

國立中央大學八十四學年度碩士班研究生入學試題卷

所別：資訊管理研究所

甲組

科目：經濟學

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個體經濟學第一部份：是非題（每題二分；共十分）

1. In long-run equilibrium, for a monopolistically competitive firm, its marginal cost must equal its marginal revenue at the minimum point of the long-run, average cost curve.
2. In order for a pure monopolist to earn a pure economic profit in short-run equilibrium, marginal revenue must be greater than average variable cost.
3. If a competitive firm is in long-run equilibrium, the marginal revenue line is tangent to the short-run, average variable cost curve.
4. Economics of scale exist over all ranges of output for which short-run, average total cost exceeds long-run average cost.
5. If the income elasticity of demand for a good is positive, the good is a normal good.

個體經濟學第二部份：選擇題（每題二分；共十分）

1. As one moves upward and to the left along a normally-shaped indifference curve, the marginal rate of substitution:
 - (a) increases.
 - (b) remains the same.
 - (c) decreases.
 - (d) increases and then decreases
2. If the marginal cost curve is above the average total cost curve, the average total cost curve must have a slope that is:
 - (a) negative.
 - (b) positive.
 - (c) constant.
 - (d) variable with output.
3. Which of the following statement is correct?
 - (a) In order to maximizing profits, a firm should produce the level of output for which total revenue is greatest.
 - (b) In the short-run, a competitive firm will continue to produce as long as total receipts are sufficient to cover total fixed cost.
 - (c) In long-run equilibrium, a competitive firm will produce at the point of minimum average total cost.

(d) In the short-run, a competitive firm will close down whenever price is less than minimum average total cost.

4. At the level of output in which the marginal cost and marginal revenue curves intersect, a pure monopolist's straight-line demand curve passes below its average variable cost curve. The firm will:
 - (a) be able to make a pure economic rent.
 - (b) stay in operation in the short-run, but shut down eventually if demand conditions do not improve.
 - (c) increase price.
 - (d) shut down in the short-run.
5. Tacit coordination will be most difficult in an industry in which:
 - (a) two firms have a large market share and are the same size.
 - (b) one firm is a dominant price leader.
 - (c) products are homogeneous.
 - (d) information on price, output, and profits is secret.

個體經濟學第三部份：計算題（每題十分；共三十分）

1. Assume that an entrepreneur's short-run total cost function is $C = q^3 - 10q^2 + 17q + 66$. Assume the output price $p = 5$.
 - (a) Determine the output level at which he maximizes profit.
 - (b) Compute the output elasticity of cost at this output level.
2. Construct a short-run supply function for an entrepreneur whose short-run cost function is $C = 0.04q^3 - 0.8q^2 + 10q + 5$.
3. Let two duopsonists have production functions $q_1 = 13x_1 - 0.2x_1^2$ and $q_2 = 12x_2 - 0.1x_2^2$ where x_1, x_2 are the input levels employed by the duopsonists. Assume that the input supply function is $r = 2 + 0.1(x_1 + x_2)$ where r is the supply price of the input, and q_1 and q_2 are sold in competitive markets for prices $p_1 = 2$ and $p_2 = 3$. Let π_1 and π_2 denote the profits of the firm 1 and firm 2, respectively.
 - (a) Find the input reaction function.
 - (b) Determine the Cournot equilibrium values for $x_1, x_2, q_1, q_2, \pi_1, \pi_2$.

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參考用

(每題兩分共五十分)(總經部份)

