

## CITY UNIVERSITY OF HONG KONG

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Course code & title : FB2400 Economics I (for section CG1, CU1)

Sessions: CU1 & CG1 Semester A 2001/02

Time allowed : Two hours

Lecturer: : Dr. Shunli Yao

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This paper has EIGHT pages (including this cover page).

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1. This paper consists of three sections. Section I has 5 terms to be defined, Section II has 25 multiple-choice questions, and Section III has 2 essay questions.
2. Answer ALL questions.

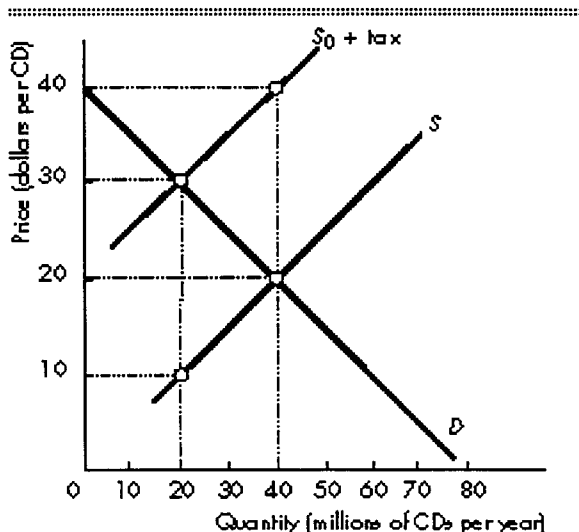
**ANSWER ALL QUESTIONS. TOTAL 100 POINTS**

**I. Define the Following Terms (5 x 3 = 15 points)**

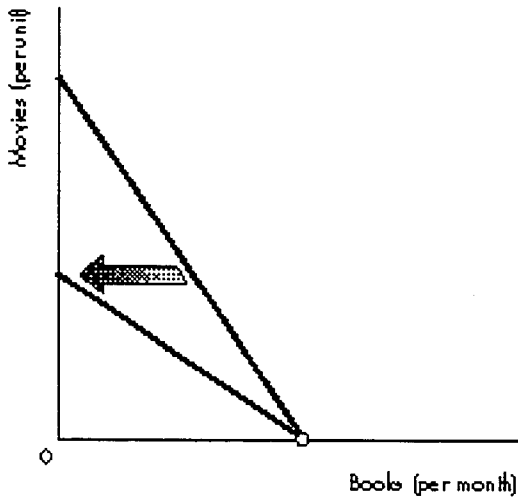
- 1). External economies;      2). Public good;      3). Budget line;  
4). Monopolistic competition;      5). Economies of scale.

**II. Multiple Choice Questions (25 x 2 = 50 points)**

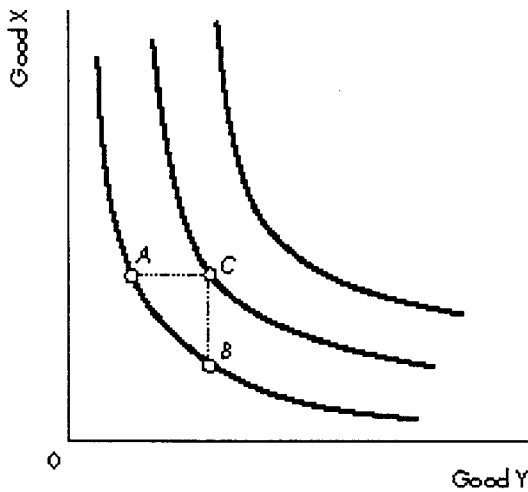
- 1) Markets are considered efficient because they
- A) ensure firms make profits.
  - B) always ensure that resources are efficiently used.
  - C) remove the need for government intervention in the economy.
  - D) send resources to where they are most highly valued.
- 2) Country A can produce 1 cello by giving up the production of 5 guitars. Country B can produce 1 guitar by giving up the production of 4 cellos. In which good does country A have a comparative advantage?
- A) Guitars
  - B) Cellos
  - C) Both goods
  - D) Neither good
- 3) If the U.S. Surgeon General announced that increased grapefruit juice consumption could cause lower cholesterol levels, what would happen to the equilibrium price and quantity of grapefruit juice?
- A) Price and quantity both increase.
  - B) Price and quantity both decrease.
  - C) Price increases but quantity decreases.
  - D) Price decreases but quantity increases.
- 4) As the price of hand-held camcorders fell during the 1980's, the amount of money spent on this good increased, that is, consumers' total expenditures on camcorders increased. This fact suggests that the demand for camcorders
- A) must have shifted leftward.
  - B) must be upward sloping.
  - C) is elastic.
  - D) is inelastic.



