

考試科目	經濟學	系所別	商學院共同科	考試時間	2月10日(四) 第二節
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### I. Multiple Choice (1 point each)

Identify the letter of the choice that best completes the statement or answers the question.

- Suppose the demand function for a good is expressed as  $Q = 200 - 4p$ . If the good currently sells for \$30, then the price elasticity of demand equals
  - 1.
  - 1.5.
  - 4.
  - 6.67.
- If Andy likes broccoli (B) but hates cabbage (C), which of the following might best represent his utility function for broccoli and cabbage?
  - $U = B + C$
  - $U = \min\{B, C\}$
  - $U = U/C$
  - $U = B^{0.5}C^{0.5}$
- As the price of a Giffen good falls, the consumer will
  - purchase more units.
  - purchase fewer units.
  - not change the amount purchased.
  - There is not enough information to answer this question.
- What will happen to the equilibrium price of new textbooks if more students attend college, paper becomes more expensive, textbook authors accept lower royalties, and more used textbooks are sold?
  - Price will rise.
  - Price will fall.
  - Price will stay exactly the same.
  - The price change will be ambiguous.
- With capital on the vertical axis and labor on the horizontal axis, vertical isoquants imply that
  - capital and labor are perfect substitutes.
  - capital and labor must be used together in certain proportion.
  - capital is not productive.
  - labor is not productive.

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6. In a monopolistically competitive market, the entry of new firms will lead to the demand curve of an incumbent firm become
- steeper.
  - flatter.
  - remain the same.
  - none of the above.
7. Which of the following statement is wrong for an oligopolistic market?
- A firm in the market has a supply curve.
  - The market outcomes could be like a monopoly.
  - When the number of firms in the market getting large, this market will approach to a perfectly competitive market.
  - The owners of firm consider the output effect and the price effect when making production decisions.
8. Which of the following statement is wrong for a perfectly competitive market?
- Some firms might earn profit in the long run.
  - For a firm, average revenue equals marginal revenue.
  - When the fixed cost is zero, a firm will leave the market when it earns negative profit.
  - The market long-run supply curve is always horizontal at the price.
9. Which of the following statement is wrong?
- In a perfectly competitive market which all firms have the same cost structure, the firms will produce at the efficient scale in the long run.
  - Under the average cost pricing, a monopoly will not create deadweight losses.
  - A competitive market might not as efficient as a monopoly.
  - Price discrimination might create deadweight losses.
10. Consider the production possibilities frontier of two goods. Which of the following statement is wrong?
- A slope of the PPF measures the opportunity cost between the two goods that producers face.
  - The production point will not lie to the right of the PPF.
  - The consumption point will not lie to the right of the PPF.
  - The production point and the consumption point could be different points.

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11. After a certain nation changed its policy from one that banned international trade in wheat to one that allowed international trade in wheat, the nation began importing wheat. As a result, total surplus in the wheat market increased by \$10 million. Which of the following changes could have occurred as well?

- A. The price of wheat in that nation increased with the adoption of the new policy.
- B. The domestic quantity of wheat supplied increased with the adoption of the new policy.
- C. Consumer surplus in the wheat market increased by \$7 million and producer surplus in the wheat market increased by \$3 million.
- D. Consumer surplus in the wheat market increased by \$15 million and producer surplus in the wheat market decreased by \$5 million.

12. Which of the following events would be consistent with purchasing-power parity?

- A. The price level in the United States rises more rapidly than that in Ireland and the real exchange rate defined as Irish goods per unit of U.S. goods stays the same.
- B. The money supply in the United States rises more rapidly than in Egypt and the nominal exchange rate defined as Egyptian pounds per dollar falls.
- C. Earl, a worldwide traveler, looks at exchange rates and worldwide breakfast prices one morning and finds that whatever country he decides to go to he can convert \$15 into enough local currency to buy the same breakfast.
- D. All of the above are correct.

13. According to classical macroeconomic theory, in the long run

- A. monetary growth affects both real and nominal variables.
- B. the only real variable affected by monetary growth is the unemployment rate.
- C. a number of factors that affect unemployment are influenced by monetary growth.
- D. monetary growth affects nominal but not real variables.

14. Jennifer took out a fixed-interest-rate loan when the CPI was 100. She expected the CPI to increase to 103 but it actually increased to 105. The real interest rate she paid is

- A. higher than she had expected, and the real value of the loan is higher than she had expected.
- B. higher than she had expected, and the real value of the loan is lower than she had expected.
- C. lower than she had expected, and the real value of the loan is higher than she had expected.
- D. lower than she had expected, and the real value of the loan is lower than she had expected.

