

CITY UNIVERSITY OF HONG KONG

Course code & title : FB2400 Economics I (for section CA1, CB1, CC1)
Session : Semester A 2001/02
Time allowed : Two hours

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

1. This paper consists of 40 multiple choices in Section A and 3 essay questions in Section B.
 2. Answer ALL questions in Section A and TWO questions in Section B.
 3. Use a multiple choices answer sheet for Section A and a separate answer book for Section B.
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Materials, aids & instruments which students are permitted to use during examination:

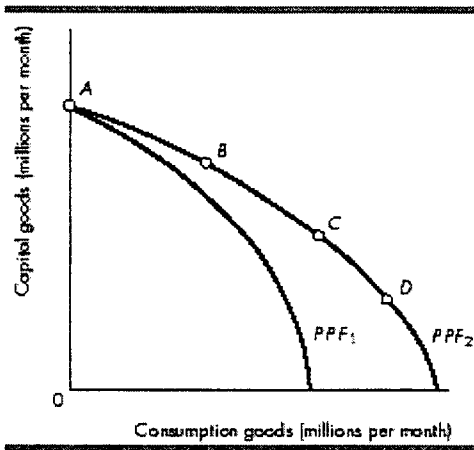
Approved calculator

Section A (40%)

Attempt ALL questions from this section. Each question carries 1 mark.

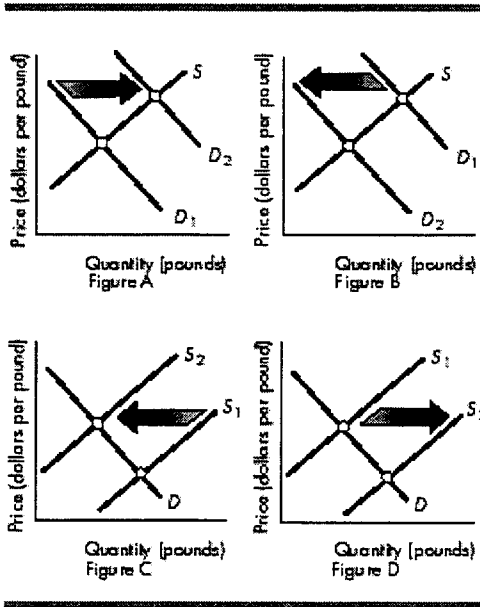
- 1) The fundamental questions in economics result from
 - A) an excess of production over the wants of society.
 - B) technological progress.
 - C) distribution of income.
 - D) scarcity of resources relative to the wants of society.

- 2) The quantity of shoes produced is measured along the horizontal axis of a *PPF* and the quantity of shirts are measured along the vertical axis. As you move down toward the right along the *PPF*, the marginal cost of
 - A) shoes decreases.
 - B) shoes increases.
 - C) shirts increases.
 - D) shoes and shirts is equal at the midpoint between the vertical and horizontal axis.



- 3) In the above figure, in order for this country to move from production possibility frontier *PPF*₁ to *PPF*₂, it might
 - A) increase the skills and productivity of its work force.
 - B) put all unemployed resources to work producing desired output.
 - C) engage in exchange with other nations.
 - D) increase the average level of prices for all goods produced and consumed.

- 4) Suppose the price of a football is \$20.00 and the price of a basketball is \$10.00. The _____ of a football is _____
 - A) relative price; 2 basketballs
 - B) relative price; 1/2 basketball
 - C) opportunity cost; \$20.00
 - D) opportunity cost; \$10.00



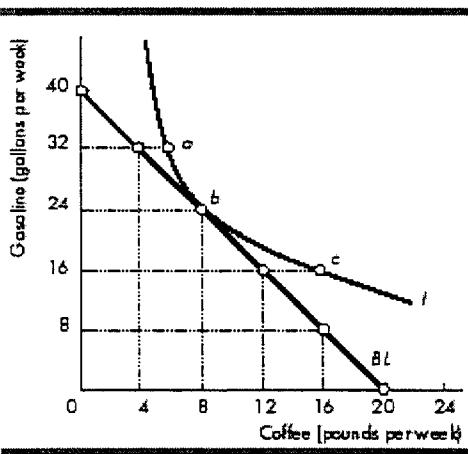
- 5) The above figures show the market for oranges. Which figure(s) shows the effect of new successful advertising campaigns to eat more oranges?
- Panel A.
 - Panel B.
 - Panel D.
 - Panels A and D.
- 6) For many goods, the price elasticity of demand increases over time because
- people's incomes tend to increase over time.
 - inflation causes all prices and incomes to increase over time.
 - the ability to find substitutes for a good whose price has risen increases over time.
 - None of the above answers are correct.
- 7) If the income elasticity of demand for corn is 0.5, then as income increases
- the demand for corn will increase.
 - the demand for corn will decrease.
 - corn will prove to be an inferior good.
 - the supply curve of corn will shift leftward.
- 8) Which of the following represents a price elastic supply?
- The quantity demanded increases 18 percent as a result of a decrease in the price of 8 percent.
 - The price rises by 8 percent causing the quantity demanded to fall by 10 percent.
 - The quantity supplied increases by 21 percent as a result of an increase in the price of 12 percent.
 - The price rises by 22 percent causing the quantity supplied to increase by 3 percent.
- 9) When the price of milk goes up as a result of a rightward shift of the demand curve for milk
- total revenue will increase only if milk is inelastic in supply.
 - total revenue will decrease only if milk is elastic in supply.
 - total revenue will remain constant only if milk has a unitary price elasticity of supply.
 - None of the above.

