

考試科目	經濟學	系別	商學院共同科	考試時間	7月8日(五)第二節
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Multiple Choice (1.7 points each)

選擇題請在答案卡上作答，否則不予計分。

Identify the letter of the choice that best completes the statement or answers the question. Mark each answer clearly with a No. 2 pencil on the Scantron form.

1. Mike (an American) buys a designer dress produced by an American-owned fashion shop in France. As a result, U.S. consumption increases, U.S. net exports
A. decrease, U.S. GDP is unaffected, and U.S. GNP increases.
B. decrease, U.S. GDP increases, and U.S. GNP is unaffected.
C. decrease, U.S. GNP increases, and French GDP is unaffected.
D. are unaffected, U.S. GDP is unaffected, and French GDP increases.
2. The natural rate of unemployment is the
A. unemployment rate that would prevail with zero inflation.
B. rate associated with the highest possible level of GDP.
C. difference between the long-run and short-run unemployment rates.
D. amount of unemployment that the economy normally experiences.
3. In the United States, a three-pound can of coffee costs about \$5. Suppose the exchange rate is about 0.8 euros per dollar and that a three-pound can of coffee in Belgium costs about 3 euros. What is the real exchange rate?
A. 5/3 cans of Belgian coffee per can of U.S. coffee
B. 4/3 cans of Belgian coffee per can of U.S. coffee
C. 3/4 cans of Belgian coffee per can of U.S. coffee
D. 3/5 cans of Belgian coffee per can of U.S. coffee
4. The paradox of thrift states that
A. an increase in the interest rate lowers saving.
B. an increase in saving raises output in the long run.
C. an increase in saving reduces output in the short
D. a decrease in the interest rate raises saving.
5. An increase in the marginal propensity to consume (MPC)
A. increases the multiplier, so that changes in government expenditures have a larger effect on aggregate demand.
B. increases the multiplier, so that changes in government expenditures have a smaller effect on aggregate demand.

【請注意，背面還有試題。】

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- C. decreases the multiplier, so that changes in government expenditures have a larger effect on aggregate demand.
- D. decreases the multiplier, so that changes in government expenditures have a smaller effect on aggregate demand.
6. According to monetary neutrality and the Fisher effect, an increase in the money supply growth rate eventually increases
- inflation, nominal interest rates, and real interest rates.
 - inflation and nominal interest rates, but does not change real interest rates.
 - inflation and real interest rates, but does not change nominal interest rates.
 - neither inflation, nominal interest rates, or real interest rates.
7. An increase in expected inflation shifts
- the long-run Phillips curve right.
 - the short-run Phillips curve right.
 - neither the short-run nor long-run Phillips curve right.
 - both the short-run and long-run Phillips curve right.
8. Which of the following best describes the idea of excess capacity in monopolistic competition?
- Firms produce more output than is socially desirable.
 - The output produced by a typical firm is less than what would occur at the minimum point on its ATC curve.
 - Due to product differentiation, firms choose output levels where $P > ATC$.
 - Firms keep some surplus output on hand in case there is a shift in the demand for their product.
9. Public goods should be produced up to the point at which the marginal cost of production equals:
- the maximum price any individual is willing to pay for that unit.
 - the sum of the individual marginal benefits from all consumers of that unit.
 - zero, which is the marginal cost of allowing another individual to consume the good.
 - the highest marginal benefit from any individual consumer of the good.
10. A free-rider problem exists for any good that is NOT
- rival.
 - a private good.
 - free.
 - excludable.

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<p>11. During the last decade of 20th century, economists observe that the real wage of skilled labor increases while the real wage of unskilled labor decreases in developed and developing countries. If we want to explain this phenomenon, what is the possible economic forces you should focus on</p> <p>A. The supply of skilled labor increases. B. The supply of unskilled labor decreases. C. The supply of skilled labor decreases, while the demand of unskilled labor decreases. D. The supply of unskilled labor increases while the demand of skilled labor decreases.</p> <p>12. When a government restricts the quantity of a good consumers consume, it usually generates waste of economic resources. It is not caused by</p> <p>A. the price that consumers are willing to pay is higher than the marginal cost of production. B. the marginal utility is higher than the marginal cost of production. C. resources are wasted to obtain the right or opportunity to consume the good and the right or opportunity to produce the good. D. production generates negative externality.</p> <p>13. Intuitively, we usually believe that at equilibrium the total revenue of a high-productivity producer is higher than the revenue of a low-productivity producer. Logically, suppose the elasticity of demand is constant it happens only when</p> <p>A. the elasticity is greater than one. B. the elasticity is equal to one. C. the elasticity is smaller than one. D. the elasticity is greater than the difference of productivity.</p> <p>14. Suppose that the production function to produce a product is $x = L - F$, where L is the labor input, F is a constant and x is the production level. Suppose also that potential producers enter the market freely and producers choose output level to maximize profit.</p> <p>A. The market structure must be perfectly competitive at equilibrium because of the assumption of free entry. B. If the production is greater than zero, the market structure cannot be perfectly competitive because it contradicts with the assumption of profit maximization. C. There must be only one firm survive at equilibrium. D. The profit must be positive for all surviving producers.</p> <p>15. Consider a product produced by a constant return to scale production function. Suppose also that the markets of the commodity and factors are perfectly competitive and the factor price is fixed.</p>					

