

INTRODUCTION TO MICROECONOMICS
ECO 1104 D
COURSE INSTRUCTOR: MARIO SECCARECCIA
FINAL EXAM, DECEMBER 12TH 2009, 9:30-12:30
DMS 1140, 1150, 1160

Calculators, phones or any other aids are forbidden.

Do not browse this exam paper until you are told to do so!

Reply on the scanning sheet for part A.

Reply in the booklet for parts B, C, D.

Part A: Multiple-choice questions (1x42=42%). Reply on the scanning sheet, not on the questionnaire.

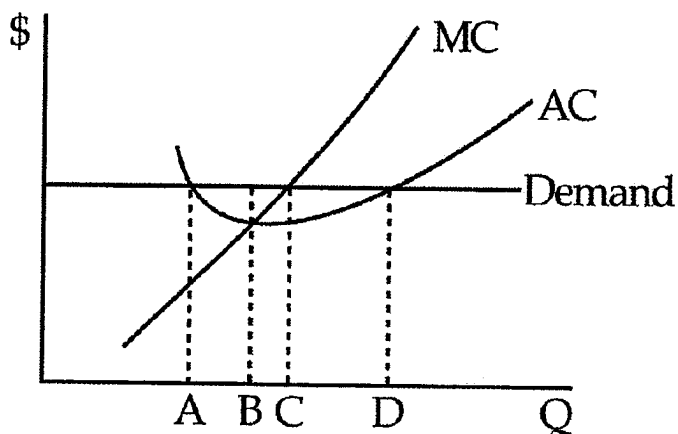
1. A corporation is legally owned by its
 - a. chief executive officer.
 - b. board of directors.
 - c. bondholders.
 - d. shareholders.

2. The major advantage of the corporation is
 - a. limited liability for owners.
 - b. greater profit incentive than the other forms of business organization.
 - c. lower taxes for owners, who are taxed only once.
 - d. ability of owners to have hands-on management of the firm.

3. The primary source of corporate financing in Canada is
 - a. the sale of stock.
 - b. the sale of bonds.
 - c. retained earnings.
 - d. lending from chartered banks.

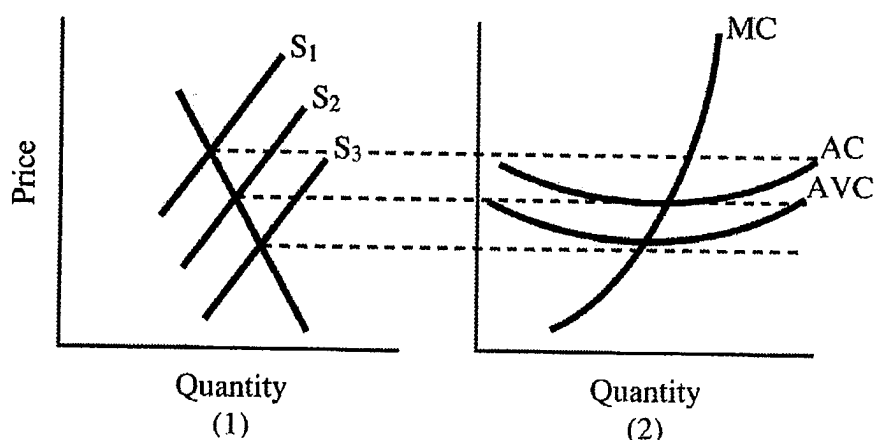
4. A technique that can be employed to make a portfolio less risky than any of its individual securities is
 - a. plowback.
 - b. diversification.
 - c. programmed trading.
 - d. speculation.

Figure 5



5. If the profit-maximizing firm depicted in Figure 5 is perfectly competitive, how much output should it produce?
 - a. A
 - b. B
 - c. C
 - d. D