10) Total utility describes

- A) the benefit gained from all consumption.
- B) an increase in consumption times the gain in utility.
- C) total consumption times marginal utility.
- D) total consumption divided by marginal utility.

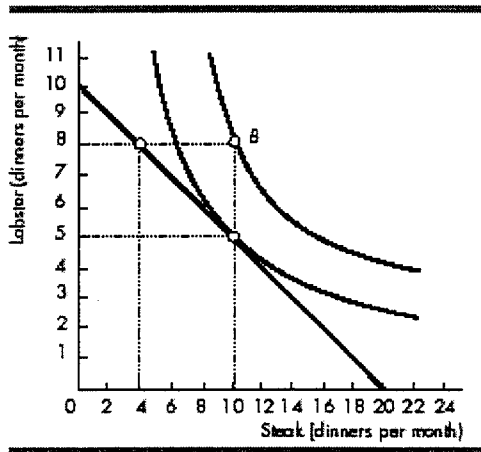
11) Thomas, who is both an opera fan and a baseball fan, has four tickets to operas and two tickets to baseball games. If he has diminishing marginal utility of each, then definitely

- A) his marginal utility of a fifth opera ticket is greater than his marginal utility of a third baseball ticket.
- B) his marginal utility of a fifth opera ticket is less than his marginal utility of a third baseball ticket.
- C) he would be willing to pay more for a third baseball ticket than for a fifth opera ticket.
- D) None of the above.

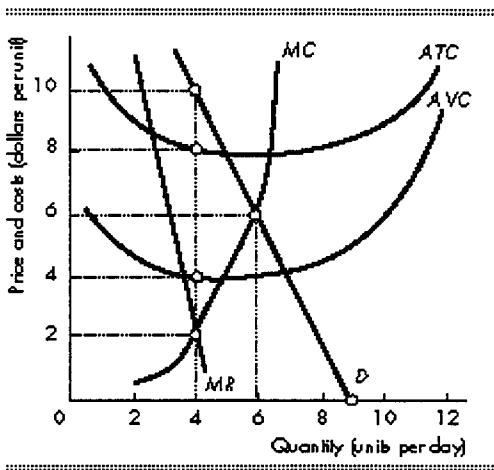


12) The above figure shows Sam's budget line and one of his indifference curves. What combination of coffee and gasoline will Sam select?

- A) Combination *a* because that contains all the gasoline he needs and still has some coffee.
- B) Combination *c* because that contains all the coffee he needs and some gasoline.
- C) Combination *b* because it is on his budget line and on the highest attainable indifference curve.
- D) None of the above.

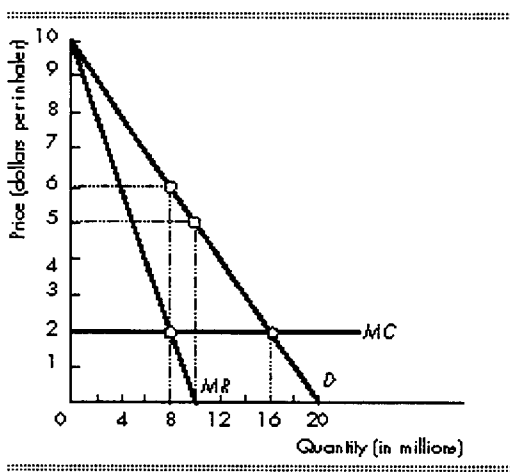


- 13) In the above figure, Jane's marginal rate of substitution is
- A) the rate at which she would give up a lobster dinner for a steak dinner and consider herself just as well off.
 - B) equal to ratio of the price of a steak dinner to the price of a lobster dinner when she is at best affordable point.
 - C) equal to 2 lobster dinners per steak dinner at her best affordable point.
 - D) Both answers A and B are correct.
- 14) Which of the following occurs with both perfectly price discriminating and single-price monopolies?
- A) The level of output is inefficient.
 - B) All consumer surplus goes to the monopoly.
 - C) Deadweight loss is created.
 - D) There is a redistribution of consumer surplus to the monopoly.