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<p>Producers choose the optimal production level to maximize profit. Then</p> <p>A. the marginal cost is increasing. B. the marginal cost is decreasing. C. the marginal cost is constant. D. the average cost is greater than the marginal cost.</p> <p>16. Consider an economy where consumers consume only two goods, x and y. Two goods are perfectly complemented for consumers. Consumers can be categorized as H and L according to their income level. H consumers are richer than L consumers. The marginal cost of production is increasing for both x and y. The market structure is perfectly competitive.</p> <p>A. The preference implies that the income elasticity is always greater than one. B. The preference implies that the income elasticity is always smaller than one. C. The preference implies that the income elasticity can be greater or smaller than one depending on consumers' income level. D. The preference implies that the income elasticity is always equal to one.</p> <p>17. Based on question 16., suppose that government transfers income from H to L. Suppose also that the price is fixed at the original level. We define the aggregate quantity of demand of a good as the summation of H and L's quantity of demand on that good. Then after the income transfer</p> <p>A. the aggregate quantity of demand is unchanged for both goods. B. the aggregate quantity of demand on both goods decrease. C. the aggregate quantity of demand of x increases while the aggregate quantity of demand of y decreases. D. the aggregate quantity of demand on both goods increase.</p> <p>18. The perfect competitive economy without friction is most efficient because</p> <p>A. demand is equal to supply at equilibrium. B. the marginal utility of consumers equals to the marginal cost of production. C. consumers have maximize utilities and producers have maximize profit. D. all factors are employed.</p> <p>19. The degree of division of labor is the symbol of civilization. We seldom see that in a civilized society individuals produce all necessities. On the contrary in less developed economy, the islands of Polynesia (islands scattered around the center of Pacific Ocean) for instance, specialization in one career is not common. What is the possible explanation?</p> <p>A. Because individuals are different in talent, specialization always reduces opportunity cost. It is</p>					

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simply because Polynesian has not discovered this methodology of production.

- B. Degree of specialization is inevitably constrained by the size of population.
- C. The technology of Polynesian is not high enough to explore the benefit of division of labor.
- D. Polynesia does not have enough natural resources. Opportunity cost cannot be saved through division of labor if factor endowment is not abundant.
20. Suppose that similar to Japan, islands of Polynesia are scattered nearby Asia. The trade volume between Polynesian and Asian could be dramatically increased due to the reduction of transportation cost. Then Polynesian's degree of specialization might increase because
- A. trade makes the degree of specialization not constrained by the size of population of Polynesia but the size of population of Asia which is larger.
- B. Polynesian learns the idea of division of labor from Asian through trade.
- C. better technology is introduced to Polynesia through trade.
- D. natural resources can be imported from Asia more easily.
21. When a firm operates under conditions of monopoly, its price is
- A. not constrained.
- B. constrained by marginal cost.
- C. constrained by demand.
- D. constrained only by its social agenda.
22. To increase their individual profits, members of a cartel have an incentive to
- A. charge a higher price than the other members of the cartel.
- B. increase production above the level agreed upon.
- C. ignore the choices made by the other firms and act as a monopolist.
- D. charge the same price a monopolist would charge.
23. Suppose the central bank requires banks to hold 10 percent of their deposits as reserves. A bank has \$20,000 of excess reserves and then sells the central bank a government bond for \$9,000. How much does this bank now have to lend out if it decides to hold only required reserves?
- A. \$29,000
- B. \$28,100
- C. \$19,100
- D. \$11,000
24. To increase the money supply, the Fed can

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- A. buy government bonds or increase the discount rate.
- B. buy government bonds or decrease the discount rate.
- C. sell government bonds or increase the discount rate.
- D. sell government bonds or decrease the discount rate.

25. If people had been expecting prices to rise but in fact prices fell, then who among the following would benefit?

- A. lenders and people holding a lot of currency
- B. lenders but not people holding a lot of currency
- C. people holding a lot of currency but not lenders
- D. neither lenders nor people holding a lot of currency

26. When interest rates fall

- A. firms want to borrow more for new plants and equipment and households want to borrow more for homebuilding.
- B. firms want to borrow more for new plants and equipment and households want to borrow less for homebuilding.
- C. firms want to borrow less for new plants and equipment and households want to borrow more for homebuilding.
- D. firms want to borrow less for new plants and equipment and households want to borrow less for homebuilding.

27. Which of the following would both shift aggregate demand right?

- A. the price level decreases and government expenditures increase
- B. the price level decreases and the government repeals an investment tax credit
- C. government expenditures increase and the money supply increases
- D. None of the above are correct.

28. According to the aggregate demand and aggregate supply model, in the long run an increase in the money supply leads to

- A. increases in both the price level and real GDP.
- B. an increase in real GDP but does not change the price level.
- C. an increase in the price level but does not change real GDP.
- D. no change in either the price level or real GDP.

