國立中正大學

108 學年度碩士班招生考試

試 題

[第 2 節]

系所組別	經濟學系國際經濟學－乙組
科目名稱	經濟學

第一部分: 單選題 (每題 3 分，共 60 分)

1. Indifference curves cannot intersect one another because of the assumption of
(A) completeness.
(B) transitivity.
(C) more is better.
(D) None of the above.

2. If the utility function is $U = \min\{x_1, x_2\}$, the income offer curve is
(A) an upward-sloping straight line.
(B) a downward-sloping straight line.
(C) a horizontal line.
(D) an inverted-U shaped curve.

3. Alan's utility function is $U = \min\{x, 3y + 2z\}$. The price of x is $1, the price of y is $9, and the price of z is $8. His income is $8. How many units of x does Alan demand?
(A) 2.
(B) 1.6.
(C) 5.
(D) 7.

4. Michael consumes two commodities in a perfect market system. The price of x is $4 and the price of y is $1. His utility function is $U = xy$. He is endowed with 25 units of good x and 20 units of y. Find his consumption of good y.
(A) 15.
(B) 60.
(C) 20.
(D) 25.

5. Which of the following statement is NOT true?
(A) An inferior good must be a Giffen good.
(B) A Giffen good must be an inferior good.
(C) A normal good must be an ordinary good.
(D) A normal good has an upward-sloping Engel curve.

6. How does an increase in price affect a firm's revenues?
(A) Revenues do not change.
(B) Revenues will decrease.
(C) Revenues will increase.
(D) It depends on the price elasticity of demand.

7. A monopolist faces the inverse demand curve $p = 30 - 2q$, and the marginal cost is 10. At what level of output is the profit maximized?
(A) 5
(B) 10
(C) 15
(D) 20

8. Consider a production function $y = 4L^{1/3}K^{2/3}$. In the short run, K is the fixed input. Which of the following statement is true?
(A) For any level of K in the short run, the marginal product of L is diminishing.
(B) The marginal product of L increases with K.
(C) The technology exhibits constant returns to scale.
(D) All of the above are true.

9. In the game matrix below, the first payoff in each pair goes to player A who chooses the row, and the second payoff goes to player B, who chooses the column. Let a, b, c, and d be positive constants.

		Player B	
		Left	Right
Player A	Top	a,1	b,1
	Bottom	1,c	1,d

If player A chooses Bottom and player B chooses Right in Nash equilibrium, then we know that
(A) b > 1 and d < 1.
(B) c < 1 and b < 1.
(C) b < 1 and c < d.
(D) b < c and d < 1.

10. A firm has the short-run total cost function $C(y) = 2y^2 + 72$. At what quantity of output is the average cost minimized?
(A) 6.
(B) 2.
(C) 8.
(D) 1.

11. If the real GDP is 200 billion and the nominal GDP is 250 billion, then the GDP deflator is
(A) 25
(B) 80
(C) 125
(D) 25%

12. The Phillips curve shows the relationship between
(A) inflation rate and unemployment rate.
(B) inflation rate and growth rate.
(C) unemployment rate and growth rate.
(D) exchange rate and inflation rate.

13. If the Federal Reserve sells bond, it will
(A) shift the IS curve to the right.
(B) shift the LM curve to the right.
(C) shift the IS curve to the left.
(D) shift the LM curve to the left.

14. If the U.S. interest rate rises, the U.S. dollar _____ and net exports _____.
(A) appreciates; increase
(B) appreciates; decrease
(C) depreciates; increase
(D) depreciates; decrease

15. If the interest rate is 10%, which one has the highest present value?
(A) Receives $100 now.
(B) Receives $50 now and $60 one year from now.
(C) Receives $110 one year from now.
(D) Receives $120 two years from now.

16. The short-run aggregate supply curve is upward sloping because in the short run
(A) the price level changes but the money wage rate does not.
(B) the money wage rate changes but the price level does not.
(C) both the money wage rate and the price level change.
(D) neither the money wage rate nor the price level can change.

17. Suppose that the government increases its expenditures on goods and services. Within the AS-AD model, the result will be _____ in real GDP and _____ in the price level.
(A) an increase; an increase
(B) an increase; a decrease
(C) a decrease; an increase
(D) a decrease; a decrease

18. The price of iPhone xs in Taiwan is $36,000 NTD, and the price in Hong Kong is $8,000 HKD. The exchange rate is $1 HKD = $4 NTD. To have the law of one price holds, HKD should
(A) depreciate by about 12%.
(B) appreciate by about 12%.
(C) depreciate by about 2%.
(D) appreciate by about 2%.

19. If the deposit multiplier is 5, then the required reserve ratio is
(A) 5.
(B) 1.
(C) 0.5.
(D) 0.2.

20. Consider an economy in which the adult population is 200 million and the labor participation rate is 40%. If the unemployed population is 4 million, then the unemployment rate is
(A) 4%.
(B) 10%.
(C) 5%.
(D) 20%.

第二部分：填空題 (每格 5 分，共 40 分)

(1) 共有 8 個空格，請於「選擇題作答區」下方自行製作如下 1-8 格答題區。

第 1 格		第 5 格	
第 2 格		第 6 格	
第 3 格		第 7 格	
第 4 格		第 8 格	

(2) 填空題不需計算過程，僅依答案格內的答案對錯給分。

(3) 若無特別說明，請將答案約分至最簡分數。

1. The utility function of Annie is $U = \min\{x_1, 2x_2\}$. The initial prices are $p_1 = 1$ and $p_2 = 1$, and her income is $m = 30$. If p_1 increases to 2, the compensating variation of the price change is _____(1)_____, and the equivalent variation is _____(2)_____.

2. Consider a duopoly market with two firms facing a linear market demand $p = 60 - q_1 - q_2$. The marginal cost of firm 1 is constant at 20, and the marginal cost of firm 2 is constant at 10.
(a) Find the Nash-Cournot equilibrium outputs if the two firms choose quantities at the same time: $(q_1^*, q_2^*) =$ _____(3)_____.
(b) If firm 1 is the Stackelberg leader and firm 2 is the follower, the equilibrium quantities would be: $(q_1^*, q_2^*) =$ _____(4)_____.

3. If the marginal propensity to consume (MPC) is 0.75 and the tax rate is 0.5, then the government spending multiplier is _____(5)_____.

4. Consider a closed economy with the following information:
$C = 100 + 0.5(Y - T)$
$I = 100 - 10r$
$G = T = 50$
$M^S = 500$
$P = 2$
$(M^D/P) = Y - 30r$
where C is consumption, Y is income, T is tax, I is investment, r is interest rate, G is government expenditure, T is tax, M^S is money supply, P is price level, and (M^D/P) is real money demand.
The equation for the IS curve is _____(6)_____. The equation for the LM curve is _____(7)_____. The equilibrium (Y, r) = _____(8)_____.