

考試科目	個體經濟學	所別	經濟系乙組	考試時間	4月21日(上) 星期 日 下午第 / 節
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第一部份(共 50 分)

一、單選題：每小題 3 分，共 30 分

1. Use the following two statements to answer this question:

I. According to the three basic assumptions regarding people's preferences, a person will always prefer to earn a living through honest work rather than a life of crime.

II. When we say that preferences are complete, we mean that if a consumer prefers market basket A to market basket B, and prefers market basket B to market basket C, then the consumer prefers market basket A to market basket C.

- a. Both I and II are true.
- b. I is true and II is false.
- c. I is false and II is true.
- d. Both I and II are false.

2. If input prices are constant, a firm with increasing returns to scale can expect

- a. costs to double as output doubles.
- b. costs to more than double as output doubles.
- c. costs to go up less than double as output doubles.
- d. to hire more and more labor for a given amount of capital, since marginal product increases.
- e. to never reach the point where the marginal product of labor is equal to the wage.

3. Consider the following statements when answering this question;

I. A firm's marginal cost curve does not depend on the level of fixed costs.

II. As output increases the difference between a firm's average total cost and average variable cost curves cannot rise.

- a. I is true and II is false.
- b. I is false and II is true.
- c. I and II are both true.
- d. I and II are both false.

4. Three hundred firm's supply the market for paint. For fifty of the firms, their short run average variable costs are minimized at \$10 and short run total costs are minimized at \$15. For the remaining firms, the short run average variable costs and short run average total costs are minimized at \$20 and \$25 respectively. If each firm has a U shaped marginal cost curve then the short run market supply curve is

- a. U shaped too
- b. kinked at \$10
- c. kinked at \$15
- d. kinked at \$20
- e. kinked at \$25

5. Consider the following statements when answering this question

I. Overall, the sick will always gain from a price ceiling on prescription drugs.

II. The reduction of supply caused by the imposition of a price ceiling is greater the more inelastic the market supply curve.

- a. I and II are true.
- b. I is true and II is false.
- c. I is false and II is true.
- d. I and II are false.

備 考	試 題 隨 卷 繳 交
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6. The marginal cost of a monopolist is constant and is \$10. The marginal revenue curve is given as follows:

$$MR = 100 - 2Q$$

The profit maximizing price is

- \$70
 - \$65
 - \$60
 - \$55
 - \$50
7. The Acme Oil Company is a vertically integrated firm. It explores for and extracts crude oil. It also refines the crude oil into gasoline and other products, and sells these products to consumers. There are many other firms that extract and sell crude oil so that the market for crude oil is regarded by Acme Oil as competitive. The internal price that Acme Oil uses when the crude oil that it extracts is "sold" to one of its refineries:
- equals the market price for crude oil.
 - equals the market price for crude oil less a discount because Acme Oil does not to profit from itself.
 - is unrelated to the market price of crude oil.
 - is greater than the marginal cost of extracting crude oil.
8. You are studying a market for which the kinked demand curve model applies. The kinked demand curve is as follows:

$$Q = 1200 - 5P \text{ for } 0 < Q < 150$$

$$Q = 360 - P \text{ for } 150 < Q$$

The marginal cost is given as:

$$MC = Q$$

What is the profit maximizing level of output?

- 171.43
 - 120
 - 150
 - all of the above
 - none of the above
9. Suppose a stream is discovered whose water has remarkable healing powers. You decide to bottle the liquid and sell it. The market demand curve is linear and is given as follows:

$$P = 30 - Q$$

The marginal cost to produce this new drink is \$3.

What price would this new drink sell for if it sold in a competitive market?

- 0
- \$3
- \$12
- \$13.50
- \$30

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10. Consider last question, what will be the price of this new drink in the long run if the industry is a Stackelberg duopoly?
- \$3
 - \$9
 - \$12
 - \$13.50
 - none of the above

二、

若要素與產品市場均為完全競爭，廠商的生產函數為 $X - Y_1^2 - Y_2^2 = 0$ ，

X 為投入要素， Y_1 及 Y_2 分別為第一種及第二種產品之產出，求在利潤最大

化下，廠商對投入要素之需求。

20分

備考	試題隨卷繳交
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命題委員：

(簽章) 91 年 4 月 8 日

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第二部份(共 50 分)

三、單選題：每小題 3 分，共 30 分

Bull Meat

		Expand in the West	Expand in the South
Bear Meat	Expand in the West	10,60	50,90
	Expand in the South	20,80	40,50

1. In the game above,
- there is one equilibrium: for both to expand West.
 - there is one equilibrium: for both to expand South.
 - there are two equilibria: either can expand in the West, and the other expands in the South.
 - there is no equilibrium in pure strategies.
 - all four outcomes are equilibria.

