

Name:
ID:

Department of Economics
Iowa State University
Principles of Macroeconomics
Spring 2011, Midterm 1

Directions:

Do Not Open This Booklet Until Told To Do So.

- Print your name and University ID number on this page
- Fill in your name, birth date, and ID on the bubble sheet, and put exam version 1 for special code "K"
- Answer multiple choice questions on the bubble-sheet, and answer the rest of the questions in this book.
- There are 52 points total on the exam.

Multiple choice questions. 2 points each

Answer the following questions on the bubble sheet provided. You will not get credit for your exam unless you fill in the exam version under special code “K” (the version is listed at the bottom of the page).

1. If the economy grew at a 3% rate this year and average prices grew _____, people would be better off this year compared with last year.
 - A) faster than 10%
 - B) slower than 3%
 - C) 3%
 - D) faster than 3%

2. Gross Domestic Product (GDP) may be calculated as the sum of:
 - A) exports and imports only.
 - B) consumer spending, investment spending, government purchases of goods and services, and exports.
 - C) consumer spending, investment spending, government purchases of goods and services, and exports minus imports.
 - D) consumer spending, investment spending, government transfer payments, and exports minus imports.

3. In an open economy:
 - A) there is trade in goods, services, or assets with other countries.
 - B) trade is only beneficial to the relatively larger economy.
 - C) the exchange rate is determined by the government.
 - D) specialization in activities with a comparative advantage is not possible.

4. The natural rate of unemployment changes when:
 - A) actual rate of unemployment changes.
 - B) government policies remain the same.
 - C) the cyclical unemployment changes.
 - D) there are changes in labor market institutions.

5. GDP tends to understate our economic well being because it:
 - A) includes expenditures on crime prevention equipment.
 - B) includes the value of services produced in the home.
 - C) includes health care costs related to the consumption of cigarettes.
 - D) excludes the value of leisure.

Use the following to answer question 6:

Table: The Consumer Price Index

Year	Consumer Price Index
1	80
2 (base year)	100
3	105
4	125
5	150

6. (Table: The Consumer Price Index) The approximate rate of inflation in Year 5 is _____ percent.
- A) 20
 - B) 19
 - C) 5
 - D) 10
7. An efficiency wage:
- A) results in a less productive work force.
 - B) can only be secured with the help of a labor union.
 - C) is one which causes greater frictional unemployment.
 - D) is offered by an employer to encourage workers to work harder.
8. An example of a government transfer is a(n):
- A) salary for members of the armed forces.
 - B) Social Security payment.
 - C) expenditure on an interstate highway.
 - D) bequest from a deceased relative.
9. Amy just graduated from college. She recently quit her part time job to focus on finding a full time job which uses her skills she has acquired in college better. Amy is considered:
- A) frictionally unemployed.
 - B) employed since she is focusing on finding a full time job.
 - C) structurally unemployed.
 - D) cyclically unemployed.

10. Which of the following is included in GDP?
- A) the purchase of a ticket to a Rolling Stones concert
 - B) the purchase of 100 shares of Microsoft stock
 - C) the purchase of a 1965 Ford Mustang
 - D) Social Security payments from the U.S. government to retired people
11. When a country's total product, better known as real Gross Domestic Product (GDP) undergoes periodic fluctuations, it is generally known as:
- A) a business cycle.
 - B) a trough.
 - C) a recession.
 - D) an expansion.
12. Which of the following is a LIKELY response to inflation?
- A) People tend to hold on to fewer interest-bearing assets.
 - B) People tend to make more transactions.
 - C) People choose to carry higher money balances.
 - D) People tend to make fewer transactions.
13. Which one of the following statements about the U.S. economy is not accurate?
- A) Long-run growth per capita is the key to higher wages and a rising standard of living.
 - B) Since the Second World War, aggregate output grew at a rate lower than the average annual growth rate of population.
 - C) Since the Second World War, aggregate output grew at a rate higher than the average annual growth rate of population.
 - D) Since the Second World War, macroeconomic policy has helped make the economy more stable.
14. The total volume of business sales in the economy is much larger than GDP because:
- A) GDP excludes exports.
 - B) GDP understates the value of total output.
 - C) the output approach to measuring GDP excludes intermediate transactions.
 - D) GDP includes transfer payments.

Use the following to answer question 15:

Table: Price and Output Data

Year	Output	Price per Unit
1	2	\$2
2	3	4
3 = base period	4	5
4	6	6
5	7	9

15. (Table: Price and Output Data) The price index for Year 4 is:
- A) 120.
 - B) 6.
 - C) 80.
 - D) 0.
16. Which pair of policies is likely to have the effect of reducing the natural rate of unemployment?
- A) high minimum wages and generous unemployment benefits
 - B) employment subsidies and policies designed to strengthen labor unions
 - C) job training and employment subsidies
 - D) job training and higher minimum wages
17. One role for government policy is:
- A) to subsidize private insurance for businesses to cover harm from macroeconomic fluctuations.
 - B) to avoid Keynesian economics.
 - C) to attempt to manage short-run macroeconomic fluctuations.
 - D) to provide insurance to cover damages from macroeconomic fluctuations.
18. Monetary policy attempts to affect the overall level of spending in the economy by changes in:
- A) interest rates and the quantity of money.
 - B) taxes and interest rates.
 - C) taxes.
 - D) taxes and spending.

