

Principles of Economics II  
Midterm Exam 1

10/22/2015

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_.

SID: \_\_\_\_\_.

TA/Section: \_\_\_\_\_.

Do not start the exam until instructed to do so.

Please select only one answer.

1. Which of the following goods is the best example of a public good?
  - a) Garbage-collection services that are provided by a municipal government
  - b) Music that is broadcast over the airwaves by a privately-owned FM radio station
  - c) Electricity that is provided to farmhouses by a rural electric cooperative
  - d) Cable TV services that are provided by a privately-owned firm that is regulated by the Government of the city in which it operates
  
2. For an economy as a whole,
  - a) wages must equal profit.
  - b) consumption must equal income.
  - c) income must equal expenditure.
  - d) consumption must equal saving.
  
3. Suppose a basket of goods and services has been selected to calculate the CPI and 2012 has been selected as the base year. In 2012, the basket's cost was \$50; in 2014, the basket's cost was \$51; and in 2016, the basket's cost was \$52. The value of the CPI in 2014 was
  - a) 98.0.
  - b) 104.0.
  - c) 151.0.
  - d) 102.0.

4. An increase in capital will increase real GDP per person
- a) more in a poor country than a rich country. The increase in real GDP per person will be larger if the addition to capital is from domestic rather than foreign investment.
  - b) less in a poor country than a rich country. The increase in real GDP per person will be larger if the addition to capital is from domestic rather than foreign investment.
  - c) less in a poor country than a rich country. The increase in real GDP per person will be the same whether the addition to capital is from domestic or foreign investment.
  - d) more in a poor country than a rich country. The increase in real GDP per person will be the same whether the addition to capital is from domestic or foreign investment.
5. A change in the tax laws that increases the supply of loanable funds will have a smaller effect on investment when
- a) the demand for loanable funds is more elastic and the supply of loanable funds is more inelastic.
  - b) the demand for loanable funds is more inelastic and the supply of loanable funds is more elastic.
  - c) both the demand for and supply of loanable funds are more elastic.
  - d) both the demand for and supply of loanable funds are more inelastic.
6. The purchase of rice produced this period is included in GDP if the rice is
- a) used in a meal a restaurant sells during the same period they buy the rice.
  - b) purchased by a family who uses it to make tuna casserole for its supper.
  - c) purchased by a frozen food company to increase its inventory.
  - d) B and C are correct.

7. The table below shows the prices of baseballs and baseball bats for three years. Assume the typical consumer's basket consists of 6 baseballs and 2 baseball bats.

<b>Year</b>	<b>Price of a Baseball</b>	<b>Price of a Baseball Bat</b>
2008	\$3.25	\$75
2009	\$3.75	\$82
2010	\$4.50	\$96

The inflation rate was

- a) 10.03 percent in 2009 and 17.43 percent in 2010.
- b) 17.00 percent in 2009 and 32.50 percent in 2010.
- c) 10.03 percent in 2009 and 29.20 percent in 2010.
- d) 17.00 percent in 2009 and 29.20 percent in 2010.

8. When the absence of property rights causes a market failure, the government can potentially solve the problem

- a) by clearly defining property rights.
- b) through regulation.
- c) by supplying the good itself.
- d) All of the above are correct.

9. There are four homes along Belmont Circle, which surrounds a small plot of land. The land currently has no trees, and the 4 homeowners -- Adams, Benitez, Chen, and Davis -- are considering the idea of contributing to a pool of money that will be used to plant up to 4 trees. The table represents their willingness to pay, that is, the maximum amount that each homeowner is willing to contribute toward each tree.

	Adams	Benitez	Chen	Davis
First tree	\$100	\$115	\$120	\$90
Second tree	50	110	110	50
Third tree	20	100	80	30
Fourth tree	10	50	40	0

Suppose the cost to plant each tree is \$120 and the 4 homeowners have agreed to split all tree-planting costs equally. How many trees would Adams prefer to plant?

- a) 0
- b) 1
- c) 2
- d) 3

10. A country's real GDP rose from \$500 to \$530 while its nominal GDP rose from \$600 to \$700. What was this country's inflation rate?

- a) 16.7%.
- b) 10.0%.
- c) 15.0%.
- d) -9.1%.

**11.** Suppose an economy produces only cranberries and maple syrup. In 2010, 50 units of cranberries are sold at \$20 per unit and 100 units of maple syrup are sold at \$8 per unit. In 2009, the base year, the price of cranberries was \$10 per unit and the price of maple syrup was \$15 per unit. For 2010,

- a) nominal GDP is \$1800, real GDP is \$2000, and the GDP deflator is 90.
- b) nominal GDP is \$1800, real GDP is \$2000, and the GDP deflator is 111.1.
- c) nominal GDP is \$2000, real GDP is \$1800, and the GDP deflator is 90.
- d) nominal GDP is \$2000, real GDP is \$1800, and the GDP deflator is 111.1.

**12.** According to the definitions of national saving and public saving, if  $Y$ ,  $C$ , and  $G$  remained the same, an increase in taxes would

- a) leave national saving unchanged and raise public saving.
- b) raise national saving and public saving.
- c) raise national saving and raise public saving.
- d) leave national saving and public saving unchanged.

