國立成功大學

114學年度碩士班招生考試試題

編　　號：179

系　　所：國際企業研究所

科　　目：經濟學

日　　期：0211

節　　次：第 3 節

注　　意：1.不可使用計算機
　　　　　2.請於答案卷(卡)作答，於試題上作答，不予計分。

I.   True or False (2 points each, 40 points, please answer each question in either "T" or "F")

1. The interest rate will decline, and the bond price will decrease subsequently when the central bank decides to increase the money supply.

2. We should expect Taiwan's exports to increase when the Taiwan dollar has weakened about 6.5% recently and is likely to continue this way.

3. A factory implementing new technology that increases its production rate while simultaneously reducing its pollution output is experiencing productivity gains but still creating a negative externality.

4. On July 30, 2024, the Ministry of Economic Affairs issued a new regulation for the localization rate of auto parts for locally produced cars. This is a typical example of non-tariff barriers and enhancing technology transfer for automobiles.

5. Economic hysteresis means that the economic condition has lasting effect even after initial causes of the current economic condition have already dissipated.

6. Negative interest rates could stimulate economies but might suffer a deflationary spiral once the self-correction mechanism within economies fails to function.

7. A denial of a proposed merger between Ubereats and Foodpanda by the Fair Trade Commission of Taiwan was due to regulations being used to enhance innovations of delivery platforms and delivery efficiency.

8. A government policy implementing a maximum rent price for rental units that is higher than the average current rent will likely lead to a shortage of available rental units.

9. People see US dollars more valuable and fungible compared to other currencies due to the idea of mental accounting.

10. Switching from driving a car to riding a bicycle for your daily commute increases your personal productivity while also generating a positive externality.

11. If your income tax rate is higher than the tax rate on your capital gains, it would be more advantageous for you to receive a $10,000 bonus from your employer rather than earn $10,000 from selling stock you've held for several years.

12. A rise in custom duties could lead to higher price levels in imports while enhancing the competitiveness of domestic products.

13. In repeated games, the players could collude to increase mutual benefits while the players might reach a Nash equilibrium in non-repeated games even though they knew that collusion benefits are much higher than non-collusion benefits.

14. A person who avoids moving to a new city for a potentially better job because they fear the regret of leaving their friends and family is influenced by a behavioral bias that can impact microeconomic decisions like labor mobility.

15. If a country faces a recession with rising unemployment, the most effective policy response would be to combine tax cuts with lower interest rates.

16. Information disadvantages could occur after the product purchase due to the principal-agent issue.

17. Labor costs might not be so responsive to economic conditions due to wage rigidity caused by institutional and psychological factors.

18. The AI revolution in the current technology could enhance the workers' productivity and bring about non-decreasing marginal productivity. However, the AI revolution might cause the unemployment rate to increase due to structural and surplus unemployment.

19. Cryptocurrencies, decentralized digital currencies, are created through block-chain technology and could be regarded as alternative value preservation instruments like gold. However, the current value status of cryptocurrencies is uncertain and fragile due to their tremendously high price volatility.

20. Announcements of government policies tend to drive economic impact due to rational expectations.

II. Multiple Choice (Choose the Best One, 3 points each, 60 points)

1. The following table lists the production costs and the market demand for a hardware product:

Quantity	Price	Total Production Cost
1	$225	$241.76
2	$200	$292.76
3	$150	$342.76
4	$120	$393.16
5	$101	$443.76
6	$88	$494.86
7	$78	$546.00
8	$70	$597.24

What is the possible variable production cost per unit when producing two units of hardware if the variable production cost per unit for producing one hardware unit is two dollars more than the variable production cost per unit for producing two hardware units?

a. 57

b. 55

c. 53

d. 52

2. The following table lists the production costs and the market demand for a hardware product:

Quantity	Price	Total Production Cost
1	$225	$241.76
2	$200	$292.76
3	$150	$342.76
4	$120	$393.16
5	$101	$443.76
6	$88	$494.86
7	$78	$546.00
8	$70	$597.24

What is the fixed production cost of producing hardware if the variable production cost per unit for producing two hardware units is one dollar more than the variable production cost per unit for producing three hardware units?

a. 188.86

b. 186.76

c. 184.86

d. 182.76

3. The following table lists the production costs and the market demand for a hardware product:

Quantity	Price	Total Production Cost
1	$225	$241.76
2	$200	$292.76
3	$150	$342.76
4	$120	$393.16
5	$101	$443.76
6	$88	$494.86
7	$78	$546.00
8	$70	$597.24

What is the marginal revenue for the fourth hardware unit?

a. 50

b. 45

c. 30

d. 25

4. The following table lists the production costs and the market demand for a hardware product:

Quantity	Price	Total Production Cost
1	$225	$241.76
2	$200	$292.76
3	$150	$342.76
4	$120	$393.16
5	$101	$443.76
6	$88	$494.86
7	$78	$546.00
8	$70	$597.24