- 5) In the above figure, the price received by the seller before the tax is \_\_\_\_ per compact disc, and the price received by the seller after the tax is \_\_\_\_ per compact disc.
- A) \$20; \$20
  - B) \$20; \$10
  - C) \$30; \$20
  - D) \$30; \$10
- 6) Price floors in agricultural markets
- A) create shortages that must be covered by the government.
  - B) create lower prices for consumers.
  - C) create surpluses that must be bought by the government.
  - D) decrease the quantity that farmers are permitted to produce.
- 7) Given the budget equation  $5M + 10P = 100$ , where  $M$  represents movies and  $P$  represents pizza, the relative price of good  $P$  in terms of good  $M$  is
- A) 2.
  - B)  $1/2$ .
  - C) 10.
  - D) 5.

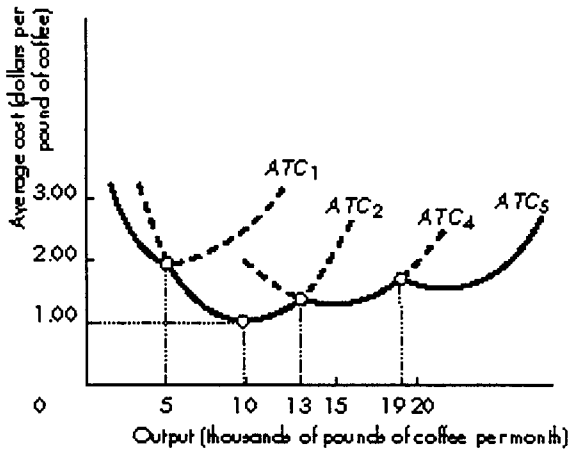


- 8) In the above figure, a rotation of the budget line in the direction indicated would occur as a result of a
- A) rise in the price of a book.
  - B) decrease in income.
  - C) rise in the price of a movie.
  - D) a fall in the price of a movie.



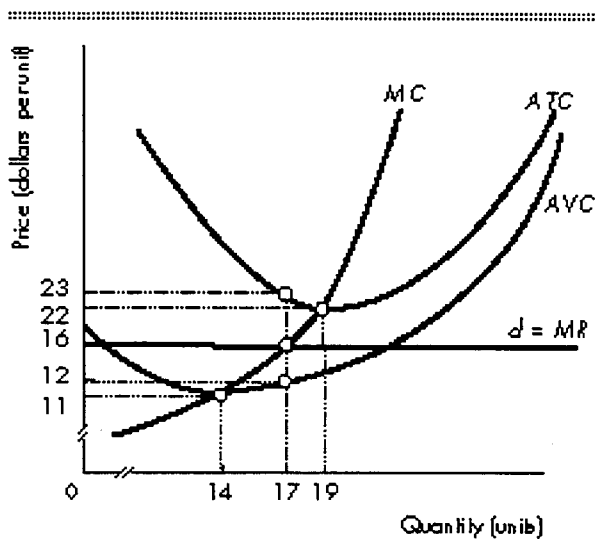
- 9) Which of the following statements about the above figure is true?
- A) Point A is equally preferred to point C.
  - B) Point B is equally preferred to point C.
  - C) Point C is preferred to point A.
  - D) Point A is preferred to point C.
- 10) The substitution effect from a price rise
- A) induces a movement along the fixed budget line, due to a change in relative prices.
  - B) causes the quantity demanded of the good to increase.
  - C) causes the quantity demanded of the good to decrease.
  - D) Both answers A and B are correct.

- 11) For an inferior good,
  - A) the income effect is negative, so that an increase in income decreases the demand.
  - B) a lower price may not always lead to an increase in the quantity demanded.
  - C) a lower price has a substitution effect that increases the quantity demanded.
  - D) All of the above answers are correct.
  
- 12) Economic profits are calculated as
  - A) total revenue minus explicit costs.
  - B) total revenue minus opportunity costs.
  - C) total revenue minus labor costs.
  - D) total revenue minus capital costs.
  
- 13) The marginal product and average product curves
  - A) never intersect.
  - B) intersect at the maximum point of the marginal product curve.
  - C) intersect at the maximum point of the average product curve.
  - D) do not intersect at any predictable point.
  
- 14) When marginal cost is greater than average total cost, the
  - A) marginal cost decreases as output increases.
  - B) marginal cost does not change as output increases.
  - C) average total cost increases as output increases.
  - D) average total cost decreases as output increases.