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<p>15. There is a temporary adverse supply shock. Given the effects of this shock, if the central bank chooses to return unemployment closer to its previous rate it would</p> <p>A. raise the rate at which it increases the money supply. In the long run this will shift the short-run Phillips curve right.</p> <p>B. raise the rate at which it increases the money supply. In the long run this will shift the short-run Phillips curve left.</p> <p>C. reduce the rate at which it increases the money supply. In the long run this will shift the short-run Phillips curve right.</p> <p>D. reduce the rate at which it increases the money supply. In the long run this will shift the short-run Phillips curve left.</p> <p>16. Which one of the following will increase the supply of money in the economy, everything else held constant?</p> <p>A. If the general public in the economy decides to hold more currency in the pockets.</p> <p>B. If the banking system decides to reduce the holding of excess reserves.</p> <p>C. The central bank sells bonds to the general public.</p> <p>D. The central bank sells its foreign currency reserves.</p> <p>17. Which one of the following is not considered to be “conventional monetary policy tool”?</p> <p>A. Open market operation.</p> <p>B. Reserve requirement ratio.</p> <p>C. Discount rate and lending.</p> <p>D. Large scale asset purchases.</p> <p>18. In the December 2021 statement, the FOMC “decided to keep the target range for the federal funds rate at 0 to 1/4 percent.” What is the federal funds rate?</p> <p>A. The interest rate anyone needs to pay to borrow money from the government.</p> <p>B. The interest rate banks receive by depositing money with the central bank.</p> <p>C. The interest rate banks pay to borrow money from the central bank.</p> <p>D. The interest rate banks pay to borrow money from other banks.</p> <p>19. Since 2014, the ECB has adopted a negative interest rate policy. What is the rate that is negative?</p> <p>A. The interest rate the ECB pays to banks for depositing money with the ECB.</p> <p>B. The interest rate that the ECB lends to banks.</p>					

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- C. The interest rate that the banks lend and borrow from other banks.  
D. The rate of Eurodollar.

20. Everything else held constant, which of the following does not cause aggregate demand to increase?

- A. An increase in consumer spending.  
B. An increase in investment spending.  
C. An increase in taxes.  
D. An increase in exports.

## II. Problems and Short-essay Questions

Please answer the following questions IN SEQUENCE. All questions may be answered in either Chinese or English.

1. Suppose that the inverse demand curve for paper is  $p = 150 - Q$ . Paper is produced with a constant marginal cost of 10. For simplicity, assume that there are no fixed costs. Producing paper creates pollution. Each unit of production generates an external cost of 80 to the residents who live near the paper mill(s).

A. (7 points) What are the equilibrium price, quantity and the associated deadweight loss if paper is produced by perfectly competitive firms?

B. (7 points) What are the equilibrium price, quantity and the associated deadweight loss if paper is produced by a monopoly?

C. (6 points) Suppose the residents can costlessly negotiate with the monopoly. What is the equilibrium quantity of paper produced? What is the minimum monetary transfer from the residents to the monopoly that can achieve the social optimum?

2. Assume Taiwan is a small country and imports pork under free trade. The demand and supply are all linear. The consumers of Taiwan consume 1 million kilograms of pork per year. 400,000 of those are produced domestically and 600,000 are imported.

A. (10 points) Assume due to some reasons, the international price of pork falls by 100 dollars per kilogram. The consumers now consume 1.2 million kilograms of pork per year. 1 million of them are imported. Please calculate the welfare gain and the change of the producer surplus of the economy of Taiwan.

B. (10 points) If the government sets up a quota that only allows 400,000 kilograms of pork to be imported. After this policy, the price of pork in Taiwan rises by 150 dollars. Please calculate the deadweight loss for this policy.

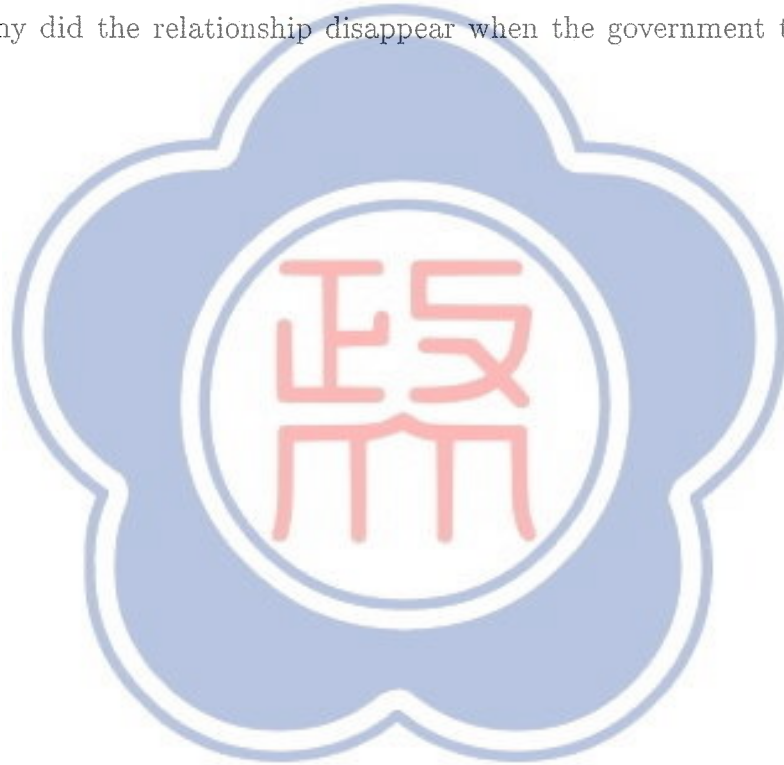
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3. Suppose Taiwan makes a decision to tax the import of agricultural products from abroad, but it does not decrease taxes or increase any other government spending to offset this tax revenues.

Using diagrams and words, show and explain what happens to

- A. (12 points) national saving, domestic investment, net capital outflow and the interest rate;
- B. (4 points) the exchange rate; and
- C. (4 points) the amount of exports, imports and trade balance.

4. (20 points) Please explain, in words, why did the relationship of the Phillips curve exist in the past, and then why did the relationship disappear when the government tried to use it to boost the economy?



備

註

- 一、作答於試題上者，不予計分。
- 二、試題請隨卷繳交。