

Mid term sample questions



Beta Industries manufactures floppy disks that consumers perceive as identical to those produced by numerous other manufacturers. Recently, Beta hired an econometrician to estimate its cost function for producing boxes of one dozen floppy disks. The estimated cost function is $C = 20 + Q$. $MAC = Q$

a. What are the firm's fixed costs? B. What is the firm's marginal cost? Now suppose other firms in the market sell the product at a price of \$10. C. How much should this firm charge for the product? D.

What is the optimal level of output to maximize profits? . How much profit will be earned? F. In the long run, should this firm continue to operate or shut down? Why? A. Fixed costs = 20. B. Marginal costs = Q . C. $P = \$10$. D. The firm should produce such that $MAC = P$, i. e. , $Q = 10$. This implies that $Q = 2.5$ units. E. Profits are $20 - = -\$7.5$. F. Since the firm is earning losses, in the long run it will shut down if the market conditions do not change. 2 You have been hired to analyze the effect of high oil prices on the airlines industry.

(a.) How may high oil prices affect supply?

On its own, how would this affect equilibrium Prices and Quantities in the market? B.) How may high oil prices affect demand? On its own, how would this affect equilibrium Prices and Quantities in the market? (c.) Combining the effects described in (a) and (b), what would be the net effect on Prices and Quantities? (a.) Oil is an important input. Therefore, high oil prices would shift the supply curve to the left, causing Prices to increase and Quantities to decrease. (b.) High oil prices may reduce the disposable income of consumers. This would cause the demand for airline tickets to fall, reducing prices and quantities.

Alternatively, high oil prices may increase the price of car travel, a bustiest for air travel. This would increase demand for airline tickets, causing prices and quantities to increase. (c) A reduction in supply combined with a reduction in demand would lead to a decrease in quantity, while the effect on prices is unclear. Alternatively a reduction in supply combined with an increase in demand would lead to an increase in price, while the effect on quantities is unclear. 3. In a perfectly competitive market, A. All firms produce and sell a standardized or undifferentiated product. B. He output sold by a particular firm may be quite different from the output sold by the other firms in the market. C. Firms are price-setters. D. It is difficult for new firms to enter the market due to barriers to entry. 4. The market demand curve for a given good shifts when there is a change in any of the following factors EXCEPT A. The price of the good. C. The prices of goods related in consumption. D. The tastes of consumers. 5. A farm must decide whether or not to purchase a new tractor. The tractor will reduce costs by \$2, 000 in the first year, \$2, 500 in the second and \$3, 000 in the third and final year of usefulness.

The tractor costs \$9, 000 today, while the above cost savings will be realized at the end of each year. If the interest rate is seven percent, what is the net present value of purchasing the tractor? A. -\$2, 498. C. D. 6. A. B. C. \$3, 362. \$18, 362. None of the above. If input prices increase, all else equal, quantity supplied will decrease. Supply will increase. Supply will decrease. Demand will decrease. Use the following general linear demand relation to answer next 2 questions: $Q = 680 - UP + 0. MM - PR$ where M is income and PR is the price off related good, R. 7. From this relation it is apparent that the good is:

A. N inferior good B. A substitute for good R C. A normal good D. A complement for good R E. Both c and d . If $M = \$15,000$ and $PR = \$20$ and the supply function is $Sq = 30 + UP$, equilibrium price and quantity are, respectively, A. $P = \$55$ and $Q = 195$. B. $\$6$ and $Q = 38$. D. $P = \$$ and 170 . E. $\$40$ and $Q = 250$. (The answer for #8 should be $P = \$60$, $Q = 210$.) Use the following demand and supply functions to answer the next question:

Demand: $Q = 50 - UP$ supply: $SQ = 20 + UP$ surplus of 30 units. Shortage of 30 units. Surplus of 40 units. Shortage of 10 units. E. None of the above 10.

