

國立清華大學 102 學年度碩士班考試入學試題

系所班組別：計量財務金融學系

考試科目（代碼）：經濟學(4402)(4502)

每題 4 分

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1. Which of the following statements is true?

- [A] It is possible for a country to have a current account deficit and at the same time has a surplus in its balance of payments.
- [B] GNP accounts avoid double counting by including only the value of intermediate goods and services sold on the market.
- [C] To reduce a current account surplus, a country must increase its private saving, reduce domestic investment, or cut its government budget deficit.
- [D] Official international reserves are foreign assets held by central banks as a cushion against inflation.
- [E] None of the above.

2. A €10,000 deposit in a Paris bank in a year when the interest rate on euros is 10 percent and the \$/€ exchange rate moves from \$1.25 per euro to \$1.10 per euro. What is the dollar rate of return on the deposit?

- [A] -4 percent.
- [B] -2 percent.
- [C] 10 percent.
- [D] 22 percent.
- [E] None of the above.

3. Which of the following statements is true?

- [A] The exchange rate is said to overshoot when its long-run response is greater than its immediate response to a disturbance.
- [B] Fisher effect predicts that a rise in a country's expected inflation rate will eventually cause an equal fall in the interest rate.
- [C] The monetary approach predicts that the exchange rate is fully determined in the long run by the relative supplies of monies and the relative real demands for monies.
- [D] The interest rate parity equates international differences in nominal interest rates to the expected percentage change in the real exchange rate.
- [E] None of the above.

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4. Which of the following event would improve a country's external balance?

- [A] A rise in the world price of oil.
- [B] The world price of that country's main export falls.
- [C] Money supply doubles.
- [D] Adoption of a fixed exchange rate.
- [E] Saving rate rises while investment rate falls.

5. Which of the following statements is false?

- [A] An open economy cannot simultaneously have independence in monetary policy, stability in the exchange rate, and the free movement of capital.
- [B] Original sin is a phrase to describe inability of developing countries to borrow in their own currencies.
- [C] Dollar deposits located outside the United States are called Eurodollars.
- [D] The gold standard system contains a powerful automatic mechanism, the price-specie-flow mechanism, for assuring internal balance.
- [E] Optimum currency areas are groups of regions with economies closely linked by trade in goods and services and by factor mobility.

6. Suppose a government has an initial debt of \$10 trillion, and the nominal interest rate is 4 percent. Suppose the government keeps its primary budget in balance, and the country's GDP grows at 2 percent per year.

- [A] The growth rate of its debt is 6 percent and the debt-GDP ratio grows at a rate of 4 percent.
- [B] The growth rate of its debt is 4 percent and the debt-GDP ratio grows at a rate of 2 percent.
- [C] The growth rate of its debt is 2 percent and the debt-GDP ratio grows at a rate of 0 percent.
- [D] The growth rate of its debt is 4 percent and the debt-GDP ratio grows at a rate of 0 percent.
- [E] None of the above.

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7. Suppose an interest rate of 4 percent, a rate of depreciation of 6 percent, a price of capital that rises at 1 percent per year, and a zero corporate tax rate. What is the user cost of capital?

- [A] 7 percent.
- [B] 9 percent.
- [C] 11 percent.
- [D] 14 percent.
- [E] None of the above.

8. The Euler equation for consumption is stated as $u'(c_{\text{today}}) = \beta(1 + R)u'(c_{\text{future}})$. With log utility, if the real interest rate 4 percent and $\beta = 1$, what grow rate for consumption will households choose?

- [A] 0.02.
- [B] 0.03.
- [C] 0.04.
- [D] 0.05.
- [E] None of the above.

9. Which of the following statements is false?

- [A] A deflationary spiral can destabilize the economy because deflation raises the nominal interest rate, which deepens a recession.
- [B] Liquidity trap is a term that refers to the inability of monetary policy to lower the nominal interest rate below zero.
- [C] Between 2007 and 2009 the Federal Reserves has expanded its balance sheet by more than \$1 trillion to fight the financial crisis.
- [D] Lenders demand a risk premium if they are afraid that borrowers may have trouble repaying the loans.
- [E] None of the above.

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10. Assume the following IS curve and monetary policy rule, what is the aggregate demand curve?

$$\begin{aligned} IS \text{ curve} & : Y_t = a - b(R_t - r) \\ \text{monetary policy rule} & : R_t - r = m(\pi_t - \pi) + nY_t \end{aligned}$$

- [A] $Y_t = a - bm(\pi_t - \pi)$.
 [B] $Y_t = a + bm(\pi_t - \pi)$.
 [C] $Y_t = \frac{a}{1+bn} - \frac{bm}{1+bn}(\pi_t - \pi)$.
 [D] $Y_t = \frac{a}{1+bn} + \frac{bm}{1+bn}(\pi_t - \pi)$.
 [E] None of the above.

11. Consider the following balance sheet for a hypothetical bank:

Assets		Liabilities	
Mortgage-backed securities	1,000	Deposits	300
		Loan from other banks	600
Total assets	?	Total liabilities	?
		Equity (net worth)	?

Suppose the mortgage-backed securities held by the bank fall in value to only \$600. The bank's net worth becomes

- [A] -\$300.
 [B] \$0.
 [C] \$300.
 [D] \$600.
 [E] None of the above.