- 15) The unregulated, single-price monopolist illustrated in the figure above earns an economic profit of
- A) zero.
 - B) \$8.00 per day.
 - C) \$10.00 per day.
 - D) \$40.00 per day.

- 16) Monopolies can sustain positive economic profit in long run because
- A) they receive government subsidies.
 - B) they have high costs.
 - C) barriers to entry prevent competing firms from entering the market.
 - D) monopoly risks are high.
- 17) Sue's Surfboards is the sole renter of surfboards on Big Wave Island. If marginal revenue is positive at the actual number of surfboard rentals made each hour, then Sue's Surfboards
- A) must face an elastic demand for surfboard rentals.
 - B) must face an inelastic demand for surfboard rentals.
 - C) can increase its total revenue by increasing the price of rentals.
 - D) must face a unit elastic demand for surfboard rentals.



- 18) Prime Pharmaceuticals has developed a new asthma medicine, for which they have a patent. An inhaler can be produced at a constant marginal cost of \$2/inhaler. The demand curve, marginal revenue curve, and marginal cost curve for this new asthma inhaler are in the figure above. With its patent giving it a monopoly for its new inhaler, if Prime Pharmaceuticals could practice perfect price discrimination, then producer surplus would equal
- A) \$64 million.
 - B) \$16 million.
 - C) \$32 million.
 - D) Zero.
- 19) Firms in monopolistic competition always will
- A) earn an economic profit.
 - B) set their price equal to their marginal cost.
 - C) set their price above their marginal cost.
 - D) produce at the minimum average total cost.
- 20) In monopolistic competition, in the short run a firm maximizes its profit by selecting an output at which marginal cost equals
- A) average total cost.
 - B) marginal revenue.
 - C) price.
 - D) zero.

- 21) In monopolistically competitive industries,
- A) entry and exit push economic profits toward zero.
 - B) there is no diversity of products.
 - C) firms are not sensitive to changes in consumer demand.
 - D) firms produce where marginal cost equals the marginal benefit to the consumers.
- 22) In long-run equilibrium, a monopolistically competitive firm earns
- A) an economic profit but the economic profit is less than it would be if the firm was a monopoly.
 - B) an economic profit that is higher than what it would be if the firm was a monopoly.
 - C) a normal profit.
 - D) an economic profit that is the same amount as it would if the firm was a monopoly.

		Sears	
		Lower prices	Don't lower prices
Walmart	Lower prices	S: \$5 million W: \$5 million	S: \$1 million W: \$30 million
	Don't lower prices	S: \$30 million W: \$1 million	S: \$20 million W: \$20 million

- 23) Sears and Wal-Mart must decide whether to lower their prices, based on the potential economic profits shown in the table above. Which of the following is true?
- A) This situation is not a prisoners' dilemma.
 - B) If Sears lowers its prices and Wal-Mart does not, Sears will earn a \$20 million economic profit.
 - C) If Wal-Mart lowers its prices, Sears should keep its prices high.
 - D) Both Sears and Wal-Mart would jointly be better off if they could *each* keep their prices high.
- 24) Refer to the payoffs in the table above. Sears and Wal-Mart must decide whether to lower their prices based on the potential profits shown in the table. This game has
- A) no Nash equilibrium.
 - B) no dominant strategy.
 - C) a Nash equilibrium: both Sears and Wal-Mart keep prices high.
 - D) a dominant strategy: both Sears and Wal-Mart lower prices.
- 25) In a cartel,
- A) each firm has an incentive to decrease its own output below the level set by the cartel.
 - B) the firms' marginal cost equals the price set by the cartel.
 - C) each firm has an incentive to lower its price below the level set by the cartel.
 - D) each firm has an incentive to raise its price above the level set by the cartel.

- 26) The maximum *total* economic profit that can be made by colluding duopolists
- A) is less than the economic profit made by a monopolist.
 - B) equals the economic profit made by a monopolist.
 - C) exceeds the economic profit made by a monopolist.
 - D) bears no necessary relation to the economic profit made by a monopolist.

Demand Schedule Facing a Perfectly Price Discriminating Firm	
Price (dollars)	Quantity Sold
8	0
7	1
6	2
5	3
4	4
3	5
2	6
1	7

- 27) Using the demand schedule in the table above, the total revenue a perfectly price discriminating monopolist receives from selling 5 units of output is
- A) \$5.
 - B) \$15.
 - C) \$18.
 - D) \$25.
- 28) The value of a good is
- A) the maximum price you are willing to pay for it.
 - B) the price that you actually pay for it.
 - C) the price you actually pay for it minus the maximum you are willing to pay for it.
 - D) the maximum you are willing to pay for it minus the price you actually pay for it.
- 29) Assuming that there are no external costs or benefits, no price ceilings or price floors, and that the good is not a public good, then efficiency is
- A) achieved when a monopoly produces the good.
 - B) achieved when the good is produced in a competitive market.
 - C) achieved when the amount of output exceeds the amount produced in a competitive market.
 - D) unrelated to the amount produced in a competitive market.
- 30) Consider the market for diamonds, a monopoly managed by DeBeers. We can expect
- A) an inefficient amount of resources allocated to the diamond market.
 - B) the prices of diamonds to be too low.
 - C) the diamond market to equalize marginal benefits to marginal costs.
 - D) the diamond market to be efficient.