Figure 6

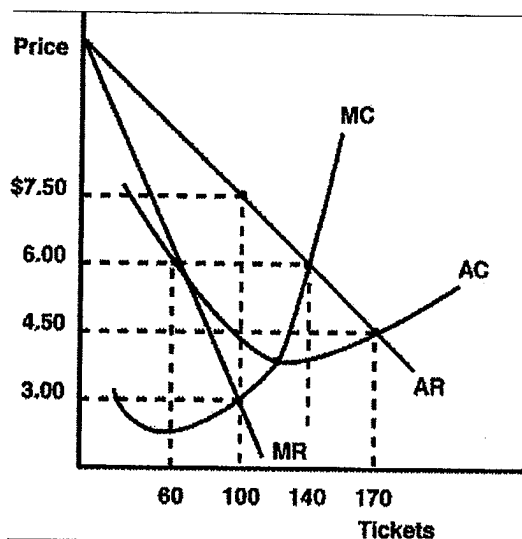


6. Figure 6 shows the industry's supply and demand curves in panel (1) and the cost curves of a firm in the industry in panel (2). At S_1 , the firm is
- shut down.
 - incurring losses.
 - earning zero economic profits.
 - earning economic profit greater than zero.
7. The short-run supply curve of the perfectly competitive firm is the firm's
- MC curve.
 - AVC curve.
 - MC curve above the minimum point on the AVC curve.
 - MC curve above the minimum point on the AFC curve.
8. Perfectly competitive firms _____ earn zero economic profit in long-run equilibrium because _____.
- always; firms in perfectly competitive industries always maximize output and so flood the market until the equilibrium price of output is driven to zero
 - sometimes; the demand curve for an individual perfectly competitive firm may or may not cross the company's long-run average total cost curve at its lowest point
 - always; firms enter whenever their economic profit is positive and exit whenever it's negative, so in long-run equilibrium economic profit must always be zero
 - never; no firm would be willing to produce if it received zero economic profit
9. The demand curve of the monopoly firm is always the
- average revenue curve.
 - marginal revenue curve.
 - total revenue curve.
 - marginal cost curve above average variable cost.

Table 10

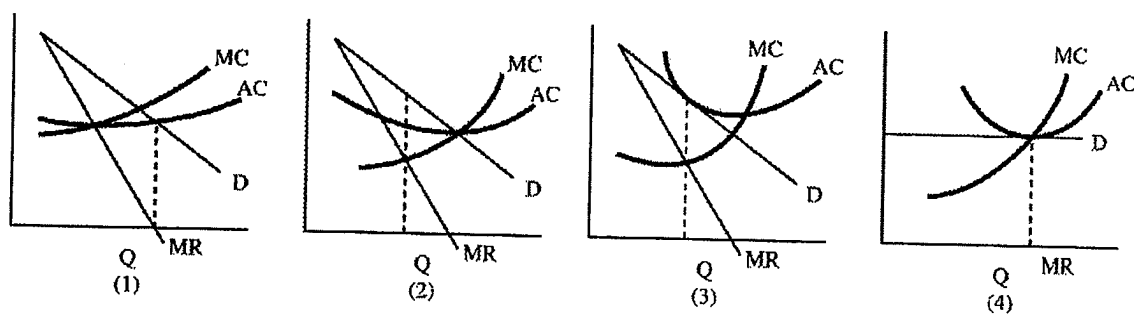
Quantity (units)	18	16	14	12	10	4
Price per unit (dollars)	1	2	3	4	5	6
Total cost (dollars)	44	38	32	26	20	14

10. Table 10 shows demand and total cost schedules for Monopoliteria. At its profit-maximizing level of output, Monopoliteria's profit is
- \$10.
 - \$15.
 - \$22.
 - \$30.
 - \$44.

Figure 11

11. Crown Theater is the only movie theater in the city. Its cost and revenue curves are shown in Figure 11-5. Monopolist Crown Theater would set the price of its tickets at
- \$7.50.
 - \$6.00.
 - \$4.50.
 - \$3.00.
12. A cartel is
- a group of oligopolists who try to behave like a single monopolist and split the benefits among themselves.
 - a government-approved organization for the exchange of technical information among firms.
 - a form of competition among oligopolists.
 - a regulated industry that is officially permitted to set the price of its product above long-run average total cost.

Figure 13



13. In Figure 13, which of the graphs represents a monopolistic competitor in long-run equilibrium?
- 1
 - 2
 - 3
 - 4
14. In Figure 13 above, which of the graphs represents a firm that is a sales revenue maximizer?
- 1
 - 2
 - 3
 - 4
15. All of the following are possible characteristics of oligopoly *except*
- free entry into the industry.
 - significant economies of scale.
 - interdependence among sellers.
 - homogeneous product.
16. If an oligopolistic manufacturer believes that he faces a kinked demand curve for his product, he thinks his competitors will _____ if he lowers his price and _____ if he raises his price.
- lower their prices; raise their prices.
 - lower their prices; not raise their prices
 - not lower their prices; raise their prices
 - not lower their prices; not raise their prices
17. What does the Herfindahl Index value near zero imply about the market?
- Monopoly
 - Perfect competition
 - Monopolistic competition
 - Oligopoly
18. Bigness, or large firms, may benefit consumers in which of the following ways?
- Larger firms usually charge lower prices than smaller firms.
 - Larger firms with monopoly power definitely have greater incentive to be efficient and innovative.
 - Larger firms may take advantage of economies of scale and scope.
 - Larger firms are more responsive to consumers' desires.

