

# 東吳大學 111 學年度碩士班研究生招生考試試題

第1頁，共8頁

系級	企業管理學系碩士班 A 組	考試時間	100 分鐘
科目	經濟學	本科總分	100 分

※一律作答於答案卷上(題上作答不予計分)；並務必標明題號，依序作答。

**一、選擇題(單選題，共 35 題，每題 2 分)(70%)**

1. In the AD-AS framework, long-run equilibrium implies that \_\_\_\_\_.
  - A. quantity demanded equals quantity supplied at a moderate level of equilibrium inflation.
  - B. quantity demanded equals quantity supplied at a point consistent with the short-run equilibrium level of inflation.
  - C. quantity demanded equals quantity supplied at a point consistent with the natural rate of unemployment.
  - D. all of the above.
  
2. A perfectly elastic demand implies that
  - A. buyers will not respond to any change in price.
  - B. any rise in price above that represented by the demand curve will result in a quantity demanded of zero.
  - C. quantity demanded and price change by the same percent as we move along the demand curve.
  - D. price will rise by an infinite amount when there is a change in quantity demanded.
  
3. Which equation is a plausible aggregate demand curve?
  - A.  $\pi = 2 + 0.3Y$
  - B.  $Y = 50 - 1.25\pi$
  - C.  $Y = 250 - 80r$
  - D.  $\pi = 5 - 0.4(U - 6)$
  
4. Suppose that when the price of wheat is \$2 per bushel, farmers can sell 10 million bushels. When the price of wheat is \$3 per bushel, farmers can sell 8 million bushels. Which of the following statements is true? The demand for wheat is
  - A. income inelastic, so an increase in the price of wheat will increase the total revenue of wheat farmers.
  - B. income elastic, so an increase in the price of wheat will increase the total revenue of wheat farmers.
  - C. price inelastic, so an increase in the price of wheat will increase the total revenue of wheat farmers.
  - D. price elastic, so an increase in the price of wheat will increase the total revenue of wheat farmers.
  
5. If the central bank raises the rate at which it increases the money supply, then in the short run un-employment is
  - A. above its natural rate. The short-run Phillips curve shifts right as the economy moves back to its natural rate of unemployment.
  - B. above its natural rate. The long-run Phillips curve shifts left as the economy moves back to its natural rate of unemployment.
  - C. below its natural rate. The short-run Phillips curve shifts right as the economy moves back to its natural rate of unemployment.
  - D. below its natural rate. The long-run Phillips curve shifts left as the economy moves back to its natural rate of unemployment.

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6. Suppose your own demand curve for tomatoes slopes downward. Suppose also that, for the last tomato you bought this week, you paid a price exactly equal to your willingness to pay. Then

- A. you should buy more tomatoes before the end of the week.
- B. you already have bought too many tomatoes this week.
- C. your consumer surplus on the last tomato you bought is zero.
- D. your consumer surplus on all of the tomatoes you have bought this week is zero.

7. A profit-maximizing firm in a competitive market is able to sell its product for \$7. At its current level of output, the firm's average total cost is \$10. The firm's marginal cost curve crosses its marginal revenue curve at an output level of 9 units. The firm experiences a

- A. profit of more than \$27.
- B. profit of exactly \$27.
- C. loss of more than \$27.
- D. loss of exactly \$27.

8. Which of the following statements is correct?

- A. The CPI can be used to compare dollar figures from different points in time.
- B. The percentage change in the CPI is a measure of the inflation rate, but the percentage change in the GDP deflator is not a measure of the inflation rate.
- C. Compared to the consumer price index (CPI), the GDP deflator is the more common gauge of inflation.
- D. The GDP deflator better reflects the goods and services bought by consumers than does the CPI.

9. A competitive market is in long-run equilibrium. If demand decreases, we can be certain that price will

- A. fall in the short run. All firms will shut down, and some of them will exit the industry. Price will then rise to reach the new long-run equilibrium.
- B. fall in the short run. No firms will shut down, but some of them will exit the industry. Price will then rise to reach the new long-run equilibrium.
- C. fall in the short run. All, some, or no firms will shut down, and some of them will exit the industry. Price will then rise to reach the new long-run equilibrium.
- D. not fall in the short run because firms will exit to maintain the price.