12. Consider an economy that begins with output at its potential level and an inflation rate of 5 percent. To reduce inflation, the central bank faces the following menu of policy choice:

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Option	Output			Inflation		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
1	-6%	0	0	2%	2%	2%
2	-4%	-2%	0	3%	2%	2%
3	-2%	-2%	-2%	4%	3%	2%

What is the slope of the Phillips curve?

- [A] $\frac{1}{0.5}$.
- [B] $\frac{1}{1.0}$.
- [C] $\frac{1}{1.5}$.
- [D] $\frac{1}{2.0}$.
- [E] None of the above.

13. Consider the data on the CPI:

Year	CPI	Year	CPI	Year	CPI
1900	4.00	1960	14.00	1990	64.00
1930	8.00	1970	19.00	2000	83.00
1950	12.00	1980	40.00	2007	100.00

What is the average annual rate of inflation that prevailed between 1980 and 1990?

- [A] 0.180.
- [B] 0.044.
- [C] 0.048.
- [D] 0.054.
- [E] None of the above.

14. The Romer model consists of two main equations:

$$\frac{\Delta A_{t+1}}{A_t} = \bar{z}\bar{l}\bar{L}$$

$$y_t = \bar{A}_0 (1 - \bar{l}) (1 + \bar{z}\bar{l}\bar{L})^t$$

Suppose the parameters of the Romer model take the following values: $\bar{A}_0 = 100$, $\bar{l} = 0.15$, $\bar{z} = 1/500$, and $\bar{L} = 100$. What is the growth rate of output per person in this economy?

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- [A] 2 percent per year.
- [B] 3 percent per year.
- [C] 4 percent per year.
- [D] 5 percent per year.
- [E] None of the above.

15. Continue the previous question. What is the level of output per person after 50 years?

- [A] 256.
- [B] 286.
- [C] 373.
- [D] 465.
- [E] None of the above.

16. Which of the following statements is false?

- [A] Economics is grounded on the assumption of rational self-interest.
- [B] The process of deriving theories and principles is called theoretical economics.
- [C] Positive economics deals with value judgments; normative economics involves factual statements.
- [D] Economics is concerned with obtaining maximum satisfaction through the efficient use of scarce resources.
- [E] None of the above.

17. Here is a production possibilities table for war goods and civilian goods:

Type of Production	Production Alternatives				
	A	B	C	D	E
Automobiles	0	2	4	6	8
Rockets	30	26	20	12	0

If the economy is at point B, what is the cost of one more automobile?

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- [A] 2 units of rocket.
- [B] 3 units of rocket.
- [C] 4 units of rocket.
- [D] 5 units of rocket.
- [E] None of the above is true.

18. Consider the following production possibilities tables of Mexico and United States.

Mexico	Production Alternatives				
Product	A	B	C	D	E
Coffee	0	10	20	30	40
Potato	15	12.5	10	7.5	5

U.S.	Production Alternatives				
Product	R	S	T	U	V
Coffee	0	30	45	60	90
Potato	30	20	15	10	0

- [A] U.S. has a comparative advantage in coffee production and Mexico has a comparative advantage in potato production.
- [B] U.S. has a comparative advantage in potato production and Mexico has a comparative advantage in coffee production.
- [C] U.S. has a comparative advantage in both coffee and potato production.
- [D] Mexico has a comparative advantage in both coffee and potato production.
- [E] None of the above.

19. Continue the previous question. Suppose Mexico is at point B and U.S. is at point S. suppose both countries specialize according to their comparative advantage. The world production of coffee would increase by:

- [A] 20.
- [B] 32.
- [C] 48.
- [D] 56.

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[E] None of the above.

20. Commodities having negative income elasticities are called:

[A] Consumption goods

[B] Giffen goods.

[C] Inferior goods.

[D] Normal goods.

[E] Luxury goods.

21. Let $MU_A = 10 - x$ and $MU_B = 20 - 2y$, where MU denotes marginal utility per dollar, x is the amount spent on product A , and y is the amount spent on product B . Assume that the consumer has \$14 to spend on A and B , that is, $x + y = 14$. What is the optimal purchase of A ?

[A] 0.

[B] 4.

[C] 6.

[D] 8.

[E] None of the above.

22. Continue the previous question. How much utility will the marginal dollar yield?

[A] 1.

[B] 2.

[C] 3.

[D] 4.

[E] 5.

23. Which of the following is short-run adjustment?

[A] Beoing hires 100 extra workers for one of its commercial airline plants.

[B] Wendy's builds a new restaurant.

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- [C] An aluminum plant adds a new production facility and installs more equipment.
- [D] A T-shirt manufacturer installs new cutting tables and sewing machines.
- [E] None of the above.

24. Assume the following profit payoff for oligopolists A and B.

		B's possible prices	
		\$40	\$30
A's possible prices	\$40	$(A = 60; B = 55)$	$(A = 50; B = 60)$
	\$30	$(A = 65; B = 45)$	$(A = 55; B = 50)$

Assume no collusion between A and B, what is the likely profit outcome?

- [A] $(A = 60; B = 55)$.
- [B] $(A = 50; B = 60)$.
- [C] $(A = 65; B = 45)$.
- [D] $(A = 55; B = 50)$.
- [E] None of the above.

25. Continue the previous question. Which of the following statements is false?

- [A] Price collusion is mutually profitable.
- [B] There is a temptation to cheat on the collusive agreement.
- [C] Oligopolies are mutually independent in their pricing policies.
- [D] Non-collusion outcome is beneficial to consumers but not to the oligopolists, whose profits decrease.
- [E] None of the above.