

Name:
Spring 2005

Econ 112 Test 1
Dr. Raymond

Directions: There are two parts.

Part I: Please choose the most appropriate answer and carefully record your response on your scantron card. Each question is worth 3 points.

Part II: Answer the question in a clear, very concise, yet comprehensive manner.

Graphs are mandatory whenever appropriate! Each part (a,b,c,...) is worth 5 points.

One can earn up to 120 points on this exam.

Part I: (60 points)

1) Macroeconomics investigates the:

- A. determinants of national income.
- B. aggregate consumption and investment.
- C. aggregate price level.
- D. Both B&C.
- E. All the above.

2) The external benefits claimed for a college education include:

- A. increased social cohesion.
- B. higher fringe benefits.
- C. higher productivity for years to come.
- D. both A&C.
- E. all of the above.

3) Federal money awarded to college students on the basis of need (such as Pell Grants and Guaranteed Student Loans) are indicative that college education:

- A. is efficiently allocated by competitive markets.
- B. provides external costs.
- C. is not efficiently allocated by competitive markets.
- D. Both B&C.
- E. none of the above.

4) A recession may occur whenever:

- A. A period where GDP growth is increasing and inflation is high.
- B. A period where GDP growth is stagnated and inflation is low.
- C. A period where unemployment is low.
- D. All of the above.
- E. None of the above.

5) An example(s) of a government policy tool(s) is(are):

- A. fiscal policy
- B. monetary policy
- C. income-wage policies
- D. laws and regulations
- E. all the above.

6) When Beth Ann receives a vaccination against rubella, her neighbors also receive some benefit because Beth Ann will not expose them to this disease. This is an example of:

- A. an external benefit.
- B. private benefit.
- C. social benefit.
- D. external cost.
- E. None of the above.

- 7) Suppose that at the efficient level of production *Lights Are Us* Utility Company's marginal private cost is estimated to be \$18 per unit while its marginal social cost is estimated to be \$21 per unit. To bring about efficiency, the government should impose a tax of:
- A. \$3 per unit. B. \$18 per unit. C. \$21 per unit. D. \$39 per unit.
- 8) United State's gross domestic product (GDP) is:
- A) the value of all goods and services produced in the US during a year.
B) the value of all final goods and services produced in the US during a year.
C) the value of all goods and services produced by US citizens during a year.
D) the value of all final goods and services produced by US citizens abroad during a year.
E) none of the above.
- 9) Economists view investment as:
- A) borrowing for the purchase of stocks and bonds.
B) borrowing for the purchase of raw land for later resale.
C) saving to cover the difference between people's income and their spending.
D) borrowing for the purchase of equipment, plants, and inventories.
E) saving for the purchase of certificates of deposit.
- 10) Which of the following is most likely to be an intermediate good or service?
- A) flour purchased by a homemaker
B) flowers purchased by a student for his valentine
C) the shoes of an NBA star
D) tires on a new car
E) All of the above
- 11) Coase stated that efficient markets require, among other things, universal property rights. This means that:
- A. individuals' rights must be monitored and enforced by government.
B. individuals must possess all rights to property ownership.
C. individuals who hold property must have access to the same set of rights.
D. individuals must have the ability to buy and sell their property as they wish.
E. individuals must possess all rights to, and obligations of, property ownership.
- 12) ZAPCO Refinery is currently producing 100,000 barrels of refined oil per day. The marginal private cost of this production is \$45 per barrel and the marginal external cost is \$25 per barrel. Suppose the marginal social benefit is \$65 per barrel. In this case, ZAPCO is:
- A. imposing too much harm on the environment and should cut back production.
B. is producing an efficient amount.
C. is producing an amount less than the efficient amount.
D. could make society better off by increasing production.
E. none of the above.