19. A survey reveals that on a small island initially 1,000 people have jobs, 250 people are looking for jobs, and 450 people are neither working nor looking for work. Suppose that 150 of the 450 people who weren't looking for work now begin looking for work. There are now 400 people looking for work and 1,000 people working. What happens to the unemployment rate?
- A) It rises to 50.0%.
 - B) It falls to 20%.
 - C) Nothing happens to the unemployment rate, because these people weren't working before and they aren't working now.
 - D) It rises to 28.6%.
20. If the actual unemployment rate is 7% and the cyclical unemployment rate is 2%, then the natural rate of unemployment is:
- A) 5%.
 - B) 7%.
 - C) 9%.
 - D) 2%.

The next questions are from your homework. Answer in the space provided. Please give short answers and use complete sentences. If you do not explain your answer it will be marked wrong, even if you write down a correct number.

1. In May of each year, *The Economist* publishes data on the price of the Big Mac in different countries and exchange rates. The accompanying table shows some data used for the index from 2003 and 2007. Use this information to answer the following questions.

Country	<u>2003</u>		<u>2007</u>	
	Price of Big Mac (in local currency)	Price of Big Mac (in U.S. dollars)	Price of Big Mac (in local currency)	Price of Big Mac (in U.S. dollars)
Argentina	peso4.10	\$1.42	peso8.25	\$2.65
Canada	C\$3.20	\$2.21	C\$3.63	\$3.08
Eurozone	€2.71	\$2.98	€2.94	\$3.82
Japan	¥262	\$2.18	¥280	\$2.31
United States	\$2.71	\$2.71	\$3.22	\$3.22

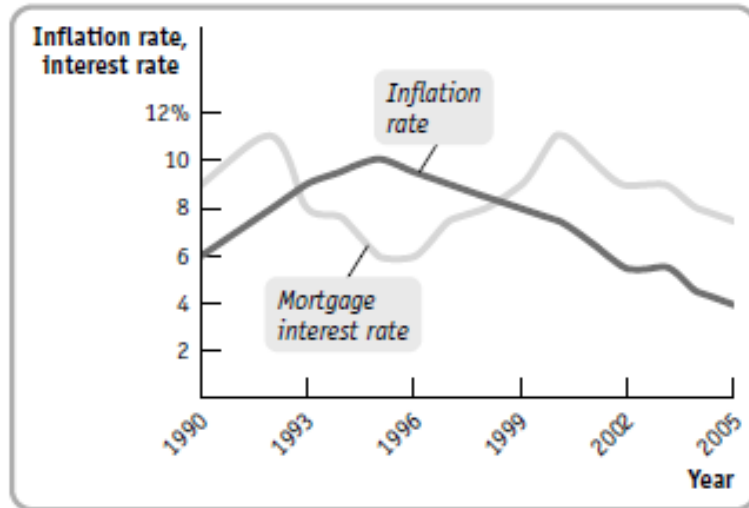
- a. Where was it cheapest to buy a Big Mac in U.S. dollars in 2003? **(1 point)**
- b. Where was it cheapest to buy a Big Mac in U.S. dollars in 2007? **(1 point)**
- c. Using the increase in the local currency price of the Big Mac in each country to measure the percent change in the overall price level from April 2003 to January 2007, which nation experienced the most inflation? Did any of the nations experience deflation? **(2 points)**

2. The consumer price index, or CPI, measures the cost of living for a typical urban household by multiplying the price for each category of expenditure (housing, food, and so on) times a measure of the importance of that expenditure in the average consumer's market basket and summing over all categories. However, using data from the consumer price index, we can see that changes in the cost of living for different types of consumers can vary a great deal. Let's compare the cost of living for a hypothetical retired person and a hypothetical college student. Let's assume that the market basket of a retired person is allocated in the following way: 10% on housing, 15% on food, 5% on transportation, 60% on medical care, 0% on education, and 10% on recreation. The college student's market basket is allocated as follows: 5% on housing, 15% on food, 20% on transportation, 0% on medical care, 40% on education, and 20% on recreation. The accompanying table shows the November 2007 CPI for each of the relevant categories. The overall CPI for all items in November 2007 was 210.2.

	CPI November 2007
Housing	210.7
Food	206.3
Transportation	190.7
Medical care	357.0
Education	121.4
Recreation	118.8

- a. Calculate the overall CPI for the retired person and compare to the overall CPI.
(2 points)
- b. Calculate the overall CPI for the college student and compare to the overall CPI.
(2 points)

3. The accompanying diagram shows mortgage interest rates and inflation during 1990-2005 in the economy of Albernia. When would home mortgages have been especially attractive and why? **(4 points)**



Answer Key

1. B
2. C
3. A
4. D
5. D
6. A
7. D
8. B
9. A
10. A
11. A
12. B
13. B
14. C
15. A
16. C
17. C
18. A
19. D
20. A