

大同大學 99 學年度研究所碩士班入學考試試題

考試科目：經濟學

所別：事業經營研究所

第 1/2 頁

註：本次考試 不可以參考自己的書籍及筆記； 不可以使用字典； 不可以使用計算器。

I. Multiple choice(2 points for each)

1. If money income increases and the prices of products A and B both increase, the budget line (A) must shift to the right (B) may shift to the left (C) may shift either to the right or the left (D) will no longer be tangent to an indifference curve.
 2. Average product reaches its maximum value (A) before the Law of Diminishing Returns sets. (B) after the Law of Diminishing Returns sets. (C) at the point where marginal product reaches its maximum value. (D) at the point where average product and marginal product are equal.(E) (B) and (D) hold.
 3. The demand for a certain good is given by $Q(p)=(2p+2)^2$ where p is the price of the good. If the price of the good is \$3, the price elasticity of demand for the good is (A) -1.5 (B) -2.0 (C) -2.3 (D) -0.75
 4. Someone's utility function is $U = \min\{ X, Y \}$. Which of the following statement is wrong? (A) The equilibrium quantity is at a fixed ratio. (B) The indifference curve is convex to the origin. (C) A completely complementary preference (D) The equilibrium choice satisfies $MU_x / P_x = MU_y / P_y$
 5. If the function of marginal cost for a firm dealing with cases (Q) is: $MC=3Q^2-2Q+1$, and the fixed cost is 3. Which of the following statement is wrong? (A) $AVC=Q^2-Q+4$. (B) On the bottom of AVC, the corresponding number of cases is 0.5. (C) $TC=Q^3-Q^2+Q+3$. (D) $AFC=3/Q$.
 6. The demand curve facing a firm in an imperfectly competitive market: (A) is more elastic than the demand curve facing a competitive firm. (B) is less elastic than the demand curve facing a monopolistic firm. (C) slopes downward to the right. (D) all of the above.
 7. Which of the following is most likely to be an increasing-cost industry? (A) An industry whose firms experience diminishing marginal productivity. (B) An industry whose firms experience economies of scale. (C) An industry that is a major buyer in the markets for the input it uses. (D) An industry that is a major seller in the markets for its outputs.
 8. Which of the following is not included in the *expenditure* method of the GDP calculation? (A) consumption (personal consumption expenditures) (B) investment (gross private domestic investment) (C) government purchases (government consumption and gross investment) (D) compensation of employees (wages and salaries)
 9. Under a balanced budget policy, a sharp decline in GNP will cause: (A) a small budget surplus (B) tax increase or expenditure cut (C) tax receipts to exceed government expenditures (D) no serious budget changes.
 10. The market demand function for steels is $P=12-2Q$ with a supply function of $P=2+2Q$. If the government now demands tons of steels for the public construction, the demand function becomes $P=18-2Q$. What is the quantity of demand crowded out by the public expenditure increased by the government? (A) 4 (B) 1.5 (C) 1 (D) 3.
 11. In the simple Keynesian model, when there reaches the equilibrium output, (A) the planned investment equals the actual investment (B) the planned saving equals the actual saving (C) the actual investment equals the actual expenditure (D) the planned investment equals the actual expenditure.
 12. Under the hyperinflation, the transaction mode would be inclined to (A) credit exchange (B) non-entity exchange (C) barter exchange (D) indirect exchange.
 13. When there is an inflation in a trade partner, under the fixed exchange rate system, (A) the government must depreciate the currency (B) the trade balance will work against the trade partner (C) speculators will stabilize the exchange rate (D) the domestic money supply will be decreased.
 14. Whenever a person can produce more of all goods than anyone else, that person (A) should specialize in everything (B) has a comparative in everything (C) should be self-sufficient (D) has an absolute advantage.
 15. According to supply-side theory, the most important and probable result when the government cut the personal income tax rates would be (A) increased consumption spending (B) increased personal savings (C) increased number of hours worked and thus GNP (D) a revenue neutral fiscal policy.
- II. Please prove the relationship among real interest rate (r_t), nominal interest rate (R_t), and the inflation rate (π_t), where t is the period of T . (5 points)

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III. If the income effect is positive, the slope of the demand curve must be negative. Please prove it! (5 points)

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IV. If the economy of Country A can be characterized as follows: (10 points)

Consumption function: $C = 180 + 0.8(Y-T)$, investment function: $I = 400$, government consumption expenditure: $G = 600$, tax function: $T = 100 + 0.25Y$, exports: $X = 750$, imports: $M = 50 + 0.1Y$.

(A) What is the equilibrium output of Country A? (B) If the government consumption expenditure is increased from 600 to 700, how is the equilibrium output of Country A? What is the multiplier of government consumption expenditure? (C) If the government consumption expenditure remains, but its fixed tax drops from 100 to 0, how is the equilibrium output of Country A? What is the tax multiplier?

V. The following table shows the relationship between Q, TR and STC for a firm: (15 points)

Q	TR	TC
0	0	1000
10	500	1700
20	1000	2200
30	1500	2600
40	2000	2800
50	2500	3100
60	3000	3500
70	3500	4000
80	4000	4600
90	4500	5300
100	5000	6100

(1) Is the firm a price-taker?

(2) Calculate MR.

(3) Find the firm's equilibrium output and its economic profit. Will this firm stay in operation in the short run? Will it stay in operation in the long run?

VI. Draw supply and demand diagrams for market A for each of the following. Then use the diagram to illustrate the impact of the following events. In each case, what happens to price and quantity in each market? (20 points)

(a) A and B are substitutes, and the price of good B rises.

(b) A and B satisfy the same kinds of desires, and there is a shift in tastes away from A to B.

(c) A is a normal good, and incomes in the community increase.

(d) There is a technological advance in the production of good A.

(e) B is an input to produce good A, and the price of B rises.

VII. Explain the following terms (15 points)

1. stagflation

2. balance of payment

3. currency devaluation

4. current account

5. the Big Mac theory of exchange rate