

**Econ 101, Sections 3 and 4, S11, Schroeter
Makeup Exam**

Choose the single best answer for each question. Do all of your scratch-work in the side and bottom margins of pages.

1. Which of the following phrases best captures the notion of efficiency?
 - a. absolute fairness.
 - b. equal distribution.
 - *. minimum waste.
 - d. equitable outcome.

2. The usual "bowed-outward" shape of the production possibilities frontier is a reflection of the fact that
 - a. production possibilities improve as technology advances.
 - b. the economy's productive resources are limited.
 - c. an efficient allocation of resources involves a tradeoff: increased production of one good requires a decrease in production of some other good.
 - *. the opportunity cost of a good increases as more of it is produced.

Questions 3 and 4 are based on the following information. Two small countries, Decatur and Montgomery, use their labor resources to produce goods of two types: manufactured goods and agricultural goods. The table below gives the number of hours of labor needed to produce one unit of each type of good in each country.

	Hours needed to produce one unit of	
	manufactured goods	agricultural goods
Decatur	4	3
Montgomery	6	2

3. Which of the following is true?
 - a. The opportunity cost of one unit of manufactured goods in Montgomery is 6 units of agricultural goods.
 - b. The resource cost of one unit of agricultural goods in Decatur is $\frac{3}{4}$ units of manufactured goods.
 - c. Decatur has the comparative advantage in agricultural goods.
 - *. None of the above is true.

4. Which of the following is true?
 - a. Montgomery has the absolute advantage in manufactured goods.
 - b. The resource cost of one unit of agricultural goods in Montgomery is 3 hours.
 - c. The two countries could engage in a mutually beneficial trade with one another if the terms of trade were 4 units of agricultural goods per unit of manufactured goods.
 - *. None of the above is true.

5. Which of the following could be responsible for a decrease in the supply of a good?
- a. a decrease in the good's own price.
 - b. a decrease in the demand for the good.
 - *. an increase in the price of an input used to produce the good.
 - d. all of the above.
6. In a competitive market, demand remains stable while supply increases. As a result, we would expect
- a. an increase in equilibrium price and an increase in equilibrium quantity.
 - b. an increase in equilibrium price and a decrease in equilibrium quantity.
 - *. a decrease in equilibrium price and an increase in equilibrium quantity.
 - d. a decrease in equilibrium price and a decrease in equilibrium quantity.
7. Coffee and tea are substitutes. What changes will occur in the competitive market for coffee if the price of tea increases and bad weather in the world's coffee-growing regions leads to a decrease in coffee bean production? The equilibrium price of coffee will
- *. increase and the equilibrium quantity of coffee will either increase, decrease, or stay the same.
 - b. decrease and the equilibrium quantity of coffee will either increase, decrease, or stay the same.
 - c. either increase, decrease, or stay the same, and the equilibrium quantity of coffee will increase.
 - d. either increase, decrease, or stay the same, and the equilibrium quantity of coffee will decrease.
8. For a good that is a necessity, demand
- a. tends to be elastic.
 - b. has unit elasticity.
 - *. tends to be inelastic.
 - d. cannot be represented by a demand curve in the usual way.
9. If the price elasticity of demand for a good is -0.8 , then which of the following events is consistent with a 4% decrease in the quantity demanded of the good?
- a. a 0.2% increase in the price of the good.
 - b. a 3.2% increase in the price of the good.
 - c. a 4.8% increase in the price of the good.
 - *. a 5.0% increase in the price of the good.
10. At Bud's Service Center, the quantity of gasoline purchased per day falls from 8,500 gallons to 8,000 gallons when the price increases from \$3.50/gallon to \$4.00/gallon. Over this range of prices, the elasticity of demand (calculated by the midpoint method) for gasoline at Bud's Service Center is
- *. -0.455 .
 - b. -0.787 .
 - c. -1.271 .
 - d. -2.200 .

11. A shortage results when

- *. a binding price ceiling is imposed on a market.
- b. a non-binding price ceiling is imposed on a market.
- c. a binding price floor is imposed on a market.
- d. a non-binding price floor is imposed on a market.

12. The equilibrium price in a competitive market is \$4.00/unit. Then the government imposes a \$1.00/unit excise tax on the market and, as a result, the price that consumers pay (inclusive of the tax) goes up by \$0.75/unit. Which of the following is true?

- a. The elasticity of demand for the good is -0.25.
- b. The elasticity of demand for the good is -0.75.
- c. The demand for the good must be more elastic than the supply of the good.
- *. The demand for the good must be less elastic than the supply of the good.

13. Randy values a new set of golf clubs at \$750 but he is able to buy them for \$575.

Randy's consumer surplus from the purchase is

- *. \$175.
- b. \$575.
- c. \$750.
- d. \$1325.

Questions 14 and 15 refer to the following information. In the competitive market for widgets, demand and supply curves are straight lines. With no excise tax on the market, equilibrium price and quantity are \$2.00/widget and 1500 widgets/day, respectively. Then the government imposes an excise tax of \$0.80/widget and, as a result, the quantity of widgets traded falls to 1000 widgets/day.

14. As a result of the excise tax, consumer surplus falls by

- a. \$200/day.
- b. \$500/day.
- c. \$800/day.
- *. impossible to determine without more information.

15. This tax results in a deadweight loss of

- *. \$200/day.
- b. \$500/day.
- c. \$800/day.
- d. impossible to determine without more information.