What is the quantity where the marginal revenue is equal to the marginal production cost for this hardware product?

a. 2

b. 3

c. 4

d. 5

5. The following table lists the production costs and the market demand for a hardware product:

Quantity	Price	Total Production Cost
1	$225	$241.76
2	$200	$292.76
3	$150	$342.76
4	$120	$393.16
5	$101	$443.76
6	$88	$494.86
7	$78	$546.00
8	$70	$597.24

What is the quantity which makes the profit equal to zero?

a. 6

b. 7

c. 8

d. None

6. There are three representative agents, A, B, and C who had consumption bundles of $(x_A,y_A)=(2,1)$, $(x_B,y_B)=(3,2)$, and $(x_C,y_C)=(3,3)$, respectively, last year (base period) while they have consumption bundles of $(x_A,y_A)=(2,2)$, $(x_B,y_B)=(2,3)$, and $(x_C,y_C)=(4,4)$ this year. The prices were $(p_x,p_y)=(1,2)$ last year while the prices are $(p_x,p_y)=(2,3)$ this year. What is the Laspeyres CPI (consumer price index)?

a. 1.55

b. 1.60

c. 1.65

d. 1.70

7. There are three representative agents, A, B, and C who had consumption bundles of $(x_A,y_A)=(2,1)$, $(x_B,y_B)=(3,2)$, and $(x_C,y_C)=(3,3)$, respectively, last year (base period) while they have consumption bundles of $(x_A,y_A)=(2,2)$, $(x_B,y_B)=(2,3)$, and $(x_C,y_C)=(4,4)$ this year. The prices were $(p_x,p_y)=(1,2)$ last year while the prices are $(p_x,p_y)=(2,3)$ this year. What is the Paasche CPI (consumer price index)?

a. 1.60

b. 1.65

c. 1.70

d. 1.75

8. There are three representative agents, A, B, and C who had consumption bundles of $(x_A, y_A) = (2,1)$, $(x_B, y_B) = (3,2)$, and $(x_C, y_C) = (3,3)$, respectively, last year (base period) while they have consumption bundles of $(x_A, y_A) = (2,2)$, $(x_B, y_B) = (2,3)$, and $(x_C, y_C) = (4,4)$ this year. The prices were $(p_x, p_y) = (1,2)$ last year while the prices are $(p_x, p_y) = (2,3)$ this year. What is the Marshall-Edgeworth CPI (consumer price index)?

   a. 1.68
   b. 1.74
   c. 1.85
   d. 1.92

9. There are three representative agents, A, B, and C who had consumption bundles of $(x_A, y_A) = (2,1)$, $(x_B, y_B) = (3,2)$, and $(x_C, y_C) = (3,3)$, respectively, last year (base period). The prices were $(p_x, p_y) = (1,2)$ last year while the prices are $(p_x, p_y) = (2,3)$ this year. What is the plutocratic CPI (consumer price index)?

   a. 0.62
   b. 0.73
   c. 0.84
   d. 0.95

10. There are three representative agents, A, B, and C who had consumption bundles of $(x_A, y_A) = (2,1)$, $(x_B, y_B) = (3,2)$, and $(x_C, y_C) = (3,3)$, respectively, last year (base period). The prices were $(p_x, p_y) = (1,2)$ last year while the prices are $(p_x, p_y) = (2,3)$ this year. What is the democratic CPI (consumer price index)?

    a. 1.60
    b. 1.65
    c. 1.70
    d. 1.75

11. In the closed Wizard of Oz economy, there are Lion and Tin Woodman. Lion grows 12 oranges with each worth half of an Oz dollar while Tin Woodman can grow up to 10 apples with each worth one Oz dollar. Dorothy, a humble and modest girl, kindly issues one Oz dollar bill to Tin Woodman who uses the bill to purchase produce through the market. What is the gross domestic product (GDP) in terms of Oz dollars within the Wizard of Oz economy if Lion sells off all his oranges and spends all his earnings purchasing Tin Woodman's apples? (Lion and Tin Woodman will not eat their own produce)

    a. 12
    b. 16
    c. 24
    d. 32

12. In the closed Wizard of Oz economy, there are Lion and Tin Woodman. Lion grows 12 oranges with each worth half of an Oz dollar while Tin Woodman can grow up to 10 apples with each worth one Oz dollar. Dorothy, a humble and modest girl, kindly issues two one-Oz dollar bills to Tin Woodman who uses these bills to purchase produce through the market. What is the gross domestic product (GDP) in terms of Oz dollars within the Wizard of Oz economy if Lion sells off all his oranges and spends all his earnings purchasing Tin Woodman's apples? (Lion and Tin Woodman will not eat their own produce)