10. Which equation is a plausible aggregate supply curve?

- A.  $Y = 50 - 1.25\pi$
- B.  $\pi = 2 + 0.3(Y - 75)$
- C.  $Y = 250 - 80r$
- D.  $\pi = 5 - 0.4(U - 6)$

11. Competitive firms differ from monopolies in which of the following ways?

- (i) Competitive firms do not have to worry about the price effect lowering their total revenue.
- (ii) Marginal revenue for a competitive firm equals price, while marginal revenue for a monopoly is less than the price it is able to charge.
- (iii) Monopolies must lower their price in order to sell more of their product, while competitive firms do not.

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- A. (i) and (ii) only
- B. (ii) and (iii) only
- C. (i) and (iii) only
- D. (i), (ii), and (iii)

12. The short-run Phillips curve shows the combinations of

- A. unemployment and inflation that arise in the short run as aggregate demand shifts the economy along the short-run aggregate supply curve.
- B. unemployment and inflation that arise in the short run as short-run aggregate supply shifts the economy along the aggregate demand curve.
- C. real GDP and the price level that arise in the short run as short-run aggregate supply shifts the economy along the aggregate demand curve.
- D. None of the above is correct.

13. Which of the following might cause the demand curve for an inferior good to shift to the left?

- A. a decrease in income
- B. an increase in the price of a substitute
- C. an increase in the price of a complement
- D. None of the above is correct.

14. If output is above its natural rate, then according to sticky-wage theory

- A. workers and firms will strike bargains for higher wages. This increase in wages shifts the short-run aggregate supply curve right.
- B. workers and firms will strike bargains for higher wages. This increase in wages shifts the short-run aggregate supply curve left.
- C. workers and firms will strike bargains for lower wages. This decrease in wages shifts the short-run aggregate supply curve right.
- D. workers and firms will strike bargains for lower wages. This decrease in wages shifts the short-run aggregate supply curve left.

15. What would happen to the equilibrium price and quantity of peanut butter if the price of peanuts went up, the price of jelly fell, fewer firms decided to produce peanut butter, and health officials announced that eating peanut butter was good for you?

- A. Price will fall, and the effect on quantity is ambiguous.
- B. Price will rise, and the effect on quantity is ambiguous.
- C. Quantity will fall, and the effect on price is ambiguous.
- D. Quantity will rise, and the effect on price is ambiguous.

16. To fight a recession, the central bank should do which of the following?

- A. Raise the nominal interest rate.
- B. Lower the real interest rate.
- C. Keep the real interest rate constant.
- D. Allow the real interest rate to fluctuate with the market.

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第4頁，共8頁

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17. Jerome says that he will spend exactly \$25 each month on new apps for his mobile device, regardless of the price of apps. Jerome's demand for apps is

- A. perfectly elastic.
- B. unit elastic.
- C. perfectly inelastic.
- D. somewhat inelastic, but not perfectly inelastic.

18. Changes in the interest rate

- A. shift aggregate demand whether they are caused by changes in the price level or by changes in fiscal or monetary policy.
- B. shift aggregate demand if they are caused by changes in the price level, but not if they are caused by changes in fiscal or monetary policy.
- C. shift aggregate demand if they are caused by fiscal or monetary policy, but not if they are caused by changes in the price level.
- D. do not shift aggregate demand.

19. A production function can be described as  $Q=50L^{0.5} \cdot K^{0.7}$ , where L denotes labor input and K denotes capital input. This production function exhibits

- A. constant returns to scale.
- B. decreasing returns to scale.
- C. increasing returns to scale.
- D. none of the above.

20. Quality Motors is a Japanese-owned company that produces automobiles; all of its automobiles are produced in American plants. In 2010 Quality Motors produced \$30 million worth of automobiles, with \$17 million in sales to Americans, \$9 million in sales to Canadians, and \$4 million worth of automobiles added to Quality Motors' inventory. The transactions just described contribute how much to U.S. GDP for 2010?