19. If average cost is declining,
 - a. marginal cost must be below average cost.
 - b. firms would go bankrupt if all prices were set equal to marginal costs.
 - c. marginal cost may be declining or increasing.
 - d. All of the above are correct.

20. If a firm's average cost is declining, setting price equal to marginal cost will
 - a. maximize the firm's profits.
 - b. minimize the firm's losses.
 - c. guarantee that the firm will lose money.
 - d. help the firm earn the opportunity costs of its resources.

21. An example of peak pricing is charging
 - a. more for long-distance phone calls in the daytime.
 - b. less for electricity at night.
 - c. more for public transportation in rush hours.
 - d. All of the above are true.

22. The questions of what to produce, how to produce, and for whom are answered by
 - a. free-market economies.
 - b. economies that are a mixture of planning and markets.
 - c. command economies.
 - d. all economic systems in some manner.

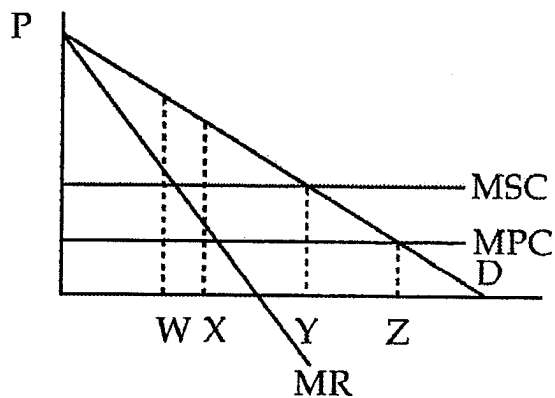
23. When the price of the product falls
 - a. consumer's surplus remains the same.
 - b. producers' surplus increases.
 - c. consumer's surplus falls.
 - d. producer's surplus falls.

24. If the marginal utility of a litre of milk to consumers is \$1.50 and the MC of producing the litre of milk is \$0.50, then
 - a. the value of the resources used up in producing one more litre of milk would be \$1 less than the money value of the additional litre to consumers.
 - b. society could be made better off by expanding the output of milk.
 - c. resources are not being used most efficiently.
 - d. All of the above are true.

25. An externality is an event which
 - a. is external to economics.
 - b. always brings harm to someone in the economy.
 - c. is incidental to some market activity.
 - d. harms the economy as a whole rather than a particular person.

26. A good's marginal social cost is defined as its
 - a. marginal private cost minus the value of any detrimental externality.
 - b. incidental cost.
 - c. marginal private cost plus the value of any taxes paid on its production.
 - d. marginal private cost plus its incidental cost.