**13.** Suppose that a small county is considering adding a guard rail to a dangerous curve by a river. The guard rail will cost \$70,000. The average damage done to vehicles that slide off the road at the curve is \$10,000. It is expected that the guard rail will prevent 5 vehicles from sliding off the road during its usable life. What should the county do?

- a) Install the guard rail because safety is priceless.
- b) Install the guard rail because the benefits exceed the costs.
- c) Do not install the guard rail because the costs exceed the benefits.
- d) Do not install the guard rail at any cost because drivers can purchase private insurance for their vehicles.

**14.** The table below contains data for the country of Batterland, which produces only waffles and pancakes. The base year is 2013.

Year	Price of Waffles	Quantity of Waffles	Price of Pancakes	Quantity of Pancakes
2010	\$2.00	80	\$1.00	100
2011	\$2.00	100	\$2.00	120
2012	\$2.00	120	\$3.00	150
2013	\$4.00	150	\$3.00	200

From 2012 to 2013, this country's output grew

- a) 28.2%.
- b) 29.0%.
- c) 29.6%.
- d) 73.9%.

**15.** In the fourteenth century it is estimated that deaths resulting from the bubonic plague reduced the population by about a third. Assuming diminishing returns, the decrease in population should have

- a) increased productivity and real GDP per person.
- b) increased productivity but decreased real GDP per person.
- c) increased real GDP per person, but decreased productivity.
- d) decreased productivity and real GDP per person.

**16.** Suppose the government were to replace the income tax with a consumption tax so that interest on savings was not taxed. The result would be that the interest rate

- a) and investment both would increase.
- b) and investment both would decrease.
- c) would increase and investment would decrease.
- d) would decrease and investment would increase.

**17.** Suppose the price of a quart of milk rises from \$1.00 to \$1.20 and the price of a T-shirt rises from \$8.00 to \$9.60. If the CPI rises from 150 to 195, then people likely will buy

- a) more milk and more T-shirts.
- b) more milk and fewer T-shirts.
- c) less milk and more T-shirts.
- d) less milk and fewer T-shirts.

**18.** A regional lobster management board recently proposed a five-year moratorium on lobster fishing in the Atlantic waters south of Cape Cod based on a study of the lobster population. Which of the following statements is *not* correct?

- a) Lobsters are rival but not excludable.
- b) The lobster population is an example of the tragedy of the commons.
- c) Reducing the quota on the number of lobsters any fisher can catch would have a protective effect on the lobster population.
- d) If left unregulated, the lobster population will likely increase.

**19.** The president of a poor country has announced that he will implement the following measures which he claims are designed to increase growth: 1. Reduce corruption in the legal system; 2. Reduce reliance on market forces because they allocate goods and services in an unfair manner; 3. Restrict investment in domestic industries by foreigners because they take some of the profits out of the country; 4. Encourage trade with neighboring countries; and 5. Increase the fraction of GDP devoted to consumption. How many of these measures will have a positive effect on growth?

- a) 1
- b) 2
- c) 3
- d) 4



**20.** One of the widely acknowledged problems with using the consumer price index as a measure of the cost of living is that the CPI

- a) fails to account for consumer spending on housing.
- b) accounts only for consumer spending on food, clothing, and energy.
- c) fails to account for the fact that consumers spend larger percentages of their incomes on some goods and smaller percentages of their incomes on other goods.
- d) fails to account for the introduction of new goods.

**21.** Suppose that in a closed economy GDP is equal to 20,000, consumption equal to 15,000, government purchases equal 4,000 and taxes equal 3,000. What are private saving, public saving, and national saving?

- a) -2,000, 1,000, and 2,000, respectively.
- b) 1,000, 2,000, and 3,000, respectively.
- c) 2,000, -1,000, and 1,000, respectively.
- d) 2,000, 1,000, and 2,000, respectively.

**22.** Suppose that an economy produces 20,000 units of good A which sells at \$3 a unit and 40,000 units of good B which sells at \$1 per unit. Production of good A contributes

- a)  $\frac{1}{3}$  times as much to GDP as the production of good B.
- b)  $\frac{3}{2}$  times as much to GDP as the production of good B.
- c) 3 times as much to GDP as the production of good B.
- d)  $\frac{2}{3}$  times as much to GDP as production of good B.

**23.** Sue Holloway was an accountant in 1944 and earned \$12,000 that year. Her son, Josh Holloway, is an accountant today and he earned \$210,000 in 2013. The price index was 17.6 in 1944 and 218.4 in 2013. In real terms, Josh Holloway's income amounts to about what percentage of Sue Holloway's income?

- a) 71 percent
- b) 141 percent
- c) 165 percent
- d) 198 percent

**24.** Two bonds have the same term to maturity. The first was issued by a state government and the probability of default is believed to be low. The other was issued by a corporation and the probability of default is believed to be high. Which of the following is correct?

- a) Because they have the same term to maturity the interest rates should be the same.
- b) Because of the differences in tax treatment and credit risk, the state bond should have the higher interest rate.
- c) Because of the differences in tax treatment and credit risk, the corporate bond should have the higher interest rate.
- d) It is not possible to say if one bond has a higher interest rate than the other.

**25.** In 2009, the U.S. government's budget deficit increased substantially. Other things the same, this means the

- a) supply of loanable funds shifted to the right.
- b) demand for loanable funds shifted to the right.
- c) demand for loanable funds shifted to the left.
- d) supply of loanable funds shifted to the left.