

科目：個體經濟學 適用：經濟系三

編號：721

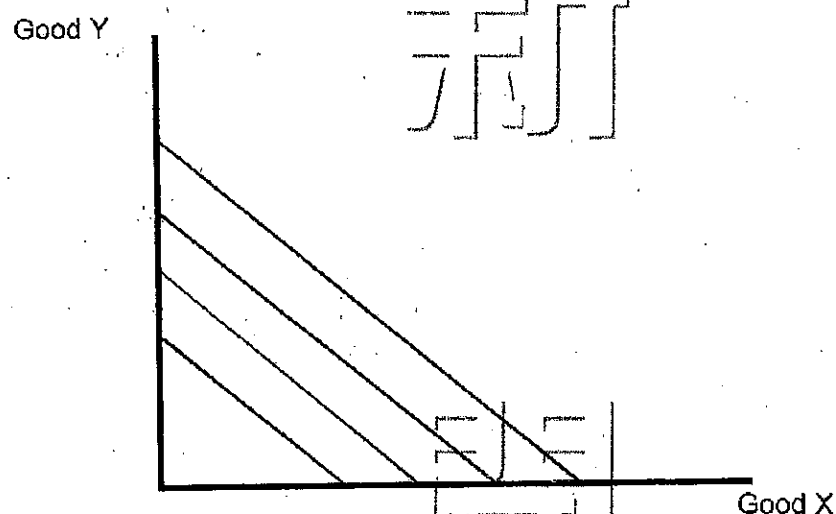
考生注意：

1. 依次序作答，只要標明題號，不必抄題。
2. 答案必須寫在答案卷上，否則不予計分。
3. 限用藍、黑色筆作答；試題須隨卷繳回。

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第一部分：單選題 (80%, 每題 4%)

1) Alvin's preferences for good X and good Y are shown in the diagram below.



Based on the above figure, it can be inferred that:

- A) Alvin regards good X and good Y as perfect substitutes.
  - B) Alvin will never purchase any of good Y.
  - C) Alvin does not consider good X as "good."
  - D) Alvin regards good X and good Y as perfect complements.
  - E) none of the above.
- 2) Assume that beer is an inferior good. If the price of beer falls, then the substitution effect results in the person buying \_\_\_\_\_ of the good and the income effect results in the person buying \_\_\_\_\_ of the good.
- A) more, less
  - B) less, less
  - C) less, more
  - D) more, more
- 3) One reason individuals are willing to pay for information in uncertain situations is that information \_\_\_\_\_
- A) is a method of self-insurance
  - B) is a way to diversify.
  - C) is a method of insurance.
  - D) can reduce uncertainty.

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- E) always reduces the difference between the probabilities of possible outcomes.
- 4) A farmer uses  $M$  units of machinery and  $L$  hours of labor to produce  $C$  tons of corn, with the following production function  $C = L^{0.5} + M^{0.75}$ . This production function exhibits
- A) no clear pattern of returns to scale
  - B) constant returns to scale for all output levels
  - C) increasing returns to scale for all output levels
  - D) decreasing returns to scale for all output levels
- 5) The supply curve for a competitive firm is
- A) its MR curve.
  - B) its MC curve above the minimum point of the AVC curve.
  - C) its entire MC curve.
  - D) the upward-sloping portion of its MC curve.
  - E) its MC curve above the minimum point of the ATC curve.
- 6) In 1994, the state of California suffered a devastating earthquake. To help pay for the damages, the state raised its sales tax by one cent per dollar of expenditure on most consumer goods. This state sales tax is an example of what economists call:
- A) an ad valorem tax. B) a neutral tax. C) a specific tax.
  - D) a negative tax. E) none of the above.
- 7) The monopolist that maximizes profit
- A) imposes a cost on society because the selling price is above marginal cost.
  - B) does not impose a cost on society because the selling price is above marginal cost.

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- C) imposes a cost on society because the selling price is equal to marginal cost.
- D) does not impose a cost on society because price is equal to marginal cost.
- 8) An amusement park charges an entrance fee of \$75 per person, then \$2.50 per ride. This is an example of
- A) second-degree price discrimination. B) a two-part tariff.
- C) first-degree price discrimination. D) tying. E) bundling.
- 9) A firm can hire labor at the minimum wage of \$4.25 per hour. Assume that labor works 8 hours a day. The firm's production function is as follows:

Number of Days of Labor	Number of Units of Output
0	0
1	8
2	15
3	21
4	26
5	30

If each unit of output sells for \$5, how many days of labor will the firm hire to maximize profit?