- Which of the following will not increase the productivity of labor?
 a. technological advances b. worker training c. growth of the labor force d. better equipment
- What is the equilibrium level of income for the following macro model of an open economy with endogenous taxes and imports?
 $C = 90 + .9(DI)$ $DI = Y - T$ $T = 10 + .33Y$ $X = 30$ $IM = 20 + .1Y$ $G = 60$
 $Y = C + I + G + (X - IM)$
- 187 b. 374 c. 236 d. 356
- Which tools of fiscal policy include: (I) changing taxes and transfers; (II) changing interest rates.
 I and II b. I not II c. II not I d. neither I nor II
- When the GNP deflator goes up, it means that
 real GNP is rising b. real GNP is falling c. prices are rising d. prices are falling
- If the required reserve ratio is 20 percent, a withdrawal of \$100,000 from one bank will eventually cause the money supply to be
 reduced by
 \$100,000 b. \$80,000 c. \$40,000 d. \$20,000
- When depreciation is subtracted from GNP in order to find
 NNP b. NI c. DI d. C + I + G
- The most significant movement of the aggregate supply curve resulting from increased productivity is
 that it
 becomes flatter b. becomes steeper c. shifts upward d. shifts downward
- Which of the following is likely to lead to a low level of investment?
 optimistic expectations b. low interest rates c. substantial excess capacity d. rapid growth of output
- Which of the following will cause a rightward shift in the aggregate demand curve?
 an increase in the price level b. a rise in imports c. a rise in exports d. a rise in GNP
- The measure used by economists to gauge the standard of living of a nation is
 productivity b. productivity of labor c. GNP d. GNP per capita
- The Phillips curve is nearly horizontal, a
 small increase in unemployment will bring a small reduction in inflation
 a small reduction in unemployment will bring a large reduction in inflation
 a large increase in unemployment will bring a large increase in inflation
 a small reduction in unemployment will not change the level of inflation
 a period of stagflation will
 increase output to erase an inflationary gap
 increase prices to erase an inflationary gap
 remove an inflationary gap by decreasing prices and increasing output
 remove an inflationary gap by increasing prices and decreasing output
- The effect of interest rates on business investment is that
 the higher the rate of interest, the larger the amount of investment
 the higher the rate of interest, the smaller the amount of investment
 econometric studies show that the rate of interest has no effect on investment
 higher interest rates encourage investment during expansions and discourage investment during recessions
- Which of the following events would not cause a rightward shift in the aggregate supply curve?
 an increase in labor productivity b. a decrease in the average wage rates
 a decrease in the cost of energy c. increased spending on the part of consumers
- Under a balanced budget policy, a sharp decline in GNP will cause
 a small budget surplus b. tax increase or expenditure cut
 tax receipts to exceed government expenditures d. no serious budget changes
- A balance of payments deficit occurs when
 the value of imports exceeds the value of exports b. the price of the domestic currency is set too high
 individual consumers buy more than is sold abroad d. all of the above
- The deficit can be defined in simple terms as
 government expenditures - transfers + taxes b. government expenditures + transfers + taxes
 government expenditures + defense spending - taxes d. government expenditures + transfers - taxes
- Exchange rates determined by the laws of supply and demand are called
 equilibrium exchange rates b. fixed exchange rates
 dirty exchange rates d. floating exchange rates
- If an economy is in equilibrium and experiences an autonomous increase
 in the level of investment spending then inventories will be
 depleted causing firms to cut production b. depleted causing firms to expand production
 accumulated causing firms to expand production d. accumulated causing firms to cut production
- A tariff is better than a quota because
 it does not distort trade as much b. quotas are inflexible
 tariffs produce tax revenue d. quotas hurt domestic producers, tariffs hurt foreign producers
- The crowding-out effect of higher interest rates can be avoided by
 expansionary fiscal policy b. expansionary monetary policy
 contracting monetary policy d. decreasing taxes
- Expansionary fiscal policy will be most effective at increasing GNP when
 the marginal propensity to consume is low b. investment spending is sensitive to changes in the interest rate
 the economy has a high marginal tax rate d. investment spending is insensitive to the interest rate
- If workers always can see inflation coming, and if they demand full compensation for it in advance so that inflation does not erode
 real wages, then the economy's aggregate supply curve on the price-income diagram
 will slope upward b. will slope downward
 will be a horizontal line corresponding to potential GNP d. will be a vertical line corresponding to potential GNP
- The main reason why nations trade is because
 trading provides opportunities to earn profits b. the rate of interest is not the same in all countries
 resources are not equally distributed to all nations d. some nations like to build one thing while others build another
- If all prices including wages increased at the same, constant rate, inflation would
 hurt the rich more than it would hurt the poor b. hurt the poor more than it would hurt the rich
 hurt everyone by the same amount d. not hurt anyone