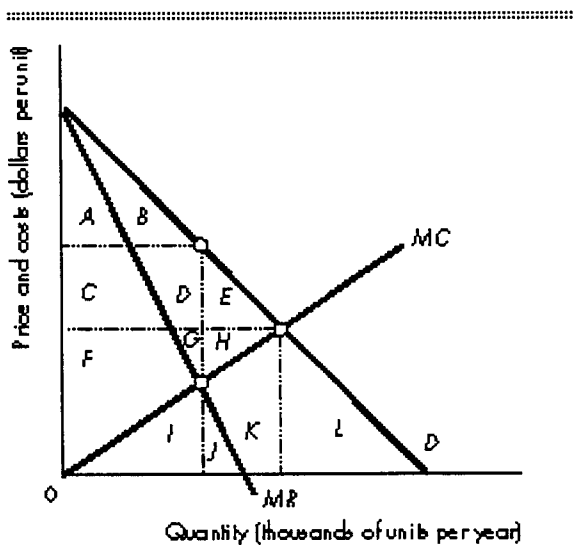


- 15) In the above figure, economies of scale are present up to an output level of
  - A) 5,000 pounds of coffee.
  - B) 10,000 pounds of coffee.
  - C) 13,000 pounds of coffee.
  - D) 15,000 pounds of coffee.

- 16) Perfect competition implies that
- A) there are many firms in the market.
  - B) all firms are price takers.
  - C) all firms are producing the same identical product.
  - D) All of the above answers are correct.
- 17) In order for perfect competition to arise, it must be the case that
- A) demand for the good or service is large relative to the efficient scale of any single producer.
  - B) firms are perceived to be producing a good or service that is identical to those of its competitors.
  - C) the time frame under consideration is very long.
  - D) Both answers A and B are correct.
- 18) For the perfectly competitive firm, price is the same as
- A) marginal revenue.
  - B) average variable cost.
  - C) total revenue.
  - D) Both answers A and B are correct.
- 19) If a firm has a fixed plant and equipment stock, and it is deciding on its best output level, the firm must be
- A) in the short-run.
  - B) in the long-run.
  - C) in the business cycle.
  - D) at the shutdown point.



- 20) Consider the perfectly competitive firm in the above figure. The shutdown point occurs at a price of
- A) \$11.
  - B) \$12.
  - C) \$16.
  - D) \$22.
- 21) A single-price monopoly will set its price according to which of the following rules?
- A)  $P = MR$  and  $MR$  equals  $MC$ .
  - B)  $P$  equals  $MC$  where the  $MC$  curve crosses the demand curve.
  - C)  $P$  equals  $MR$  where the  $MR$  curve crosses the demand curve.
  - D) None of the above answers is correct.
- 22) In the long-run, a single-price monopolist will
- A) not be able to continue to earn economic profits and will break even with a normal profit.
  - B) be able to continue to earn economic profits as long as the market remains a monopoly.
  - C) end up being regulated by the government because it is making short-run economic profits.
  - D) Both answers A and C are correct.



- 23) Which area(s) in the above figure indicates producer surplus under perfect price discrimination?
- A)  $A + B + C + D + E + F + G + H + I + J + K + L$
  - B)  $A + B + C + D + E + F + G + H + I + J + K$
  - C)  $A + B + C + D + E + F + G + H$
  - D)  $C + D + E + F + G + H$

- 24) Which of the following is a characteristic of the market structure for monopolistic competition?
- A) Barriers to entry.
  - B) A larger number of firms compete.
  - C) Each firm produces a differentiated product.
  - D) Both answers B and C are correct.
- 25) Oligopolies are always characterized as
- A) producing identical goods.
  - B) producing differentiated goods.
  - C) colluding whenever possible.
  - D) having firms whose prices and quantities depend on the prices and quantities set by the other competing firms.

### III. Essay Questions (35 points)

1. (14 points) There is a 3% hotel accommodation tax in Hong Kong and Hong Kong's hotel occupancy rate has been low since the September 11 terrorist attack in New York.
- a. Using properly labeled diagram(s), illustrate the room rate, number of rooms occupied, tax revenue and the hotel's income; and explain.

To boost the business, the Federation of Hotel Owners has asked the government to drop this hotel accommodation tax for one year. Alternatively, to achieve the same impact on the occupancy rate of hotel rooms, the tax can be kept in place but the Government increases spending on promotional activities such as advertising.

- b. Using properly labeled diagrams, illustrate the impact of the two proposals on room rate, number of room occupied, tax revenue and hotel's income; and explain.
2. (21 points) To defend the world oil price, the OPEC wants non-OPEC oil exporting countries to join it to cut oil output. Using properly labeled diagrams, answer the following questions
- a. If the non-OPEC oil exporters agree, describe the nature of the world oil market structure and explain how the world total oil output is decided to maximize the industry's profit.
  - b. If OPEC cuts its own oil output but the non-OPEC oil producers do not cooperate, explain how OPEC could make a loss while non-OPEC oil producers could make more profit.
  - c. To avoid the loss, OPEC may engage in "competitive discount", i.e., lower the oil price and increase the oil export for a larger market share. Then what will happen to the world oil market? Explain how the market equilibrium can be achieved.