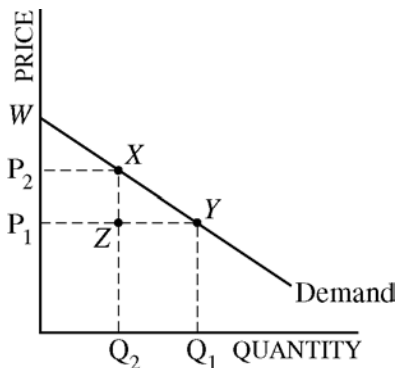


Major Field Test in Economics Sample Questions

The following questions illustrate the range of the test in terms of the abilities measured, the disciplines covered, and the difficulty of the questions posed. They should not, however, be considered representative of the entire scope of the test in either content or difficulty. An answer key follows the questions.

1. Firm X currently employs labor and capital such that the marginal product of capital is twice the marginal product of labor. If the price of a unit of labor is \$8.00 and the price of a unit of capital is \$4.00, Firm X can reduce costs while producing the same level of output by
- (A) using more labor and less capital
 - (B) using more capital and less labor
 - (C) decreasing its use of both capital and labor
 - (D) increasing its use of both capital and labor
 - (E) maintaining its employment of capital and labor at current levels



2. According to the diagram above depicting a consumer's demand for knishes, if the price of a knish is P_1 , the consumer's surplus will be equal to the area
- (A) XYQ_1Q_2
 - (B) XZP_1P_2
 - (C) XYP_1P_2
 - (D) WXP_2
 - (E) WYP_1

3. Within the Keynesian framework, which of the following is true?
- (A) At a given level of income, the amount savers intend to save and the amount investors intend to invest may or may not be equal.
 - (B) At any interest rate, the amount savers intend to save and the amount investors intend to invest are always equal.
 - (C) The marginal propensity to save is always equal to 1.
 - (D) Macroeconomic equilibrium at full employment is never achievable.
 - (E) Full-employment equilibrium would always tend to occur in the short run as well as the long run.
4. Which of the following is true of a negatively sloped labor-supply curve?
- (A) It implies that an individual's work effort is not sensitive to a change in the wage rate.
 - (B) It results when the income effect dominates the substitution effect.
 - (C) It implies that the marginal product of labor is declining.
 - (D) It cannot occur if leisure is a normal good.
 - (E) It implies positive elasticity of labor supply.

5. If the growth rate of the labor force exceeds the growth rate of output, which of the following will be true in the long run?
- (A) Wage rates will tend to rise.
 - (B) Wage rates will tend to remain constant.
 - (C) Wage rates will tend to fall.
 - (D) The number of unemployed people will fall.
 - (E) The level of employment does not change.

6. Last year the demand for a product was 105,000 units. In order to test the alternative hypothesis that demand has changed this year, which of the following would be the null hypothesis statement?

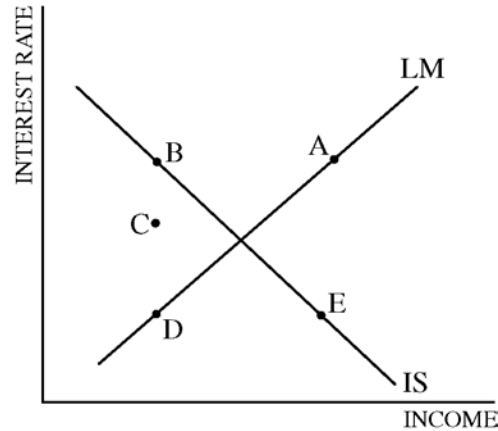
- (A) Demand is increasing or remaining constant.
- (B) Last year's demand is less than this year's demand.
- (C) Demand has not changed this year.
- (D) Demand is less this year than last year.
- (E) The level of significance is 0.05.

7. The absolute value of the slope of a production isoquant is equal to the

- (A) ratio of the prices of the two inputs.
- (B) amount of one input used divided by the amount of the other input
- (C) ratio of the marginal utilities of the two inputs
- (D) ratio of the marginal products of the two inputs
- (E) ratio of the marginal costs of the two inputs

8. Suppose that median disposable income measured in current dollars is \$10,000 and \$20,000 for 1978 and 1988, respectively. The economy's price index is 100 in the base year of 1978 and 250 in 1988. Which of the following is true?

- (A) Inflation, as measured by the price index, rose 250 percent over the period.
- (B) Nominal median disposable income rose 50 percent over the period.
- (C) Real median disposable income rose 250 percent over the period.
- (D) Real median disposable income fell 50 percent over the period.
- (E) The \$10,000 in 1978, measured in 1988 dollars, is equivalent to \$25,000.



9. The diagram above shows the IS and LM curves for an economy. Which of the points characterizes equilibrium in the money market, and desired investment in excess of desired saving?

- (A) A
- (B) B
- (C) C
- (D) D
- (E) E

10. The following data show test scores on an economics exam for seven college students. Which of the following are the correct calculations for the mean, median, and mode of the distribution?

<u>Student</u>	<u>Score</u>
A	40
B	60
C	20
D	50
E	10
F	20
G	80

	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
(A)	50	40	30
(B)	40	40	20
(C)	40	20	10
(D)	30	50	20
(E)	20	40	20

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11. If the demand for a product increases and its supply decreases, which of the following will happen to the equilibrium price and quantity?

	<u>Equilibrium Price</u>	<u>Equilibrium Quantity</u>
(A)	Increase	Indeterminate
(B)	Increase	Remain constant
(C)	Increase	Increase
(D)	Decrease	Indeterminate
(E)	Decrease	Decrease

(E) less labor becomes available as the wage rate falls

12. A demand function for a good is given by $Q = 100 - 4P^2$, where Q = quantity demanded per unit of time and P = the price per unit. At a price of \$4, the absolute value of the price elasticity of demand is approximately equal to which of the following?

