# 國立臺灣大學112學年度轉學生招生考試試題

科目:經濟學原理

題號: 28

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# ※ 注意:請於試卷上「選擇題作答區」依序作答。

#### Notes:

- There are 25 multiple-choice questions in this test.
- For each question, select only ONE answer which you consider as the most appropriate.
- The total mark is 100, with 4 marks being assigned to each question.

- 1. [時事題] On March 23, 2023, Taiwan's Central Bank announced an increase in the rediscount rate (重貼現率) from 1.750% to 1.875%. Recall that the discount rate is the rate of interest which a central bank charges on its loans to a commercial bank. At the same time, the overnight rate was 0.556%. The rate increase is expected to lead to
  - (a) an increase in bank reserves
  - (b) a decrease in bank reserves
  - (c) an increase in M2
  - (d) a decrease in M2
  - (e) None of the above
- 2. [時事題] Which of the following was NOT one of the criteria used by the US Department of the Treasury to identify a country as a currency manipulator?
  - (a) Net purchase of foreign currencies exceeding 2% of GDP
  - (b) Current account surplus exceeding 2% of GDP
  - (c) Capital account surplus exceeding 2% of GDP
  - (d) Bilateral trade surplus with the United States exceeding 20 billion USD
  - (e) None of the above
- 3. [時事題] Since March, 2022, the Fed has increased interest rate for 10 times. Which of the following rate was the Fed's target when it conducts an interest rate hike?
  - (a) Rediscount rate
  - (b) Federal funds rate
  - (c) 1-Year Treasury bill rate
  - (d) 10-Year Treasury note rate
  - (e) Demand deposit (DD) account interest rate
- 4. [時事題] The DGBAS (主計處) announced that Taiwan's economic growth rate was 2.35% in 2022. It refers to the growth rate of
  - (a) Nominal GDP
  - (b) Nominal GDP per capita
  - (c) Real GDP
  - (d) Real GDP per capita
  - (e) None of the above
- 5. Assuming that the GDP per capita in Taiwan was NT\$804,000 in 2019, when a Big-Mac hamburger was sold at NT\$72 in Taiwan and US\$6 in the US, and the currency exchange rate was then 1:30. Using solely the Big-Mac prices, what is the purchasing-power-parity GDP per capita in Taiwan of the same year?
  - (a) \$67,000
  - (b) \$134,000
  - (c) \$32,000
  - (d) \$26,800
  - (e) \$53,600

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6. If you purchased an apartment at the price of 20 million dollars at the beginning of 2022, and immediately rented it out for an annual rent of 400 thousand dollars. The apartment was built in 2000. By how much do these activities affect the GDP in 2022?

- (a) 20 million dollars
- (b) 400 thousand dollars
- (c) 20.4 million dollars
- (d) 0 dollars
- (e) None of the above

The following is an excerpt from the article "The Fed may not get inflation down to 2%, says Richard Clarida" published on *The Economist* on April 23, 2023. Read the excerpt and answer Questions 7-10:

As the Federal Reserve and other central banks have raised interest rates to fight inflation, they have increased the cost of borrowing for governments. Yet many central banks operate in countries where governments run large budget deficits even as they are more indebted, relative to GDP, than at any time since the second world war. High debts have understandably led to worries about "fiscal dominance", the fear that parlous public finances could constrain the ability—or willingness—of the Fed and other central banks to sustain interest rates at the levels required to hit their inflation targets. Recent fragility in American banks, flowing in part from their exposure to interest-rate risk on vast holdings of government debt, has exacerbated the fear that there are unresolvable tensions in American economic policy.

Similar contradictions were present as the Fed, led by Paul Volcker, fought inflation in the 1980s. Owing to President Ronald Reagan's tax cuts and desire to spend more on defence, monetary policy was tight while fiscal policy was loose. The combination pushed up the dollar as foreign investors piled into America's high-yielding government debt—even though policymakers saw excessive currency appreciation as undesirable. In the end Volcker got his disinflation, Reagan got his defence build-up and foreign investors got their Treasuries.

The Fed's struggles to return quickly to 2% have directed attention to the so-called "fiscal theory of the price level". According to this view, the Fed has played only a minor role in the surge in America's inflation since the pandemic. The logic is as follows. The huge increase in government debt issued since 2020 to pay for \$6trn of pandemic and post-pandemic spending made it impossible for the Fed to get the inflation rate it wanted. Instead, prices adjusted to make the government's debt sustainable. If investors believed that future taxes would not be raised, nor spending cut, to pay for pandemic spending, the only other way for the government-debt market to clear was for inflation to reduce its real value. The economy got in one burst the inflation necessary to pay off pandemic debts. In turn, that will allow inflation to return to 2%—albeit with prices permanently higher than before the pandemic.