- A. \$17 million
- B. \$21 million
- C. \$26 million
- D. \$30 million

21. Suppose an airline determines that its customers traveling for business have inelastic demand and its customers traveling for vacations have an elastic demand. If the airline's objective is to increase total revenue, it should

- A. increase the price charged to vacationers and decrease the price charged to business travelers.
- B. decrease the price charged to vacationers and increase the price charged to business travelers.
- C. decrease the price to both groups of customers.
- D. increase the price for both groups of customers.

# 東吳大學 111 學年度碩士班研究生招生考試試題

第5頁，共8頁

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22. Which of the following is correct?
- A. The GDP deflator is better than the CPI at reflecting the goods and services bought by consumers.  
 B. The CPI is better than the GDP deflator at reflecting the goods and services bought by consumers.  
 C. The GDP deflator and the CPI are equally good at reflecting the goods and services bought by consumers.  
 D. The GDP deflator is more commonly used as a gauge of inflation than the CPI is.
23. If the profit maximizing quantity of production for a competitive firm occurs at a point where the firm's average total cost of production is falling as production increases, then the firm
- A. will be earning positive economic profit at the profit-maximizing quantity.  
 B. will have economic profit less than zero at the profit-maximizing quantity.  
 C. will have zero economic profit at the profit-maximizing quantity.  
 D. should increase the quantity of production to increase profit.
24. Suppose that the economy is at long-run equilibrium. If there is a sharp rise in the stock market combined with a significant increase in the minimum wage, then in the short run
- A. real GDP will rise and the price level might rise, fall, or stay the same.  
 B. real GDP will fall and the price level might rise, fall, or stay the same.  
 C. the price level will rise, and real GDP might rise, fall, or stay the same.  
 D. the price level will fall, and real GDP might rise, fall, or stay the same.
25. Robin owns a horse stables and riding academy and gives riding lessons for children at "pony camp." Her business operates in a competitive industry. Robin gives riding lessons to 20 children per month. Her monthly total revenue is \$4,000. The marginal cost of pony camp is \$200 per child. In order to maximize profits, Robin should
- A. give riding lessons to more than 20 children per month.  
 B. give riding lessons to fewer than 20 children per month.  
 C. continue to give riding lessons to 20 children per month.  
 D. We do not have enough information to answer the question.
26. Suppose the economy is in long-run equilibrium. Concerns about pollution cause the government to significantly restrict the production of electricity. At the same time, taxes fall. In the short-run
- A. real GDP will rise, and the price level might rise, fall, or stay the same.  
 B. real GDP will fall, and the price level might rise, fall, or stay the same.  
 C. the price level will rise, and real GDP might rise, fall, or stay the same.  
 D. the price level will fall, and real GDP might rise, fall, or stay the same.
27. Which of the following statements is true?
- (i) When a competitive firm sells an additional unit of output, its revenue increases by an amount less than the price.  
 (ii) When a monopoly firm sells an additional unit of output, its revenue increases by an amount less than the price.

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第6頁，共8頁

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(iii) Average revenue is the same as price for both competitive and monopoly firms.

- A. (ii) only
- B. (iii) only
- C. (i) and (ii) only
- D. (ii) and (iii) only

28. The government increases both its expenditures and taxes by \$400 billion. There is no crowding out and no accelerator effect. Aggregate demand shifts by \$400 billion. Which of the following is consistent with how far aggregate demand shifts?

- A.  $MPC = 1/2$ , and the effects of the increase in taxes is  $1/2$  as strong as the change in government expenditures.
- B.  $MPC = 2/3$ , and the effects of the increase in taxes is  $2/3$  as strong as the change in government expenditures
- C.  $MPC = 3/4$ , and the effects of the increase in taxes is  $3/4$  as strong as the change in government expenditures
- D. All of the above are correct.

29. When a university bookstore prices chemistry textbooks at \$200 each, it generally sells 120 books per month. If it lowers the price to \$160, sales increase to 160 books per month. Given this information, we know that the price elasticity of demand for chemistry books is about

- A. 1.29, and a decrease in price from \$200 to \$160 results in an increase in total revenue.
- B. 1.29, and a decrease in price from \$200 to \$160 results in a decrease in total revenue.
- C. 0.78, and a decrease in price from \$200 to \$160 results in an increase in total revenue.
- D. 0.78, and a decrease in price from \$200 to \$160 results in a decrease in total revenue.

