

[說明部份] 請將答案依照下列格式，作答於答案卷上。

壹、單選題 (作答時每行 5 小題，其格式如下：)

1. () 2. () 3. () 4. () 5. ()
6. () 7. () 8. () 9. () 10. ()
11. () 12. () 13. () 14. () 15. ()

貳、問答及計算：

- 一、
二、

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[試題部份]

壹、單選題 (請在每題中選一個最好的答案，共十五小題，每小題 4 分，共 60 分)

- Which of the following utility functions represent the same preference as $U(X, Y) = \sqrt{XY}$
(A) $U(X, Y) = 10\sqrt{XY}$
(B) $U(X, Y) = XY$
(C) $U(X, Y) = \ln(X) + \ln(Y)$
(D) All of the above represent the same preference.
- If utility is given by $U(X, Y) = X^2 + Y^2$ and $P_x = 2$, $P_y = 3$, $I = 50$, this person will choose
(A) (10, 10)
(B) (15, 6.67)
(C) (25, 0)
(D) (0, 50/3)
- Two goods are Hicksian (net) substitutes if a rise in the price of one causes a(n)
(A) decline in the quantity demanded of the other holding nominal income constant.
(B) increase in the quantity demanded of the other holding nominal income constant.
(C) decline in the quantity demanded of the other holding utility constant.
(D) increase in the quantity demanded of the other holding utility constant.
- If a consumer purchases only two goods (X and Y) and the demand for X is elastic, then a rise in the price of X
(A) will cause total spending on good Y to rise.
(B) will cause total spending on good Y to fall.
(C) will cause total spending on good Y to remain unchanged.
(D) will have an indeterminate effect on total spending on good Y.
- The firm's expansion path records
(A) profit-maximizing output choices for every possible price.
(B) cost-minimizing input choices for all possible output levels for when input rental rates expand along with production.
(C) cost-minimizing input choices for all possible output levels for a fixed set of input prices.
(D) cost-minimizing input choices for profit-maximizing output levels.
- The cost function $TC = q[v^{1/2} + w^{1/2}]^2$ arises from
(A) a Cobb-Douglas production.
(B) a CES production.
(C) a fixed proportions production.
(D) a Translog production.

(背面仍有題目，請繼續作答)

7. In order to assure allocative efficiency,
 - (A) people's marginal rate of substitution must equal the economy's rate of product transformation.
 - (B) people's marginal rate of substitution must equal the firm's rate of technical substitution among inputs.
 - (C) a firm's rate of technical substitution must equal the economy's rate of product transformation.
 - (D) all of the above.
8. If the government requires a natural monopoly to price at marginal cost,
 - (A) monopoly firms will earn zero economic profits because the price of the good equals the cost of producing that good.
 - (B) monopoly firms will operate at a loss because $P < AC$.
 - (C) more firms will be able to enter the market.
 - (D) producer surplus will increase because quantity supplied is greater.
9. Common markets and other preferential trading arrangements will promote efficiency and increase gains from trade to the extent that they:
 - (A) promote trade diversion.
 - (B) expand trade.
 - (C) substitute nontariff barriers for tariffs.
 - (D) all of the above.
10. With pegged exchange rates, increasing the money supply and lowering interest rates will:
 - (A) encourage capital exports.
 - (B) increase the supply of dollars.
 - (C) cause an overvalued dollar at the pegged rate.
 - (D) all of the above.
11. A country will realize the greatest gains from trade if:
 - (A) it imposes import barriers.
 - (B) its marginal rate of transformation is equal to the terms of trade.
 - (C) its marginal rate of transformation is much different from the terms of trade.
 - (D) its marginal rate of transformation is similar to that of the rest of the world.
12. A short-run Phillips curve shows:
 - (A) no relationship between inflation and unemployment.
 - (B) an inverse relationship between inflation and unemployment.
 - (C) a direct relationship between inflation and unemployment.
 - (D) a constant inflation rate at all unemployment rates.
13. A person is defined as unemployed if he or she is not working, and:
 - (A) willing and able to work.
 - (B) actively seeking work.
 - (C) A and B.
 - (D) A and B, and has been employed before.
14. The classical quantity theory of money treats the demand for money as:
 - (A) transactions demand only.
 - (B) asset demand only.
 - (C) combined transactions demand and asset demand.
 - (D) neither transactions nor asset demand.
15. Expansionary fiscal policies:
 - (A) shift the IS curve to the right.
 - (B) shift the IS curve to the left.
 - (C) shift the LM curve upward.
 - (D) shift the LM curve downward.

(背面仍有題目,請繼續作答)

貳、問答及計算：(每題 20 分，共 40 分)

一、Suppose that

$$q = L^\alpha K^\beta, \quad 0 < \alpha < 1, \quad 0 < \beta < 1, \quad \alpha + \beta = 1.$$

- (A) Show that output elasticity of labor is α , and output elasticity of capital is β . (6分)
- (B) Show that $MP_L > 0$, $MP_K > 0$, $\partial^2 q / \partial L^2 < 0$, $\partial^2 q / \partial K^2 < 0$. (8分)
- (C) Show that the MRTS (marginal rate of technical substitution) depends only on K/L , but not on the scale of production, and that the MRTS (L for K) diminishes as L/K increases? (6分)

二、"Moreover, the characteristics assumed by the classical theory happen not to be those of the economic society in which we actually live, with the result that its teaching is misleading and disastrous if we attempt to apply it to the facts of experience."

- (A) Can you guess the author of the above statement? (4分)
- (B) In terms of aggregate supply, what are the "characteristics assumed by the classical theory"? What are the implications of these assumptions? (8分)
- (C) Having identified the author of the statement, what differences did he or she perceive between the classical assumptions and "the economic society in which we actually live"? What are the implications of these differences in terms of aggregate supply and macroeconomic policy? (8分)