2. Suppose that a firm's demand curve for its product is as follows:

Output	Price of the Good
25	9
40	8
54	7
67	6
79	5
90	4

Also suppose that labor is the only variable input of production, and that the total product of labor is:

Amount of Labor	Total Output
2	25
3	40
4	54
5	67
6	79
7	90

Given these data, how much labor should the firm employ if labor costs \$30 a unit?

- 3 units of labor
- 4 units of labor
- 5 units of labor
- 6 units of labor
- 7 units of labor

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3. If the moral hazard problem in automobile driving were to be eliminated, the marginal cost of driving would be
- lowered enough to pull the amount of driving back down to the efficient level.
 - lowered enough to raise the amount of driving back up to the efficient level.
 - raised enough to pull the amount of driving back down to the efficient level.
 - raised enough to raise the amount of driving back up to the efficient level.
 - lowered back down to the efficient level, relieving the stress on market forces.
4. Which incentive scheme would simultaneously elicit accurate information about feasible plant production levels and motivate managers to perform up to potential (in the following schemes, B is the bonus payment, Q is actual plant output, and Q_f is the manager's estimate of feasible output)?
- $B = 0.4Q$
 - $B = 0.4(Q - Q_f)$
 - $B = 0.4Q_f + 0.3(Q - Q_f)$ if $Q > Q_f$
 - $B = 0.4Q_f - 0.6(Q - Q_f)$ if $Q < Q_f$
 - $B = 0.4Q_f - 0.6(Q - Q_f)$ if $Q > Q_f$
 - $B = 0.4Q_f + 0.3(Q - Q_f)$ if $Q < Q_f$
5. When new technologies make cleaner production possible,
- emissions would fall under a system of fees, but would not fall under a system of transferable emissions permits unless the government bought back some of the permits.
 - emissions would fall under a system of permits, but would not fall under a system of fees unless the government raised them.
 - the price of transferable permits would rise.
 - the quantity of transferable permits would rise.
 - the quantity of transferable permits would fall.
6. John's firm is a competitor in your product market and a monopsonist in the labor market. The current market price of the product that your firms produce is \$2. The total product and marginal product of labor are given as:
- $$TP = 240L - 0.1L^2, \quad MP = 240 - 0.2L$$
- where L is the amount of labor employed. The supply curve for labor and the marginal expenditure curve for labor are given as follows:
- $$L = P_L, \quad ME_L = 2L$$
- Suppose that a tax is imposed on each unit of the product that John produces, the price of labor:
- will increase.
 - will decrease.
 - will not change.
 - will change in an indeterminate fashion.
7. The substitution and income effects of a wage change have the opposite sign if:
- the wage is increasing
 - the wage is decreasing
 - work is a normal good
 - leisure is a normal good
8. If Rachel earns \$2000 this year and \$1100 next year, the present value of her endowment, if the interest rate is 10% is:
- \$3000
 - \$3100
 - \$2110
 - \$3310

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9. If the lottery pays \$3 million and the odds of winning are 1 in 10 million then a \$1 ticket has:

- a positive expected value
- a negative expected value
- zero expected value
- an expected value of greater than \$1

10. Suppose you roll a six-sided die and the payoff in dollars is equal to the face of the die. So rolling a 1 pays \$1. Assuming you were risk adverse, if it cost \$2 to play, you would:

- be willing to play
- not be willing to play
- be indifferent to playing
- cannot tell from information given

四、是非不定題：每小題 10 分，共 20 分 (先回答對錯，再詳細解釋理由)

- 假設妳(你)本來買足額保險(full insurance)，當保險費率上漲時，會導致妳(你)的效用函數發生變動而轉向部份保險(partial insurance)。
- 假如你帶\$1到賭場，莊家用的賭具為撲克牌，開出的條件為：每張賭券為\$1，若紅桃出現，你就輸，則\$1沒收；若紅桃以外的花色出現，你就贏，則可拿回\$1，且莊家還要賠你\$0.25。不管你是風險逃避者或愛好者，你都會參與此項賭博。

備 考 試 題 隨 卷 繳 交

命 題 委 員：

(簽章)

年

月

日