Those who blame the Fed for inflation might respond that the central bank purchased trillions of dollars of Treasury bonds between March 2020 and March 2022. Wasn't the Fed, not the market, financing the government—and therefore unleashing inflation? Indeed, for a long time quantitative easing (QE) appeared to be a "free lunch" for the government. The Fed's purchases were financed by the creation of bank reserves which pay a floating rate of interest very close to those on Treasury bills. At the time QE was happening, these rates were very close to zero. Consider the Fed and the Treasury as a single entity, and the effect of QE was to replace the higher interest payments on the long-maturity bonds the Fed was buying with lower interest payments on the reserves it issued to buy the bonds.

But while QE may have looked like a free lunch when short-term interest rates were close to zero, it did not last. To reduce inflation, the Fed has pushed the short-term interest rate it pays on reserves above the yields on the bonds it bought during previous QE programmes. Whereas in the first decade the Fed remitted hundreds of billions of dollars of QE profits to the Treasury, it has now suspended all such payments. They will remain suspended for as long as it takes to recoup the cumulative shortfall between the earnings on its assets and interest payments on its reserve liabilities.

In other words, QE is not a free lunch. If QE "works"—something many dispute—it is not by reducing the stock of government debt, but by changing its maturity structure. In doing so it can lower, at least for a time, the interest rate the Treasury pays on long-dated bonds. But it does not make debt disappear, and so does not undermine the fiscal theory of the price level as an explanation for recent inflation...

- 7. Which of the following is the essential point of this article?
  - (a) The Fed failed to respond quickly enough to prevent inflation from happening
  - (b) The Fed should be blamed for adopting QE between March 2020 and March 2022
  - (c) QE is not a free lunch
  - (d) The Fed is unable to increase interest rate freely to battle inflation in light of fiscal burden
  - (e) All of the above

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8. The phrase "Recent fragility in American banks" refers to

- (a) The deposit loss of PacWest Bancorp
- (b) The bankruptcy of Silicon Valley Bank
- (c) The collapse of First Republic Bank
- (d) The bankruptcy of FTX Trading
- (e) All of the above
- 9. Regarding the term 'Treasuries' in this article, which of the following is correct?
  - (a) They refer to long-term US government bonds
  - (b) They refer to short-term US government bonds
  - (c) They are issued by the Fed
  - (d) They are irrelevant of QE
  - (e) None of the above
- 10. According to the article, which of the following is UNTRUE about the 'fiscal theory of the price level'?
  - (a) Fed plays only a minor role in battling inflation
  - (b) Inflation is needed to make the government's debt sustainable
  - (c) QE strengthens the theory
  - (d) Recent bank crises made it harder for Fed to battle inflation by raising interest rate
  - (e) None of the above

Scenario: 100 people live in Country X, and 60 of these people are working full time. Tara and Jen have been able to find only part-time jobs. John, Peter, and Luna just had to close their coffee shop; and John and Peter are looking for a new business venture. Luna has inherited a large sum of money and feels that she does not need to work anymore. Her sister Sara feels the same way. Four people in Country X are living in care facilities. Ten people are full-time students, and two of them currently are hoping to find a job. All other people are retirees or under the age of 16.

- 11. Refer to the scenario above. How would the Bureau of Labor Statistics classify Luna?
  - (a) Employed
  - (b) Unemployed
  - (c) In the labor force
  - (d) Potential worker
  - (e) Retired
- 12. Refer to the scenario above. What is the size of the labor force in Country X?
  - (a) 55
  - (b) 64
  - (c) 70
  - (d) 78
  - (e) 80

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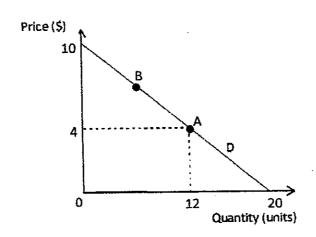
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13. In a perfectly competitive market, suppose a firm's average total cost (ATC) function follows ATC = 2Q + 10/Q, where Q refers to the quantity of output. Which of the following statement is correct?

