

系所組別： 交通管理科學系甲、乙組, 電信管理研究所甲組

考試科目： 經濟學

考試日期： 0308, 節次： 1

※ 考生請注意：本試題 可 不可 使用計算機

\*\* 請在答案卷上作答

一、選擇題 (15 題, 每題 5 分, 共佔 75 分)

1. The relationship between changes in income and purchase of a good indicates
  - (a) whether the good is luxury or necessary.
  - (b) whether the good is a compliment or substitute.
  - (c) whether the good is normal or inferior.
  - (d) both (a) and (c).
  
2. If demand is inelastic, marginal revenue will be
  - (a) positive.
  - (b) zero.
  - (c) negative.
  - (d) constant.
  
3. 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.
  
4. A firm's rate of technical substitution is represented graphically by
  - (a) the slope of the line connecting the origin with the origin with the relevant point on the isoquant.
  - (b) the negative of the slope of the line connecting the origin with the relevant point on the isoquant.
  - (c) the slope of the isoquant at the relevant point.
  - (d) the negative of the slope of the isoquant at the relevant point.
  
5. The price elasticity of demand for good X is defined as ( note:  $P_x$ : price of good X)
  - (a) percentage change in  $P_x$  / percentage change in X.
  - (b) change in  $P_x$  / change in X
  - (c) change in X / change in  $P_x$ .
  - (d) percentage change in X / percentage change in  $P_x$

(背面仍有題目,請繼續作答)

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6. As long as marginal cost is below average cost, average cost will be
- falling.
  - rising.
  - constant.
  - Changing in a direction that cannot be determined without more information.
7. Technical progress will
- shift a firm's production function and its related cost curves.
  - not affect the production function, but may shift cost curves.
  - shift a firm's production function and alter its marginal revenue curve.
  - shift a firm's production and cause more capital ( and less labor) to be hired.
8. Suppose the production function for good  $q$  is given by  $q = 3K + 2L$  where  $K$  and  $L$  are capital and labor inputs.
- The function exhibits constant returns to scale.
  - The function exhibits diminishing marginal productivities to all inputs.
  - The function has a constant rate of technical substitution.
- Which of these statements is true?
- All of them.
  - I and II but not III.
  - I and III but not II.
  - Only I.
9. The short run market supply curve is
- the horizontal summation of each firm's short-run supply curve.
  - the vertical summation of each firm's short-run supply curve.
  - the horizontal summation of each firm's short-run average cost curve.
  - the vertical summation of each firm's short-run average cost curve.
10. Per-unit transaction costs
- may cause the demand and supply curves to shift either inward or outward depending on the value obtained from transaction agents.
  - Refer only to the commission paid to a third party for each transaction made.
  - Are absorbed by the party seeking the transaction.
  - Have the same effect on behavior as do lump-sum transaction costs; the difference in terminology is purely definitional.

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11. If a monopoly is maximizing profits
- (a) price will always be greater than average cost.
  - (b) price will always equal marginal cost.
  - (c) price will always be greater than marginal cost.
  - (d) price will always equal marginal revenue.
12. 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.
13. Suppose that the price elasticity of demand for a product is -1 and that the price elasticity of supply is +1. Assume also that the income elasticity of demand is +2. Then an increase in income of 10% will raise equilibrium price by
- (a) 10%.
  - (b) 5%.
  - (c) 20%.
  - (d) an amount that cannot be determined.
14. in the price leadership model,
- (a) firms believe that price increases result in a very elastic demand, while price decrease result in an inelastic demand for their product.
  - (b) each firm acts as a price taker.
  - (c) one dominant firm takes the reactions of all other firms into account in its output and pricing decisions.
  - (d) firms coordinate their decisions to act as multiplant monopolies.
15. An efficient allocation of productive inputs requires that
- (a) each output has the same rate of technical substitution among inputs used.
  - (b) each output has the same marginal rate of substitution for consumers.
  - (c) each pair of outputs has the same rate of product transformation.
  - (d) each individual has the same marginal rate of substitution between outputs.

二、解釋名詞（5題，每題5分，中英文作答均可，共佔25分）

1. Returns to Scale
2. Opportunity Cost
3. Price Discrimination
4. Barriers to Entry
5. Externality