- 31) Profit maximization
- A) causes a firm to become as large as possible.
 - B) causes a firm to remain small in the long run.
 - C) increases the likelihood that a firm will survive.
 - D) causes a firm to become the target of a takeover.
- 32) Albert is a freelance writer who could work for a newspaper at \$25,000 a year but instead works for himself for \$41,000 a year. His only business expenses are \$1,000 for writing materials and \$12,000 for rent. Albert's normal profit is \$1,000. Ed's economic profit from working as a freelance writer is
- A) \$1,000.
 - B) \$2,000.
 - C) \$15,000.
 - D) \$25,000.
- 33) Which of the following is an explicit cost of operating a business?
- A) The opportunity cost of the land and buildings the firm owns and uses.
 - B) The opportunity cost of the owners' time.
 - C) The interest not earned on funds that were used to buy capital equipment.
 - D) The interest paid back on a bank loan that the owners obtained to help finance the company.
- 34) A firm's output is 80 units, its marginal cost is \$42, its average variable cost is also \$42, and its average fixed cost is \$10. The slope of its average fixed cost curve is
- A) negative.
 - B) positive but the precise slope cannot be calculated.
 - C) positive and the slope is between 0 and 1.50.
 - D) not able to be calculated without more information.
- 35) A firm is operating in its range of economies of scale and is on both its *LRAC* curve and its short-run *ATC* curve. At that level of output, the slope of its *LRAC* curve is
- A) zero and the slope of its *ATC* curve is zero.
 - B) zero and the slope of its *ATC* curve is negative.
 - C) negative and the slope of its *ATC* curve is zero.
 - D) negative and the slope of its *ATC* curve is negative.
- 36) Constant returns to scale means that as all inputs are increased,
- A) total output remains constant.
 - B) average total cost rises.
 - C) average total cost rises at the same rate as do the inputs.
 - D) total output increases in the same proportion as do the inputs.
- 37) A utility company produces more and more kilowatt hours, its *AFC* declines. This is an example of
- A) increasing marginal returns.
 - B) economies of scale.
 - C) Neither of the above.
 - D) Both of the above.

- 38) In perfect competition, the firm's marginal revenue curve
- A) cuts its demand curve from below, going from left to right.
 - B) cuts its demand curve from above, going from left to right.
 - C) always lies below its demand curve.
 - D) is the same as its demand curve.
- 39) If the price of its product just equals the average variable cost of production for a competitive firm,
- A) total revenue equals total fixed cost and the firm's loss equals total variable cost.
 - B) total revenue equals total variable cost and the firm's loss equals total fixed cost.
 - C) total fixed cost is zero.
 - D) total variable cost equals total fixed cost.
- 40) If a perfectly competitive firm decides to shut down in the short run, its loss will equal its
- A) minimum average variable cost, *AVC*.
 - B) total variable cost, *TVC*.
 - C) total fixed cost, *TFC*.
 - D) average total cost, *ATC*.

Section B (60%)

Attempt TWO questions from this section. Each question carries 30 marks. Use diagrams, tables, and equations wherever appropriate. Specify clearly the symbols you use.

1. When the Hong Kong Government was considering to abolish the minimum brokerage commission charge in November 2001, the Hong Kong Stockbrokers' Association warned the government that several thousands of dealers might lose their jobs if they decided to go ahead.
 - a. Explain how an abolishment of minimum charge affects the efficiency of resources allocation? (10 marks)
 - b. Do you agree that the abolishment will lead to job lost in the financial sector? Explain your answer. (20 marks)

2. Public utilities, such as gas, electricity, water, telecommunication, railway and airport, exist as *natural monopolies* in many countries. Answer the below question with respect to this kind of industries.
 - a. Why is this kind of monopolies natural? (6 marks)
 - b. Explain the similarities and differences of the demand for the products in a competitive market and in a monopoly of this kind, and their respective profit maximization conditions. (14 marks)
 - c. It is argued that monopolies will lead to inefficiency of resources allocation. Discuss the extent to which this statement is true. (10 marks)

3. The ice-cream industry in U.S. is monopolistically competitive.
 - a. Discuss some ways for an ice-cream company to differentiate its product. (6 marks)
 - b. In 1999, the summer in U.S was unusually hot. What do you think were the effects of this on consumers and firms in (i) short run and (ii) long run? (24 marks)