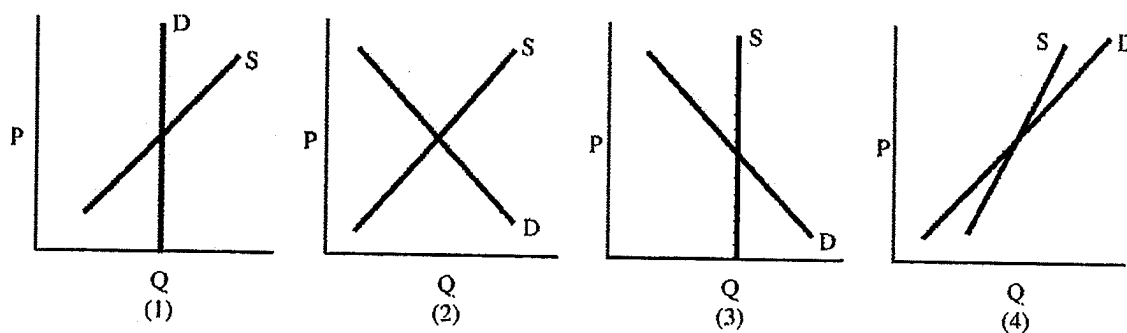
Figure 27



27. Figure 27 portrays conditions in the monopolized weezil industry. Knowing that MSC and MPC stand for marginal social cost and marginal private cost, from the diagram, the production of weezils
- must cause a detrimental externality.
 - must cause a beneficial externality.
 - must cause either a detrimental or a beneficial externality, more information is needed to determine which one.
 - may or may not cause an externality.
28. Health Canada estimates that the external costs imposed by alcohol consumption (for example, deaths caused by drunk drivers) to be 48 cents per decilitre consumed. Taxes on alcohol amount to 23 cents per decilitre consumed. This information suggests: (i) alcohol is over-consumed; (ii) alcohol taxes should be raised. Which of these statements is correct?
- i and ii
 - i not ii
 - ii not i
 - neither i nor ii
29. The prices of most services have risen much faster than inflation in recent years because
- wages and salaries of service providers have risen much faster than inflation.
 - wages and salaries of service providers have risen but their productivity has not.
 - the productivity of service providers has risen dramatically.
 - the demand for services has risen.
30. The unprecedented increase in living standards in the industrialized countries over the last two centuries is the result of
- growth in productivity of land.
 - growth in labor productivity.
 - growth in output.
 - population growth.
 - growth in government spending.

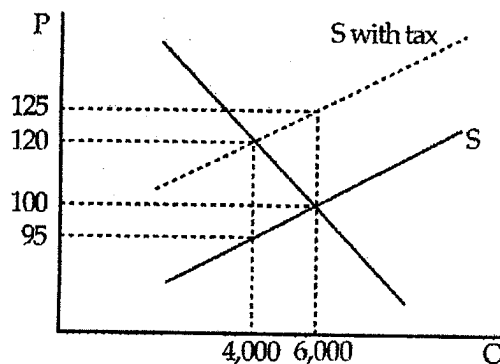
31. A successful process innovation can be expected to lead to
- an upward shift of the MC and AC curves which will lower output and raise the price of the product.
 - an upward shift of the MC and AC curves which will raise output and lower the price of the product.
 - a downward shift of the MC and AC curves which will lower output and raise the price of the product.
 - a downward shift of the MC and AC curves which will raise output and lower the price of the product.
 - a downward shift of the MC and AC curves which will leave unchanged the output and price of the product.
32. In many high-tech industries in the economy, such as computer software, medical equipment, and pharmaceuticals
- price competition is utilized by firms more than innovation to compete with rivals.
 - firms compete on the basis of innovation only; never engaging in price competition.
 - innovation is utilized by firms to compete with rivals more than price competition.
 - firms use price competition only; never engaging in innovation to compete with rivals.
 - firms utilize innovation and price competition equally to compete with rivals.
33. By providing free garbage removal, a community
- discourages activities that produce detrimental externalities.
 - encourages citizens to recycle items rather than throw them out.
 - leads citizens to throw out more garbage than is socially optimal.
 - None of the above is correct.
34. Many economists argue that the most efficient way to control pollution is to
- ban all activities that create pollution.
 - enforce legal standards on air and water quality.
 - promote environmental awareness among citizens.
 - impose taxes on emissions.
35. Requiring all firms to reduce emissions by the same percentage is
- impossible.
 - inefficient.
 - inequitable.
 - unenforceable under the law.
36. Economists predicted that the price of a depletable natural resource would rise by about 15 percent. Actually the price fell 10 percent. What most likely happened?
- A government subsidy was removed.
 - Extraction costs increased.
 - Price controls were suspended.
 - An unexpected discovery of reserves was made.
37. A \$100 fee to obtain a driver's license is a
- regressive tax.
 - degressive tax.
 - proportional tax.
 - progressive tax.

Figure 38



38. In which panel of Figure 38 would an excise tax be borne entirely by the consumer?
- 1
 - 2
 - 3
 - 4

Figure 39



39. Figure 39 shows the widget market before and after an excise tax is imposed. The tax per widget equals ____.
- \$5
 - \$20
 - \$25
 - \$30
40. Figure 39 above shows the widget market before and after an excise tax is imposed. After the tax is imposed, the amount that a firm keeps for itself from the sale of a widget is ____.
- \$95
 - \$100
 - \$120
 - \$125
41. Random walk theory says
- throwing darts will pick winners.
 - random selection of stocks will do as well as other methods of stock choice.
 - speculation can't lose if you wait long enough.
 - investment in stocks can't be profitable.

Reply in the booklet for the following parts of the exam.