- A) 1 B) 2 C) 3 D) 4 E) 5
- 10) Consider the following decision that Eileen has to make:

Eileen is considering buying a \$4000 computer for her daughter. Eileen hopes that with the computer her daughter's schoolwork will improve so much that in two years time she will be offered a full-ride scholarship to college. The scholarship is paid for four years and is valued at \$25,000 per year. Even with the computer the probability that the scholarship will be awarded is 10%.

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The expected NPV of the computer purchase is approximately

- A) \$10,000. B) \$3,200. C) \$96,000. D) \$5000. E) \$68,000.

11) What does the negative slope of the production possibilities frontier imply?

- A) Diminishing marginal utility.  
B) The only way to increase output of one good is to decrease output of another.  
C) Diminishing marginal rates of technical substitution.  
D) The only way to increase one person's utility is to decrease the other's.

12) When there are externalities, economic efficiency can be achieved without government intervention

- A) at no time.  
B) when the externality affects many people and property rights are not well defined.  
C) when the externality affects only a few parties and property rights are not well defined.  
D) when the externality affects only a few parties and property rights are well defined.  
E) when the externality affects many people and property rights are well defined.

13) Which of these measures the responsiveness of the quantity of one good demanded to an increase in the price of another good?

- A) cross substitution elasticity. B) price elasticity.  
C) income elasticity. D) cross price elasticity.

14) Which of the following statements concerning utility as a measure for

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well being are false?

- A) It is possible to determine which of two individuals is made happier by consuming a particular market basket.
- B) Utility is an abstract representation of an individual's degree of happiness.
- C) Cross country studies suggest that citizens in wealthier countries are happier than citizens in poorer countries.
- D) There is generally a positive relationship between income and utility.
- 15) Consider two goods X and Y available for consumption. Assume that the price of X changes while the price of Y remains fixed. For these two goods, the price-consumption curve illustrates the
- A) relationship between the price of X and consumption of Y.
- B) utility-maximizing combinations of X and Y for each quantity of X.
- C) utility-maximizing combinations of X and Y for each price of X.
- D) relationship between the price of Y and the consumption of X.
- 16) Which of the following is NOT an example of consumer behavior consistent with the standard assumptions of microeconomic theory?
- A) Waiters and waitresses have an incentive to provide good service in order to earn tips.
- B) Although tipping reduces the amount of income available for purchasing goods, people usually leave tips at restaurants.
- C) People are less likely to leave tips at restaurants that they are unlikely to visit again.
- D) Due to the convention of tipping, restaurants pay a lower wage to waiters and waitresses than they would in the absence of any

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tipping rule.

E) none of the above.

17) The rate at which one input can be reduced per additional unit of the other input, while holding output constant, is measured by the

- A) slope of the isocost curve.
- B) marginal rate of technical substitution.
- C) average product of the input.
- D) marginal rate of substitution.

18) The total cost of producing a given level of output is

- A) maximized when a corner solution exists.
- B) minimized when the ratio of marginal product to input price is equal for all inputs.
- C) minimized when marginal product multiplied by input price is equal for all inputs.
- D) minimized when the marginal products of all inputs are equal.

19) The shutdown decision can be restated in terms of producer surplus by saying that a firm should produce in the short run as long as

- A) revenue exceeds producer surplus.
- B) producer surplus exceeds fixed cost.
- C) producer surplus exceeds variable cost.
- D) producer surplus is positive.
- E) profit and producer surplus are equal.

20) Price ceilings

- A) may decrease consumer surplus if demand is sufficiently inelastic.
- B) cause quantity to be higher than in the market equilibrium.
- C) always increase consumer surplus.

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D) may decrease consumer surplus if demand is sufficiently elastic.

E) always decrease consumer surplus.

新

第二部份：計算題 (20%, 每題 10%)

1) (10%)

假定娛樂休閒所帶給消費者的滿足感，可以用以下之效用函數表

示：

$$u(x, y) = 20x + 80y - x^2 - 2y^2$$

其中， $x, y$  分別代表消費者對於音樂 CD 及電影的消費量。假定  $x$ 的單位價格為 \$1， $y$  的單位價格為 \$2。若消費者打算花費 \$41在音樂及電影上的娛樂支出，請問該消費者對於  $x, y$  的最適消費

量分別為何？

試

2) (10%)

假定某一個獨佔廠商所面對的市場需求函數及廠商的成本函數

分別如以下表示：

$$C = 100 + 2Q^2$$

成本函數

$$P = 80 - 2Q$$

市場需求函數

請問該獨佔廠商的最適定價、產量及利潤分別為何？

題