- 13) Which of the following is characteristic of a public good?
- A. A public good is always completely supplied by the government sector.
 - B. Nonpaying individuals can be excluded from consuming a public good.
 - C. Consumption of a public good by one individual does not decrease the quantity of the good available for other individuals to consume.
 - D. A public good is rival.
 - E. none of the above.
- 14) Which of the following is the best example of a public good?
- A. cheese whiz
 - B. Curt Schilling's sock
 - C. national defense
 - D. public housing
 - E. education
- 15) The marginal cost of providing a public good to an additional user is:
- A. negligible.
 - B. increasing as the number of users increases.
 - C. negative.
 - D. quite large. This is why government must provide the good.
 - E. none of the above.
- 16) Your neighborhood association votes to institute a Neighborhood Watch program. You refuse to participate, but receive the benefit of this extra protection because you live in the neighborhood. Your behavior is an example of:
- A. the special interest effect.
 - B. the free rider problem.
 - C. a positive externality.
 - D. a negative externality.
 - E. none of the above.
- 17) If the only externality in a market comes from pollution, the efficient level of pollution:
- A. is zero.
 - B. will lead to the firm closing.
 - C. occurs when marginal social cost and marginal private benefit are equal.
 - D. occurs when marginal private cost is less than marginal private benefit.
 - E. none of the above.
- 18) The marginal social benefit of crime control:
- A. increases as additional units are provided.
 - B. decreases as additional units are provided.
 - C. is constant as additional units are provided.
 - D. increases as additional units are provided, but increases at an increasing rate.
 - E. none of the above.
- 19) Suppose the marginal social benefit of the last unit of crime control in Metropolis is \$48,500 per year while the marginal social cost of the last unit of crime control is \$35,000 per year. In this instance the city should:
- A. cut back on crime control as the quantity of crime control currently exceeds the efficient level.
 - B. expand crime control as the quantity of crime control is currently less than the efficient level.
 - C. hire additional officers as long as the marginal social benefit associated with the marginal unit is greater than zero.
 - D. hire additional officers until the marginal social benefit associated with the marginal unit is zero.
 - E. none of the above.
- 20) A Pigovian tax can bring about an efficient solution to the pollution problem because it:
- A. forces firms to bear the full cost of the tax.
 - B. forces both firms and households to bear the full cost of their decisions.
 - C. eliminates the external cost associated with pollution.
 - D. allows government agencies to use benefit-cost analysis to determine the efficient level of pollution.
 - E. none of the above.

Part II: Answer the following in a clear, very concise, yet comprehensive manner (60 points). Graphs are mandatory whenever appropriate!

1)

- a) How would an economist justify subsidies to education?
- b) Using this argument, do you think it would be easier to justify the subsidies going to secondary (high school) or higher (college) education?
- c) How would one determine the efficient amount of subsidization in each case?
- d) Illustrate your conclusion with appropriate graph(s).

2)	INDIVIDUAL CONSUMER DEMAND			TOTAL DEMAND FOR PUBLIC GOOD			
	Price	True Quantity Demanded by Consumer 1	Quantity Demanded by Consumer 1 as a Free Rider	True Quantity Demanded by Consumer 2	True Willingness To Pay (TWP)	WP with Free Rider	Quantity Demanded
	1	12	8	14			14
	2	10	5	12			12
	3	8	3	10			10
	4	5	0	8			8
	5	3	0	5			5
	6	0	0	3			3

- a) Assume that the good in question is a public good. Using the true willingnesses to pay (TWP), derive six points and sketch the demand curve. What quantity will be provided if the marginal cost of providing the good equals \$5.00?
- b) Sketch the result.
- c) Next assume that consumer 1 is a free rider. Now, derive six points and sketch the demand curve. What quantity will be provided if the marginal cost of providing the good equals \$5.00? Is this efficient? Explain.
- d) Sketch the result.

3)

- a) Completely sketch the Circular Flow Diagram (CFD). Label everything!
- b) What condition precisely describes macro equilibrium for the Circular Flow model?
- c) Use the CFD to analyze the impact of a budget surplus on private investment if the trade deficit is constant.
- d) Intuitively explain your reasoning in (c).