16. Gastonia, a small country, prohibits international trade. The price of wheat in Gastonia's domestic market is higher than the price of wheat available on the world market. If Gastonia were to repeal its trade ban, the price of wheat in Gastonia would
- increase and Gastonia would become an importer of wheat.
 - increase and Gastonia would become an exporter of wheat.
 - *. decrease and Gastonia would become an importer of wheat.
 - decrease and Gastonia would become an exporter of wheat.

17. Finkelstein is a small country that currently has a free trade policy. Some of the oil consumed in Finkelstein is produced domestically and some is imported. If the government of Finkelstein imposes a tariff on the importation of oil, domestic oil producer surplus would _____ and domestic oil consumer surplus would _____.
- increase; increase.
 - *. increase; decrease.
 - decrease; increase.
 - decrease; decrease.

Questions 18 and 19 refer to the following information and table. Three firms (A, B, and C) are currently responsible for 3 units of pollution each (for a total of 9 units of pollution). The following table shows the marginal abatement costs for each of the three firms. For example, it would cost firm A \$20 to reduce its pollution by one unit, an additional \$27 to reduce its pollution by a second unit, and an additional \$35 to eliminate the third unit of pollution.

Unit of pollution eliminated	Firm A	Firm B	Firm C
First unit	20	26	18
Second unit	27	35	23
Third unit	35	48	32

18. Suppose that the government imposes a pollution tax of \$30/unit. Firms would then have to pay a tax of \$30 for each unit of pollution they created. How many units of pollution would be eliminated by the three firms combined?
- *. 5.
 - 6.
 - 7.
 - none of the above.

19. Suppose that the government issued two pollution permits to each firm, for a total of six, but allowed the firms to trade permits. Firms are only allowed to pollute up to their holdings of permits; one unit of pollution per permit. Which of the following trades might occur?
- Firm B buys one permit from Firm C for a price between \$32 and \$35.
 - Firm A buys one permit from Firm B for a price between \$27 and \$35.
 - Firm C buys one permit from Firm A for a price between \$20 and \$23.
 - *. Firm B buys one permit from Firm C for a price between \$23 and \$26.

20. The term market failure refers to
- *. a market that fails to allocate resources efficiently.
 - b. an unsuccessful advertising campaign that reduces demand.
 - c. ruthless competition among firms.
 - d. a firm that is forced out of business because of losses.
21. Without government intervention, public goods tend to be
- a. overproduced and common resources tend to be overconsumed.
 - b. overproduced and common resources tend to be underconsumed.
 - *. underproduced and common resources tend to be overconsumed.
 - d. underproduced and common resources tend to be underconsumed.
22. If your total income is \$40,000 and your income tax liability is \$5,000, your marginal tax rate is _____ and your average tax rate is _____.
- a. 12.5%; 8%.
 - b. 12.5%; 12.5%
 - *. impossible to determine without more information; 12.5%
 - d. 12.5%; impossible to determine without more information.
23. Consider a hypothetical income tax structure described by the following schedule of marginal rates.

On taxable income . . .	the marginal tax rate is . . .
Up to \$10,000	7%
From \$10,000 to \$40,000	15%
From \$40,000 to \$80,000	25%
Over \$80,000	38%

- For a taxpayer with taxable income of \$100,000, tax owed would be
- a. \$7,600.
 - b. \$19,600.
 - *. \$22,800.
 - d. \$38,000.
24. On a 100 acre farm, a farmer is able to produce 3,000 bushels of wheat when he hires 2 workers. He is able to produce 4,400 bushels of wheat when he hires 3 workers. Which of the following possibilities is consistent with the property of diminishing marginal product?
- a. The farmer is able to produce 5,600 bushels of wheat when he hires 4 workers.
 - b. The farmer is able to produce 5,400 bushels of wheat when he hires 4 workers.
 - c. The farmer is able to produce 5,200 bushels of wheat when he hires 4 workers.
 - *. Any one of the above would be consistent with diminishing marginal product.

25. A firm produces 300 units of output at a total cost of \$1,000. If fixed costs are \$100,
- a. average fixed cost is \$10/unit.
 - *. average variable cost is \$3/unit.
 - c. average total cost is \$4/unit.
 - d. none of the above.
26. At its current output level, a competitive firm faces a price of \$3.00/unit. Average total cost, average variable cost, and marginal cost are \$3.80/unit, \$3.20/unit, and \$3.00/unit, respectively. To maximize profit (or minimize loss) in the short-run, the firm should
- a. increase output.
 - b. maintain its current output.
 - c. decrease output, but not shut down.
 - *. shut down.
27. At its current output level, a monopoly firm faces a price of \$3.50/unit and has marginal revenue of \$3.00/unit. Average total cost, average variable cost, and marginal cost are \$3.80/unit, \$3.20/unit, and \$3.00/unit, respectively. To maximize profit (or minimize loss) in the short-run, the firm should
- a. increase output.
 - *. maintain its current output.
 - c. decrease output, but not shut down.
 - d. shut down.
28. A benefit to society of the patent and copyright laws is that those laws
- a. help to keep prices down.
 - b. help to prevent a single firm from acquiring a monopoly.
 - *. encourage creative activity.
 - d. discourage excessive amounts of output of patented or copyrighted products.
29. In a two-player game (with players A and B), a dominant strategy for player A is a strategy that
- a. always gives player A a better payoff than player B.
 - b. is best for player A if player B cooperates.
 - c. makes player A better off without hurting player B.
 - *. is the best choice for player A no matter what player B does.
30. In the Nash equilibrium of a game
- a. each player is playing his or her dominant strategy.
 - *. no player has an incentive to unilaterally change his or her strategy.
 - c. the sum of the payoffs of all the players is maximized.
 - d. all of the above.