Part B: Quick Definitions of concepts (5x3 = 15%). Choose ONLY FIVE of the following SEVEN questions.

1. Benefits principle of taxation
2. Monopolistic competition
3. Public good
4. Price leadership
5. Retained earnings
6. Stock option
7. Capital gains

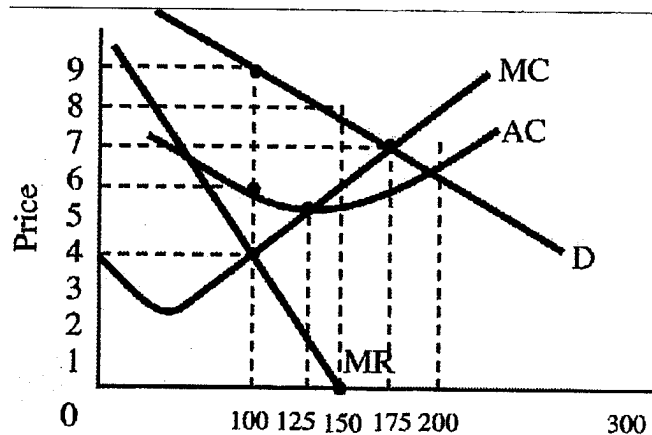
Part C: Problems and short questions (4x5 = 20%). You must answer to ONLY FOUR of the following SIX questions.

1. A monopolist sets price at \$10 and sells 100 units. The corresponding marginal revenue is \$5 and marginal cost \$3. We know that the marginal cost curve of this firm is upward sloping. What recommendation regarding price and quantity would you give this monopolist? Use a graph to illustrate your answer and the above information.
2. A firm, called IMITATE, producing a cheap version of ipods finds out through its marketing office that it should sell its product for \$120 apiece, for at any other price consumers will either prefer the real thing or will doubt the quality of the product. The production office of IMITATE informs management that the marginal cost of producing such ipods is only 30\$, and that as many as 3 million units can be produced at that marginal cost. However, taking into account fixed costs, unit costs (average cost) go up to 180\$ when 1 million units are produced, \$105 when 2 million units are produced, and \$80 when 3 million units are produced.

Draw a graph that illustrates the average variable cost curve, the average cost curve, and the price line. What is the percentage markup (or percentage gross costing margin) for this firm if the price is indeed \$120?

3. Economists object to monopolies on the grounds of efficiency. Assuming that the marginal cost curve of the monopoly would be the same as the supply curve of the competitive industry, show graphically that the monopoly does not generate as large an overall economic surplus as the competitive industry. What is this difference called?
4. Take firms in a perfectly competitive industry, with the standard U-shape cost curves. If the typical firm's minimum average variable cost is \$10 at an output of 50 units, if marginal cost is \$20 at 70 units, and there are 1,000 firms in the industry, sketch supply curves for the typical firm and for the industry as a whole.

5. Suppose an industry in which there are five companies where these companies hold 10%, 10%, 20%, 30% and 30% respectively of the market shares. What is the concentration ratio of the industry; and what is the Herfindahl index of this industry?
6. The figure below describes a monopoly. (a) If it acts as a profit-maximizer, what price will it set and what output will it produce? What will be its total profit then? (b) If the monopoly acts a sales maximizer, what price will it set and how much will it produce? What will be its total revenue then?



Part D: Essay questions (2x12%). Choose only TWO of the following FOUR sets of questions

- D1. (a) Explain briefly why prices tend to be « sticky » under oligopoly by providing at least two explanations that arise from the survey conducted by the Bank of Canada. (b) Explain the links that you see between regulated natural monopolies and the description of cost-plus pricing behaviour attributed to price leaders of oligopolistic industries.
- D2. Explain carefully why a corporate income tax (a tax on corporate profits) is presumed to have no impact on prices and output in the cases of perfect competition and pure monopoly, as well as in the oligopolistic model of sales maximization, while the oligopolistic model of average cost pricing would most likely predict that the tax would be passed on to consumers.
- D3. Economists have proposed two broad solutions to carbon emissions: one is a Pigovian tax on carbon emissions and the other is tradable emission permits. Carefully identify these two solutions, by providing graphs explaining each solution. Assess the possible advantages and disadvantages of each solution.
- D4. (a) What is price discrimination? (b) What role does the elasticity of demand play in permitting firms to engage in this apparently reprehensible practice? (c) Why is price discrimination bad for consumers? Explain under what condition the practice of price discrimination may *not* be undesirable.