

銘傳大學 96 學年度研究所碩士班招生考試

經濟學系碩士班

第一節

個體經濟學試題

(第 1 頁共 4 頁)

(限用答案本作答)

一 選擇題(單選, 每題 2 分)

1. When given a choice between a cash subsidy and a voucher worth the same dollar amount, but only good for the purchase of a single good,
 - a) the consumer will always prefer the voucher to the cash subsidy.
 - b) the consumer will always prefer the cash subsidy to the voucher.
 - c) the consumer might prefer the cash subsidy to the voucher or might prefer the voucher to the cash subsidy.
 - d) the consumer would prefer to receive neither the cash subsidy or the voucher.
2. Suppose the price of A is \$5, the price of B is \$1, and that the consumer is currently spending all available income. At the consumer's current consumption basket the marginal utility of A is 1 and the marginal utility of B is 5.
 - a) The consumer is currently maximizing utility.
 - b) The consumer could increase utility by consuming more of good A and less of good B .
 - c) The consumer could increase utility by consuming more of good B and less of good A .
 - d) Nothing can be said about the consumer's utility because we do not know the consumer's income or utility function.
3. If marginal product is greater than average product
 - a) total product must be increasing.
 - b) marginal product must be decreasing.
 - c) marginal product must be increasing.
 - d) average product may be increasing or decreasing.
4. Consider the CES production function $Q = [aL^{\frac{\sigma-1}{\sigma}} + bK^{\frac{\sigma-1}{\sigma}}]^{\frac{\sigma}{\sigma-1}}$. This production function exhibits
 - a) decreasing returns to scale.
 - b) constant returns to scale.
 - c) increasing returns to scale.
 - d) either decreasing or constant returns to scale, but more information is needed to determine which one.
5. Compensating variation is
 - a) the change in income necessary to hold the consumer at the final level of utility as price changes.
 - b) always the area under the demand curve and above the price paid.
 - c) the change in income necessary to restore the consumer to the initial level of utility.
 - d) the difference in the consumer's income between the purchase of the original basket and the new basket at the old prices.
6. If the output elasticity of total cost is less than one, then the long-run average cost curve experiences
 - a) economies of scale.
 - b) diseconomies of scale.
 - c) decreasing returns to scale.
 - d) the minimum efficient scale.

本試題係兩面印刷

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7. For a particular perfectly competitive firm $STC = 100 + 20Q + Q^2$ and $SMC = 20 + 2Q$. If the market price is equal to 40, what is the maximum profit the firm can earn?
- a) 400
 - b) 200
 - c) 100
 - d) 0
8. Which of the following statements regarding a monopolist's profit maximizing condition is false?
- a) The monopolist's profit-maximizing price will be greater than marginal cost for the last unit supplied.
 - b) A monopolist can earn positive economic profit.
 - c) Because monopoly price is above marginal cost and a monopoly earns positive economic profit, there are no benefits to consumers in the monopoly market.
 - d) Price equals average revenue at the profit-maximizing quantity of output.
9. If the income elasticity of a good is negative, then
- a) the good must be a Giffen good.
 - b) The substitution and income effects must be moving in the same direction.
 - c) The Engel curve for this good must be downward sloping.
 - d) The law of demand must be satisfied for this good.
10. If regulators require a monopoly to earn zero economic profit, the monopoly will produce the quantity where
- a) the marginal cost curve crosses the average cost curve.
 - b) the marginal cost curve crosses the demand curve.
 - c) the average cost curve crosses the demand curve.
 - d) the marginal cost curve crosses the marginal revenue curve.

