## 國立中央大學103學年度碩士班考試入學試題卷

### 所別:產業經濟研究所碩士班 法律組(一般生) 科目:經濟學 共\_2\_頁 第\_/\_頁

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\*請在試卷答案卷(卡)內作答

- (—) Multiple Choice(60%, 5% each)
  - 1. Identify the reasons why the quantity demanded of a product increases as the price of that product decreases.
    - a. as the price declines, the real income of the consumer increases
    - b. as the price of product A declines, it makes it more attractive than product B
    - c. as the price declines, the consumer will always demand more on each successive price reduction
    - d. a and b
    - e. a and c
  - 2. When demand elasticity is \_\_\_\_ in absolute value (or \_\_\_\_), an increase in price will result in a(n) \_\_\_\_ in total revenues.
    - a. less than 1; elastic; increase
    - b. more than 1; inelastic; decrease
    - c. less than 1; elastic; decrease
    - d. less than 1; inelastic; increase
    - e. none of the above
  - 3. If the marginal product of labor is 100 and the price of labor is 10, while the marginal product of capital is 200 and the price of capital is \$30, then what should the firm do?
    - a. The firm should use relatively more capital
    - b. The firm should use relatively more labor
    - c. The firm should not make any changes -they are currently efficient
    - d. Using the Equimarginal Criterion, we can't determine the firm's efficiency level
    - e. Both c and d
  - 4. For a short-run cost function which of the following statements is (are) not true?
    - The average fixed cost function is monotonically decreasing.
    - b. The marginal cost function intersects the average fixed cost function where the average variable cost function is a minimum.
    - c. The marginal cost function intersects the average variable cost function where the average variable cost function is a minimum.
    - d. The marginal cost function intersects the average total cost function where the average total cost function is a minimum.
    - e. band c
  - In pure competition:
    - a. the optimal price-output solution occurs at the point where marginal revenue is equal to price
    - b. a firm's demand curve is represented by a horizontal line
    - c. a firm is a price-taker since the products of every producer are perfect substitutes for the products of every other producer
    - d. a and b only
    - e. a, b, and c
  - 6. A firm in pure competition would shut down when:
    - a. price is less than average total cost
    - b. price is less than average fixed cost
    - price is less than marginal cost
    - d. price is less than average variable cost
  - 7. The main difference between perfect competition and monopolistic competition is:
    - a. The number of sellers in the market
    - b. The ease of entry and exit in the industry
    - c. The degree of information about market price
    - d. The degree of product differentiation
    - e. Whether it is the short run or the long run



注:背面有試題

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- 8. The demand curve facing the firm in \_\_\_\_\_ is the same as the industry demand curve.
  - a. pure competition
  - b. monopolistic competition
  - c. oligopoly
  - d. pure monopoly
  - e. none of the above
- 9. Factors that affect the ability of oligopolistic firms to successfully engage in cooperation include \_\_\_\_\_
  - a. number and size distribution of sellers
  - b. size and frequency of orders
  - c. product heterogeneity
  - d. a and b only
  - e. a, b, and c
- 10. Which of the following are not approaches to resolving the principal-agent problem?
  - a. ex ante incentive alignment
  - b. deferred stock options
  - c. ex post governance mechanism
  - d. straight salary contracts
  - e. monitoring by independent outside directors
- 11. Patents have been defended by some on the grounds that they stimulate inventive activity. Others have argued for changes in current patent laws because:
  - a. resources are misallocated by the grant of a patent monopoly
  - b. patents may not be necessary to encourage inventive activity
  - c. the current patent monopoly period (17 years) is too short to encourage any inventive activity.
  - d. a and b only
  - e. all of the above
- 12. Which of the following public policies has (have) the effect of restricting competition?
  - a. licensing
  - b. patents
  - c. import quotas
  - d. a and b only
  - e. a, b, and c

# 参考用

#### (二) Problem(40%, 10% each)

1. The Taiwan Tobacco Company feels that it is faced with the following segmented demand function for its cigarettes:

$$P = \begin{cases} 10 - .10Q & \text{When } 0 \le Q \le 20 \\ 12 - .20Q & \text{When } Q > 20 \end{cases}$$

where Q is the number of cartons sold and P is the price per carton.

- (a) Why is such a segmented demand function likely to exist? What type of industry structure is indicated by this relationship?
- (b) Determine marginal revenue function.
- (c) Given that total cost function (including a "normal" return to the owners) is  $TC_1 = 80 + 2.6Q + .05Q^2$

determine profit maximizing price and output level.

(d) Given that total cost function increases to

$$TC_2 = 90 + 3.4Q + .05Q^2$$

What is their profit maximizing price and output level?

