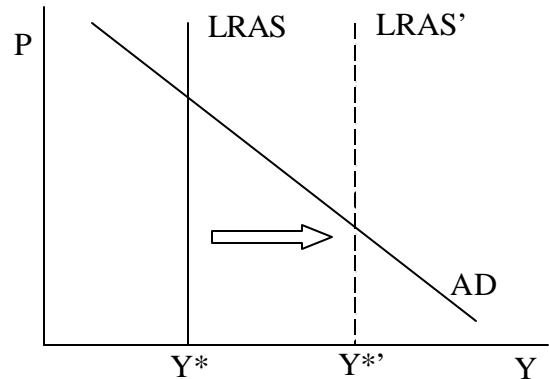
- a. I only
- b. II only
- c. III only
- d. I & II
- e. I, II, and III

16. A decrease in the real exchange rate (depreciation of the country's currency) could be caused by...
- a. a fall in the real foreign interest rate.
 - b. a decrease in the demand for loanable funds.
 - c. an increase in the budget deficit.
 - d. a decrease in the budget surplus.
 - e. none of the above
17. President Bush recently announced that the U.S. would put tariffs on imported steel. According to our model of the open economy, this action will
- a. increase U.S. net exports
 - b. decrease U.S. net exports
 - c. cause a real appreciation of the U.S. dollar
 - d. cause a real depreciation of the U.S. dollar
 - e. decrease the supply of loanable funds
18. The long-run aggregate supply curve is _____ because of _____.
- a. horizontal; monetary neutrality
 - b. vertical; monetary neutrality
 - c. horizontal; classical dichotomy
 - d. vertical; minimum wage
 - e. horizontal; fixed inputs in the production function
19. Before leaving the presidency in 1998, an inebriated Boris Yeltsin turned on all the printing presses in Russia so that rubles (the Russian currency) were printed at a rate of 15 million per hour. Assume Russia and America exist in a world where purchasing power parity and monetary neutrality holds. Russian real GDP did not increase in 1998, while America, on the other hand, has kept inflation at zero percent in 1998 due the leadership of Alan Greenspan. The dollars-per-ruble nominal exchange rate should have _____ in 1998, while the real-rubles-per-real-dollar real exchange rate should have _____ in 1998.
- a. decreased; increased
 - b. increased; decreased
 - c. not changed; increased
 - d. increased; not changed
 - e. decreased; not changed

20. In 2002 GM (a US company) buys a factory and machinery in Turkey to produce automobiles. This purchase is made in Turkish Lira GM bought in the foreign exchange market in 2002 from a wealthy Turkish citizen who adds the US dollars that she gets to a bank account in New York. In 2003 that same wealthy Turkish citizen flies to the US for a fun-filled vacation in Austin, Texas, where she spends all her US dollars saved from the year before. In 2002, the change in US NFI is _____, while the change in Turkish NFI in 2003 is _____.

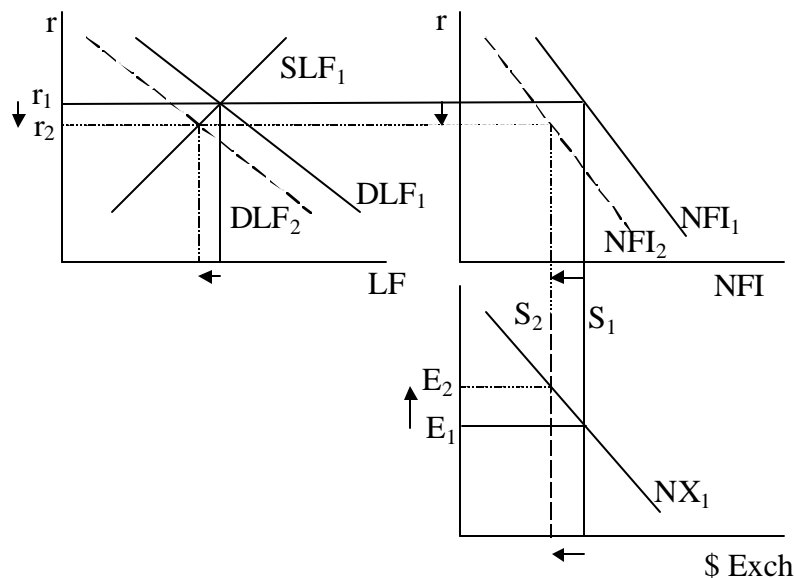
- positive; negative
- zero; zero
- negative; positive
- positive; zero
- zero; negative

21. If the production function for the US economy is given by $Y=AF(K,L,H,N)$, which of the following **cannot** describe the graph at the right:



- The natural rate of unemployment in the US falls from 5.5% to 3%.
 - Firms increase output to raise revenue when the price level falls.
 - A new vein of coal is discovered in West Virginia.
 - High school students across the country hear of Chris' stellar teaching, increasing college enrollments nationwide by 20%.
 - President Bush encourages the development of new technologies by encouraging firms to invent new weapons to use against the so-called "axis of evil."
22. The current United States trade deficit is an indication that
- U.S. firms are less productive than foreign firms
 - The U.S. economy is viewed as strong by foreigners investing here
 - Unemployment in the U.S. has been increased by lax U.S. trade policies
 - The U.S. is in a recession
 - The U.S. is exporting more than it is importing
23. Which of the following persons is considered to be employed, as defined by the U.S. Bureau of Labor Statistics?
- An accountant with a regular paid job who is away from work on a paid vacation
 - My sister-in-law, who worked twenty hours last week for no pay in her husband's store
 - A homeless person who was paid \$5 an hour for four hours of work last week picking up trash in a city park
 - All of the above
 - None of the above

24. According to the Fed's "beige book," (reported by the Wall Street Journal on Mar 7), which of the following sectors of the U.S. economy is still weak?
- Manufacturing
 - Services
 - Commercial real estate
 - All of the above
 - None of the above
25. The trade deficit is equal to
- The government budget deficit
 - The government budget deficit **plus** investment **plus** private savings
 - The government budget deficit **plus** investment **minus** private savings
 - The government budget deficit **minus** investment **minus** private savings
 - The government budget deficit **minus** investment **plus** private savings
26. The graphs below show an initial and a new equilibrium for the United States in Mankiw's Open Economy Model. The initial equilibrium is numbered "1" and shown with solid lines. The new equilibrium is numbered "2" and shown with dashed lines. Which of the following changes could this configuration of the curves represent?
- A loss of confidence by domestic firms that causes them to reduce domestic investment for any given interest rate
 - A rise in the interest rate in other countries
 - A fall in U.S. exports due to foreign concern about the safety of U.S. goods
 - Increased foreign purchases of U.S. government bonds due to loss of confidence in foreign governments
 - A rise in consumption and fall in savings by US consumers due to increased confidence about the future



Part B: Short Answer Questions(20 points)

(True/False/Uncertain—Explanation determines your grade.)

4 points each—5 questions

- a) Inflation reduces people's real purchasing power
- b) An increase in oil prices will shift the long-run aggregate supply to the left, leading to higher prices in the long run.
- c) In 1999 velocity increased from 100 to 105, the GDP deflator increased from 180 to 189, and the Federal Reserve held money supply constant at 300 million dollars. According to the quantity equation, nominal GDP does not change.

d) Government budget deficits can lead to hyperinflation.

e) Allowing foreigners to invest in the US market for loanable funds harms US borrowers, assuming that US citizens do not invest outside of the country.