二 選擇題(單選, 每題 3 分)

11. Suppose demand is given by $Q^d = 300 - 5P$ and supply is given by $Q^s = 10P$. At the equilibrium price and quantity, the elasticity of demand is
- a) -50
 - b) -0.50
 - c) -10
 - d) -0.10
12. We could use the term "bandwagon effect" to describe which of the following situations?
- a) I get great satisfaction from collecting rare coins because few people have them.
 - b) I purchase Eudora Pro as my e-mail software package because all of my friends and family use it.
 - c) I purchase more chocolate bars because the price of chocolate bars falls.
 - d) I decide not to purchase a Toyota Camry because, as I tell my friend, "Every other car on the road these days looks like a Camry."

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個體經濟學試題

(第 3 頁共 4 頁)
(限用答案本作答)

- 13 A prisoners' dilemma game illustrates the conflict between
- law enforcement and criminals.
 - the judicial system and the police system.
 - law and order.
 - self-interest and collective interests.
- 14 A decision maker has a utility function $U = \sqrt{I}$. This decision maker is
- risk-averse.
 - risk-neutral.
 - risk-loving.
 - risk-gaining.
- 15 Consider an insurance policy with \$15,000 worth of coverage. If there is a 10% chance the owner of the policy will file a claim for the \$15,000 (and a 90% chance they will not file a claim), a fair price for this policy is
- \$1,000
 - \$1,500
 - \$13,000
 - \$13,500
- 16 Moral hazard in auto insurance might refer to
- an auto owner failing to maintain the car, increasing the likelihood of an accident.
 - an applicant withholding information from the insurance company about the likelihood of having an accident.
 - an applicant lying on their application form.
 - an applicant having more cars than they announce when they complete their application.
17. All points on the firm's expansion path
- give the firm the maximum possible profit.
 - minimize the firm's cost of producing some level of output.
 - have the same long-run average cost.
 - make the marginal product of labor equal to the marginal product of capital.
18. In what way is monopolistic competition superior to perfect competition?
- The cost of producing the industry's output is lower in monopolistic competition.
 - Consumers benefit from having differentiated products instead of identical products.
 - Long-run profits are higher in monopolistic competition than in pure competition.
 - In monopolistic competition, firms can fully exploit any existing economies of scale.
19. When both players in a game play a dominant strategy, the outcome will be
- Pareto optimal.
 - a Prisoners' Dilemma.
 - a Stackelberg equilibrium.
 - the game's only Nash equilibrium.

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- 20 If labor and capital are complements in production, then an increase in the amount of capital will
- reduce the firm's demand for labor.
 - raise the firm's marginal cost of production.
 - cause the scale effect to outweigh the substitution effect.
 - increase labor's marginal product.

三 計算問答題

1(10%) 當商品價格為 $(p_1, p_2)=(1,2)$ 時，消費者甲的購買量是 $(x_1, x_2)=(1,2)$ ；當商品價格為 $(p_1, p_2)=(2,1)$ 時，消費者甲的購買量是 $(x_1, x_2)=(2,1)$ 。請問消費者甲的行為是否合乎效用極大化？請說明之。

2(20%) 假定效用函數為 $U = X^{0.5}Y^{0.5}$ ， X, Y 商品的價格分別為 P_X, P_Y ，所得為 I_0 。

- 求出 X 和 Y 的 Marshall 需求函數。
- 求出間接效用函數。
- 求出支出函數。
- 利用支出函數求出 X 商品的受補償需求曲線？

3(20%) Assume for simplicity that a monopolist has no costs of production and faces a demand curve given by

$$Q = 150 - P$$

- Calculate the profit-maximizing price-quantity combination for this monopolist. Also calculate the monopolist's profits.
- Suppose a second firm enters the market. Let q_1 be the output of the first firm and q_2 the output of the second. Market demand is now given by

$$q_1 + q_2 = 150 - P$$

Assume that this second firm also has no costs of production, use the Cournot model of duopoly to determine the profit-maximizing level of production for each firm as well as the market price. Also calculate each firm's profits.

- How do the results from parts(1) and (2) compare to the price and quantity that would prevail in a perfectly competitive market? Graph the demand and marginal revenue curves and indicate the three different price-quantity combinations on the demand curve.

試題完