Suppose that the market for salad dressing is in equilibrium. Then the price of lettuce rises. What will happen? A. The price of salad dressing will rise. B. The supply of salad dressing will decrease. C. The demand for salad dressing will decrease. D. The quantity demanded of salad dressing will increase. 11.

Which of the following would lead to DECREASE in the demand for tennis balls? A. An increase in the price of tennis balls B. A decrease in the price of tennis rackets C. An increase in the cost of producing tennis balls D. A decrease in average household income when tennis balls are a normal good E.

None of the above 12. If the own-price elasticity of DVD recorders is 0.3 and price increases 20%, what happens to the quantity of DVD recorders demanded? A. Quantity decreases by 6% B. Quantity decreases by 30% C. Quantity increases by 15% D. Quantity increases by 21% 13. Suppose that at current prices more people want Gamecock tickets than the number of tickets available. Which of the following statements is correct? A. There is a shortage of Gamecock tickets at the box office price. B. The box office price is higher than the equilibrium price for Gamecock tickets. C.

If the box office price were raised, the excess quantity demanded for Gamecock tickets would decrease. D. Both a and c E. All of the above 14.

The Interior Department recently announced that it will increase the entrance fees at Yellowstone National Park in order to increase park revenues. The Interior Department must believe that A. Park goers are very responsive to price changes. B. The demand for park services is elastic. C.

The percentage increase in fees will be greater than the percentage decrease in the number of park visitors. D. Demand is unitary elastic, and thus the number of visitors will NOT decrease. 5. Suppose you run a pizza shop and currently have two employees. If you hire a third employee, your output of pizzas per day rises from 55 to 65. If you hire a fourth employee, output rises to 80 per day. A fifth and sixth employee would cause output to rise to 90 and 95 per day, respectively. Pick the correct statement: A.

Diminishing the hiring of the fifth worker. C. Diminishing returns set in with the hiring of the sixth worker. D. Diminishing returns set in because output is still increasing. 16. A fixed cost is A. The cost of any input with a fixed price per unit.

B. A cost which increases in a fixed proportion as output increases. C. A cost the firm must pay even if output is zero. D. Both b and c 17. In which of the

following cases will the effect on equilibrium output be indeterminate (i.e., depend on the magnitudes of the shifts in supply and demand)? A. Demand increases and supply increases B. Demand decreases and supply decreases C. Demand decreases and supply increases D. Demand remains constant and supply increases

The next 2 questions refer to the following: A producer is hiring 20 units of labor and 6 units of capital (bundle A).

The price of labor is \$10, the price of capital is \$2, and at A, the marginal products of labor and capital are both equal to 20. 18. Beginning at A, if the producer increases labor by one unit and decreases capital by 1 unit, then A. Cost remains constant and output increases by 20 units. B. Cost remains constant and output decreases by 20 units. C. Output remains constant and cost increases by \$8. D. Output remains constant and cost decreases by \$8. E. Both cost and output remain constant. 19. The producer A. Is using the optimal combination of capital and labor.

B. Should use more labor and less capital. C. Should use more capital and less labor. D. Cannot determine without more information. 20. The marginal rate of technical substitution is A. The rate at which the firm can substitute labor for capital while holding total cost constant. B. The rate at which the firm can substitute labor for capital while holding output constant. C. The slope of the costs curve. D. Both a and c The next question refers to the following figure: The graph shows demand and marginal cost for a perfectly competitive firm. 21.

If the firm is producing 100 units of output, increasing output by one unit would the firm's profit by \$. A. Increase, \$3 B. Increase, \$2 C. Decrease, \$1 D. Increase, \$1 E. Decrease, \$2 22. An industry is currently in long-run competitive equilibrium. Then the price of a complement good decreases. A. The product price will rise in the short-run. B. New firms will enter the market. C. Firms will begin earning economic profit in the short-run. D. A and b The next 3 questions refer to the following figure: The figure above shows cost curves for a perfectly competitive firm.