    a. 12
    b. 16
    c. 24
    d. 32

13. In the open Wizard of Oz economy, there are Lion and Tin Woodman living in the center of Oz while Glinda, a most powerful sorceress, rules the Quadling Country on the south to the center of Oz. Lion grows 12 oranges with each worth half of an Oz dollar while Tin Woodman can grow up to 10 apples with each worth one Oz dollar. Dorothy, a humble and modest girl, kindly issues one Oz dollar bill to Tin Woodman who uses this bill to purchase produce through the market. What is the gross domestic product (GDP) in terms of Oz dollars within the Wizard of Oz economy if Lion sells off all his oranges and spends all his earnings purchasing Tin Woodman's apples while Tin Woodman exports his apples up to his capacity to exchange for Glinda's charmed heart worth 4 Quad dollars where one Quad dollar has equal value of one Oz dollar, which will be maintained constantly? (Lion and Tin Woodman will not eat their own produce)

    a. 12
    b. 16
    c. 24
    d. 32

14. In the open Wizard of Oz economy, there are Lion and Tin Woodman living in the center of Oz while Glinda, a most powerful sorceress, rules the Quadling Country on the south to the center of Oz. Lion grows 12 oranges with each worth half of an Oz dollar while Tin Woodman can grow up to 10 apples with each worth one Oz dollar. Dorothy, a humble and modest girl, kindly issues one Oz dollar bill to Tin Woodman who uses this bill to purchase produce through the market. What is the gross domestic product (GDP) in terms of Oz dollars within the Wizard of Oz economy if Lion sells off all his oranges and spends all his earnings purchasing Tin Woodman's apples while Tin Woodman exports his apples up to his capacity to Glinda who settles this deal using Quad dollars with one Quad dollar equal to one Oz dollar, which will be maintained constantly? (Lion and Tin Woodman will not eat their own produce)

    a. 12
    b. 16
    c. 24
    d. 32

15. In the open Wizard of Oz economy, there are Lion and Tin Woodman living in the center of Oz while Glinda, a most powerful sorceress, rules the Quadling Country on the south to the center of Oz. Lion grows 12 oranges with each worth half of an Oz dollar while Tin Woodman can grow up to 10 apples with each worth one Oz dollar. Dorothy, a humble and modest girl, kindly issues two one-Oz dollar bills to Tin Woodman who uses these bills to purchase produce through the market. What is the money supply in terms of Oz dollars within the Wizard of Oz economy if Lion sells off all his oranges and spends all his earnings purchasing Tin Woodman's apples while Tin Woodman exports his apples up to his capacity to Glinda who settles this deal using Quad dollars with one Quad dollar equal to one Oz dollar, which will be maintained constantly? (Lion and Tin Woodman will not eat their own produce)

    a. 2

    b. 4

    c. 6

    d. 8

16. Alice strolling around Wonderland comes across three playing card men of Two, Five, and Seven Spades who are bickering with each other due to their mistakenly planting white roses the Queen of Hears hates. They are hasty to correct this mishap and scramble to ask for Alice's kindness. Alice kindly advises them to borrow money from the Croquet bank, the only bank in the playing cards kingdom, which has total assets of 1,000 Croquet dollars and purchase stuff to fix the mistake. As follows, they borrow 1,000 Croquet dollars from the Croquet bank and buy paint brushes, red paint, and paint buckets from a paint shop. The paint shop meets their orders by purchasing materials using 700 Croquet dollars and deposits 300 Croquet dollars at the Croquet bank. Alice, wishing to win a croquet game against the Queen of Hearts, borrows 200 Croquet dollars from the Croquet bank, hires a private croquet coach using 150 Croquet dollars and deposits 50 Croquet dollars at the bank. Finally, the Croquet bank lends 80 Croquet dollars to the captain of the entourage of guards of the Queen of Hearts. The captain spends 70 Croquet dollars and deposits 10 Croquet dollars at the Croquet bank. What is the money supply in terms of Croquet dollars after these activities?

    a. 1,000

    b. 1,280

    c. 1,560

    d. 1,920

17. According to Question 16, what is the gross domestic product (GDP) in terms of Croquet dollars in Wonderland?

    a. 1,000

    b. 1,220

    c. 1,500

    d. 1,860

18. According to Question 16, what is the velocity of the money in Wonderland using the Cambridge equation?

    a. 1.05

    b. 1.00

    c. 0.95

    d. 0.85

19. According to Question 16, what is the real gross domestic product (Real GDP) if the current price level is 2 in Wonderland?

    a. 500

    b. 610

    c. 750

    d. 930

20. According to Question 16, the Queen of Hearts issues a cryptocurrency named the QHcoin of 200 units to Wonderland. She orders the Croquet bank to purchase all units of QHcoin using the total asset value of the Croquet bank. This means that the Croquet bank transfers all assets to QHcoin. What is the unit price of QHcoin in terms of Croquet dollars?

    a. 6.80

    b. 7.80

    c. 8.60

    d. 9.60