- (A) ∞
- (B) 36.0
- (C) 3.6
- (D) 1.0
- (E) 0.28

13. In a graph of a consumer's budget constraint, the amount of good X is measured along the horizontal axis, while the amount of good Y is measured along the vertical axis. The unit prices of good X and Y are P_x and P_y , respectively. The slope of the budget constraint is

- (A) $\Delta X/\Delta Y$
- (B) $-X/Y$
- (C) $-Y/X$
- (D) $-P_y/P_x$
- (E) $-P_x/P_y$

14. A perfectly competitive firm's demand curve for labor is downward sloping because

- (A) the firm must lower price to sell more units of output
- (B) the marginal product of labor declines as more labor is hired
- (C) the price of labor is bid up as the firm hires more labor
- (D) the quality of labor declines as full employment is attained

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15. In national income accounting, gross private domestic investment would include the purchase of

- (A) Treasury bills by commercial banks
- (B) Treasury bills by an automobile company
- (C) corporate bonds by a household
- (D) a new car by a household
- (E) a new home by a household

16. To internalize external costs that an industry generates, the government should do which of the following?

- (A) Impose a tax on producers to correct for the underallocation of resources to this industry.
- (B) Grant a subsidy to producers to correct for the underallocation of resources to this industry.
- (C) Impose a tax on producers to correct for the overallocation of resources to this industry.
- (D) Grant a subsidy to producers to correct for the overallocation of resources to this industry.
- (E) Impose a ceiling on prices to correct for the overallocation of resources to this industry.

17. Assume that the United States and Mexico are major trading partners. The United States dollar will appreciate in relation to the Mexican peso under which of the following conditions?

- (A) The United States demand for Mexican goods increases.
- (B) The inflation rate in the United States is higher than the inflation rate in Mexico.
- (C) United States tourists increase their travel to Mexico.
- (D) United States businesses increase their investment in Mexico.
- (E) Real interest rates in the United States rise relative to those in Mexico.

18. When the Federal Reserve increases the supply of money, the interest rate and the quantity of money demanded will change in which of the following ways?

	<u>Interest Rate</u>	<u>Quantity of Money Demanded</u>
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- | | | |
|-----|----------|-----------|
| (A) | Decrease | Decrease |
| (B) | Decrease | Increase |
| (C) | Decrease | No change |
| (D) | Increase | Decrease |
| (E) | Increase | Increase |

19. If the government sets a price floor above the market equilibrium price of eggs, which of the following will occur?

- (A) An excess demand for eggs
- (B) An excess supply of eggs
- (C) An increase in the supply of eggs
- (D) An increase in tax revenues for the government
- (E) A decrease in the demand for eggs

20. Consider a multiple regression model relating soft drink delivery time (y) to number of cases delivered (x_1) and a dummy variable for snow and ice (x_2). x_2 is 1 when the delivery route is snowy or icy and 0 otherwise. The estimated regression model is

$$\hat{y} = 20 + 2x_1 + 10x_2 + 1x_1x_2.$$

The regression indicates that the mean delivery time \hat{y} for 10 cases when there is snow or ice on the route is

- (A) 20
- (B) 30
- (C) 40
- (D) 50
- (E) 60

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21. Assume that total cost for a monopolist is constant and equal to \$3,000, regardless of the level of output. When the monopolist produces the profit-maximizing output level, elasticity of demand and marginal revenue will be which of the following?

	<u>Elasticity of Demand</u>	<u>Marginal Revenue</u>
(A)	Elastic	Zero
(B)	Elastic	Positive
(C)	Inelastic	Negative
(D)	Unitary	Positive
(E)	Unitary	Zero

22. If a resource is scarce, economic decision makers must

- (A) choose among alternative uses of the resource
- (B) increase the price of the resource above the market equilibrium
- (C) impose an upper limit on how much of the resource each individual can purchase
- (D) subsidize producers of the resource and its substitutes
- (E) levy a tax on use of the resource

23. Which of the following events would decrease the money supply?

- (A) Banks increasing their amount of excess reserves
- (B) The Federal Reserve lowering the required reserve rate
- (C) The Federal Reserve buying government securities on the open market
- (D) The public holding more funds in demand deposits, as opposed to cash
- (E) Banks experiencing an increased demand for loans

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24. In the country of Zana, a unit of labor can produce 4 units of good X or 2 units of good Y; in the country of Bren, a unit of labor can produce 2 units of good X or 1 unit of good Y. Which of the following is true?

- (A) Bren has absolute advantage in producing both goods X and Y.
- (B) Bren has comparative advantage in producing good Y.
- (C) Zana has comparative advantage in producing good Y.
- (D) Bren should export good X to Zana.
- (E) Bren and Zana cannot benefit from trading with each other.

25. Which of the following best exemplifies moral hazard?

- (A) When quality cannot be judged by buyers, only owners of low-quality used cars offer their cars for sale.
- (B) People are willing to buy a \$1 lottery ticket to get a small chance at winning a large jackpot, even though the expected value of the chance is less than \$1.
- (C) Sellers of high-quality products are willing to offer product warranties.
- (D) People who are less healthy are more likely to buy health insurance.
- (E) Bank loan officers are more likely to make risky loans if their depositors' money is federally insured.

ANSWER KEY

- | | |
|-------|-------|
| 1. B | 14. B |
| 2. E | 15. E |
| 3. A | 16. C |
| 4. B | 17. E |
| 5. C | 18. B |
| 6. C | 19. B |
| 7. D | 20. E |
| 8. E | 21. E |
| 9. D | 22. A |
| 10. B | 23. A |
| 11. A | 24. E |
| 12. C | 25. E |
| 13. E | |

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