29. Assume the money market is initially in equilibrium. If the price level decreases, then according to

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liquidity preference theory there is an excess

- A. supply of money until the interest rate increases.
- B. supply of money until the interest rate decreases.
- C. demand for money until the interest rate increases.
- D. demand for money until the interest rate decreases.

30. The price of imported oil rises. If the government wanted to stabilize output, which of the following could it do?

- A. increase government expenditures or increase the money supply
- B. increase government expenditures or decrease the money supply
- C. decrease government expenditures or increase the money supply
- D. decrease government expenditures or decrease the money supply

Short essay questions:

Please answer the following questions IN SEQUENCE. All questions may be answered in EITHER Chinese OR English.

1. Suppose that there are 2 consumers in the economy consuming two goods, X and Y, which are perfectly complement. Specifically, Z units of X have to combine with at least Z units of Y to reach certain utility level. Under this ratio, proportionally increase the consumption of X and Y will certainly elevate the utility level but increase consumption of one good while fixed the consumption of the other will not change the utility level. Suppose that consumer 1 is endowed with 10 units of X and 5 units of Y while consumer 2 is endowed with 5 units of X and 10 units of Y. Markets are perfectly competitive. Answer the following questions.

- A. Let P_x be the price of good X, P_y be the price of good Y and I_1 be the income of consumer 1. Graphically derive consumer 1's demand function. Also graphically decompose the effect of change of price on quantity of demand into income and substitution effects. (9 points)
- B. From the graph you derive in A., you should be able to observe the consumption of X relative to Y at a given price for each consumer. What is the optimal ratio of consumption? (4 point)
- C. At equilibrium, price must be adjusted such that total supply equals to total demand. In this example, can the equilibrium price be uniquely determined by supply and demand? Give a short and intuitive explanation for your answer (Hint: from A., how large is the substitution effect? You should use your answer in A. as a starting point to answer this question.) (4 points)

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2. Please answer the following questions:
- A. What is the relationship between real and nominal interest rates? (5 points)
 - B. Explain how expansionary monetary policy affects the output and employment? (5 points)
 - C. In a period of very low interest rate (like right now), how can monetary policy stimulate the economy? (6 points)
- 3.
- A. State the Coase Theorem. (4 points)
 - B. Imagine that you are a nonsmoker sharing a room with a smoker. According to the Coase theorem, what determines whether your roommate smokes in the room? (8 points)
 - C. Is the outcome reached in part B. efficient? Why or why not? (4 points)

備註	試題隨卷繳交
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選擇題請在答案卡上作答，否則不予計分。

Part I. Multiple choice questions (50 pts; 5 pts each).

1. Let $f(x) = 2x^2 + 3x + 2$. Which of the following statements is true?

- (a) $f'(0) \leq 1$ and $f''(0) \leq 1$.
- (b) $f'(0) \leq 1$ and $f''(0) > 1$.
- (c) $f'(0) > 1$ and $f''(0) \leq 1$.
- (d) $f'(0) > 1$ and $f''(0) > 1$.
- (e) $f'(0)$ does not exist.

2. Suppose that f is a differentiable function on $(-\infty, \infty)$ such that $f(1) = 1$ and $f'(1) = 2$. Let $h(x) = f(x)/(x+1)$ for $x > 0$. Which of the following statements is true?

- (a) $h'(1) \leq 1$.
- (b) $1 < h'(1) \leq 2$.
- (c) $2 < h'(1) \leq 3$.
- (d) $3 < h'(1) \leq 4$.
- (e) $h'(1) > 4$.

3. Let $f(x) = \sin(x-1)$ and $g(x) = 3x^2 - 4x + 1$. Which of the following statements is true?

- (a) $\lim_{x \rightarrow 1} f(x)/g(x)$ does not exist.
- (b) $-\infty < \lim_{x \rightarrow 1} f(x)/g(x) \leq -3$.
- (c) $-3 < \lim_{x \rightarrow 1} f(x)/g(x) \leq -1$.
- (d) $-1 < \lim_{x \rightarrow 1} f(x)/g(x) \leq 1$.
- (e) $1 < \lim_{x \rightarrow 1} f(x)/g(x) < \infty$.

4. Let $f(x) = x \ln(1+x)$ and $g(x) = e^x$ for $x > 0$. Which of the following statements is true?

- (a) $\lim_{x \rightarrow \infty} f(x)/g(x)$ does not exist.
- (b) $3 < \lim_{x \rightarrow \infty} f(x)/g(x) < \infty$.
- (c) $2 < \lim_{x \rightarrow \infty} f(x)/g(x) \leq 3$.
- (d) $0 < \lim_{x \rightarrow \infty} f(x)/g(x) \leq 2$.
- (e) $-\infty < \lim_{x \rightarrow \infty} f(x)/g(x) \leq 0$.

5. Suppose that $f'(x) = x - 1/x$ for $x > 0$. Which of the following statements is true?

- (a) f is strictly increasing on the interval $(0, \infty)$.
- (b) f is strictly decreasing on the interval $(0, \infty)$.
- (c) f has a maximum on the interval $(0, \infty)$.
- (d) f has a minimum on the interval $(0, \infty)$.
- (e) None of the above statements holds true.

備

註 試題隨卷繳交