- (a) The firm is operating in the short term
- (b) The firm has only variable cost
- (c) The firm is running above shut-down point
- (d) The firm is running at profit-maximizing point
- (e) None of the above
- 14. Following Q13, if the market price of the output is 64, what is the optimal quantity of the firm?
  - (a) 4
  - (b) 8
  - (c) 12
  - (d) 16
  - (e) 24
- 15. Following Q14, what is the profit of the firm at the optimal point?
  - (a) 0
  - (b) 248
  - (c) 502
  - (d) 512
  - (e) 1,024



- 16. The figure above describes an individual's demand for a certain product. What is the price elasticity of point A?
  - (a) -1/3
  - (b) -2/3
  - (c) -3/4
  - (d) -1
  - (e) -3
- 17. Following Q16, which of the following is correct?
  - (a) Point A and point B are equally elastic
  - (b) Point A is more elastic than point B
  - (c) Point A is less elastic than point B
  - (d) Point A and point B are not compatible in terms of elasticity
  - (e) Point A can be more or less elastic than point B depending on the exact position of point B
- 18. Which of the following is an example of adverse selection?
  - (a) Overgrazing of a common piece of land
  - (b) A passenger traveling in a subway without a ticket
  - (c) A customer buying a defective appliance from a used goods market
  - (d) The generation of hazardous waste by the production of a good
  - (e) An insured driver driving more carelessly

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19. Which of the following statements is correct?

- (a) The principle of comparative advantage provides a basis for trade when two nations have the same opportunity cost of producing a good
- (b) The principle of absolute advantage provides a basis for the determination of the terms of trade between two trading nations
- (c) The principle of absolute advantage forms the basis of trade when a nation can produce more goods and services compared to other nations
- (d) The principle of comparative advantage provides a range of prices within which trade will occur
- (e) The principle comparative advantage is only relevant of country-to-country trade, not person-to-person trade
- 20. A monopolist sells in two markets. The inversed demand curve for her product is given by  $P_1 = 21 3Q_1$  in the first market and  $P_2 = 43 4Q_2$  in the second market, where  $Q_i$  is the quantity sold in market i and  $P_i$  is the price charged in market i. She has a constant marginal cost of production, c = 3, and no fixed costs. She can charge different prices in the two markets. What is the profit-maximizing combination of quantities for this monopolist?
  - (a)  $Q_1 = 5$  and  $Q_2 = 4$
  - (b)  $Q_1 = 5$  and  $Q_2 = 6$
  - (c)  $Q_1 = 3$  and  $Q_2 = 4$
  - (d)  $Q_1 = 3$  and  $Q_2 = 5$
  - (e)  $Q_1 = 5$  and  $Q_2 = 3$
- 21. There are only two people in an economy. Person A's demand for a public good is Q = 4 P and person B's demand is Q = 9 2P. The social benefit that 3 units of the public good can generate is
  - (a) 3
  - (b) 4
  - (c) 7
  - (d) 11
  - (e) unknown due to lack of information
- 22. People will continue to use a common property until the private marginal benefit from using it equals
  - (a) opportunity cost from using it
  - (b) the social marginal benefit from using it
  - (c) sum of individual costs of all users
  - (d) zero
  - (e) none of the above
- 23. Which of the following is an implication of the Coase Theorem?
  - (a) Government intervention is not necessary for resolving externality
  - (b) Negotiation leads to an efficient outcome if transaction costs are high
  - (c) Bargaining always lead to an efficient allocation of resources
  - (d) Granting the polluter the rights to pollute always leads to as efficient allocation of resources as granting the pollution victims the rights to the clean environment does
  - (e) Taxation leads to an efficient allocation of resources regardless of who holds the property rights

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24. Consider a monopoly firm facing a market demand P(Q) = 100 - Q, where Q refers to quantity of output and P denotes the price. The marginal cost of the firm is fixed at 50. Which of the following is UNTRUE?

- (a) The optimal quantity for the firm is 25
- (b) The optimal price for the firm is 75
- (c) The marginal revenue function is MR(Q) = 100 2Q
- (d) The profit for the firm at the optimal point is 625
- (e) None of the above
- 25. Suppose that a firm in a monopolistically competitive market has a constant marginal cost and it is making a positive profit in the short run. What will happen in the long-run equilibrium?
  - (a) The firm will keep producing the same quantity but earn zero profit
  - (b) The firm will produce zero units and earn zero profit
  - (c) The firm will produce more but earn zero profit
  - (d) The firm will produce less but earn a positive profit
  - (e) None of the above

試題隨卷繳回