30. Suppose the Fed decreased the growth rate of the money supply. Which of the following would be lower in the long run?

- A. both the natural rate of unemployment and the inflation rate.
- B. the natural rate of unemployment, but not the inflation rate.
- C. the inflation rate, but not the natural rate of unemployment.
- D. neither the natural unemployment rate nor the inflation rate.

31. Winona's Fudge Shoppe is maximizing profits by producing 1,000 pounds of fudge per day. If Winona's fixed costs unexpectedly increase and the market price remains constant, then the short run profit-maximizing level of output

- A. is less than 1,000 pounds.
- B. is still 1,000 pounds.
- C. is more than 1,000 pounds.
- D. becomes zero.

# 東吳大學 111 學年度碩士班研究生招生考試試題

第7頁，共8頁

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32. Suppose the Federal Reserve pursues contractionary monetary policy. In the long run
- A. both inflation and the unemployment rate are higher than they were prior to the change in policy.
  - B. inflation is higher and the unemployment rate is the same as it was prior to the change in policy.
  - C. inflation is lower and the unemployment rate is lower than it was prior to the change in policy.
  - D. inflation is lower and unemployment is the same as it was prior to the change in policy.
33. When a country allows trade and becomes an importer of bottled water, which of the following is not a consequence?
- A. The gains of domestic consumers of bottled water exceed the losses of domestic producers of bottled water.
  - B. The losses of domestic producers of bottled water exceed the gains of domestic consumers of bottled water.
  - C. The price paid by domestic consumers of bottled water decreases.
  - D. The price received by domestic producers of bottled water decreases.
34. The least effective approach to reduce cost-push inflation is:
- A. to reduce the market power of unions and firms.
  - B. government controls of prices and wages.
  - C. an income policy.
  - D. cutting taxes.
35. Suppose there is a temporary supply shock because of a war in the Middle East, then \_\_\_\_\_.
- A. this would constitute a cost push shock due to a restriction in the supply of oil.
  - B. the AS curve would shift to the left.
  - C. this could theoretically lead to stagflation.
  - D. all of the above.

## 二、計算題(30%)

(一) Let the national-income model be:

$$Y = C + I_0 + G$$

$$C = a + b(Y - T_0), \quad a > 0, \quad 0 < b < 1$$

$$G = gY, \quad 0 < g < 1$$

1. Find the equilibrium national income. (5%)
2. What restriction on the parameters is needed for a solution to exist? (5%)

(二) You own and operate a gas station. Your demand curve is given by  $P = 0.3 - 0.001Q$ , where  $P$  is in dollars and  $Q$  is in liters of gasoline. Your marginal cost curve is  $MC = 0.001Q$ . Your fixed costs equal \$10. There is no other gas station in the nearby neighborhood.

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1. Calculate your profit maximizing quantity. (2%)
2. Calculate your profit. (2%)
3. Calculate consumer surplus at the profit maximizing P and Q. (3%)

(三) 假設一經濟體系之總體行為方程式如下：

消費函數： $C = 100 + 0.8(Y - T)$

投資函數： $I = 200$

政府支出： $G = 300$

淨租稅： $T = 100 + 0.25Y$

出口函數： $X = 500$

進口函數： $M = 100 + 0.1Y$

式中， $Y =$  實質國民所得

請問：

- 1、此體系之政府支出乘數為多少? (2%)
- 2、若充分就業所得為  $Y_f = 2,000$ ，則此體系發生緊縮或膨脹缺口? 缺口是多少? (2%)
- 3、若政府欲變更政府支出來達成充分就業，則新的政府支出是多少? (2%)
- 4、若政府欲變更自發性租稅以達成充分就業，則新的自發性租稅是多少? (2%)

(四) 假設台灣民眾持有之通貨為 100 億元，活期存款為 1,000 億元，而定期存款為 500 億元，若活期存款與定期存款的法定準備率皆為 20%，請問貨幣乘數為多少? (5%)