

Name: _____

Student Number: _____

ECONOMICS 1B03

SECTIONS C01, C02

FALL DAY CLASS

Instructor: Hannah Holmes

DURATION OF EXAM: 2 HOURS

MCMASTER UNIVERSITY FINAL EXAMINATION

December, 2012

VERSION 1 ANSWERS

THIS EXAMINATION PAPER INCLUDES 9 PAGES AND 40 QUESTIONS PLUS 1 BONUS QUESTION. YOU ARE RESPONSIBLE FOR ENSURING THAT YOUR COPY OF THE PAPER IS COMPLETE. BRING ANY DISCREPANCY TO THE ATTENTION OF YOUR INVIGILATOR.

Special Instructions:

The McMaster University Casio FX-991 calculator only may be used.

This examination paper must be handed in with the Scan sheet.

Please read carefully and follow the OMR instructions found on Page 2 of this examination paper.

Answer all questions on the scan sheet.

TOTAL MARKS AVAILABLE: 40

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Multiple Choice

Identify the choice that best completes the statement or answers the question.

Scenario 1

Market demand is given by $P = 500 - 4Q$. The monopolist who serves the market has $MR = 500 - 8Q$ and its $MC = Q + 50$. Its $ATC = .5Q + 50$.

1. Refer to Scenario 1. How much will a profit-maximizing monopolist produce?

a. 50	c. 90
b. 300	d. 140
2. Refer to Scenario 1. What will be the monopolist's profit?

a. \$180	c. \$1250
b. \$11250	d. \$9500
3. Refer to Scenario 1. If the monopolist could perfectly price discriminate, what would be its producer surplus?

a. \$40500	c. \$20250
b. \$22000	d. \$45000

Scenario 2

In a perfectly competitive market, market demand is $P = 200 - 5Q$ and market supply is $P = Q + 8$. Each identical firm has $MC = 10Q$ and $ATC = 5Q$.

4. Refer to Scenario 2. In equilibrium, how much will each firm produce?

a. 4	c. 32
b. 8	d. 0
5. Refer to Scenario 2. What is the profit or loss of each firm at the current equilibrium price?

a. \$0	c. \$40
b. \$80	d. -\$20
6. Refer to Scenario 2. Suppose that minimum average total cost is \$5. How many firms will there be in long run equilibrium?

a. 39	c. 10
b. 8	d. 78
7. Refer to Scenario 2. If this market were served instead by a monopoly with $MR = 200 - 10Q$, what would be the deadweight loss compared to perfect competition?

a. \$761.25	c. \$630.75
b. \$1522.50	d. \$1261.50

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Scenario 4

Green Bay and Chicago each produce cheese and sausages. The following table shows the quantities of each good that the cities can produce using all available labour (labour hours used to make the given quantities are also listed in the table).

	Cheese	Sausages	Labour Hours Used
Green Bay	400	200	50
Chicago	300	180	45

12. Refer to Scenario 4. Which statement is correct?
 - a. Green Bay has comparative advantage in cheese and absolute advantage in both cheese and sausages.
 - b. Green Bay has comparative advantage in cheese but no city has absolute advantage in both goods.**
 - c. Chicago has comparative advantage in sausages and absolute advantage in both goods.
 - d. Chicago has comparative advantage in sausages and absolute advantage in sausages.
13. Refer to Scenario 4. If Chicago were to trade sausages to Green Bay for cheese, one possible price might be
 - a. 1 sausage for 1.8 cheese**
 - b. 1 sausage for 2.5 cheese
 - c. 1 sausage for 1 cheese
 - d. Chicago would not trade sausage for cheese with Green Bay
14. Demand for a product is given by $Q = 100 - 3P$. What is the point elasticity of demand when price is \$20?
 - a. .67
 - b. 1.5**
 - c. 3.0
 - d. 6.0
15. Which of the following is NOT a controversial business practice?
 - a. tying
 - b. resale price maintenance
 - c. predatory pricing
 - d. paying wages based on human capital levels**
16. A subsidy for producers of milk will lead to
 - a. an increase in quantity traded and a decrease in the price paid by consumers**
 - b. an increase in quantity traded and an increase in the price paid by consumers
 - c. a decrease in consumer surplus
 - d. both b and d
17. A monopolistically competitive firm is currently selling 500 hamburgers at a price of \$3.00 each. Average total cost of 500 hamburgers is \$3.00. Which statement is FALSE?
 - a. we have LR equilibrium where $P = \min ATC$, just like perfect competition**
 - b. minimum ATC is less than \$3.00
 - c. there is no entry into the market
 - d. the firm's $MR = MC$

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Scenario 5

Faith wants to maximize her total utility by consuming the optimal bundle of Good X and Good Y. Good X sells for \$4 each and Good Y sells for \$5 each. Her utilities for each good are given below:

QTY of X	TU for X	QTY of Y	TU for Y
2	40	3	68
3	50	4	88
4	58	5	98
5	64	6	104

18. Refer to Scenario 5. How much will Faith buy of each good in order to maximize her total utility from consuming both goods?
 - a. 3 X and 4 Y
 - b. 4 X and 5 Y
 - c. 3 X and 6 Y
 - d. 5 X and 4 Y
19. Refer to Scenario 5. How much would Faith have to spend in order to maximize her total utility from both goods?
 - a. \$41
 - b. \$32
 - c. \$42
 - d. \$40
20. What characteristics do public goods and common resources have in common?
 - a. Both goods are nonexcludable.
 - b. Both goods are excludable.
 - c. Both goods are rival.
 - d. Both goods are nonrival.
21. What do goods that are rival include?
 - a. both natural monopolies and public goods
 - b. both public goods and common resources
 - c. both common resources and private goods
 - d. both private goods and natural monopolies
22. What causes market failure associated with the free-rider problem?
 - a. a problem associated with pollution
 - b. benefits that accrue to those who don't pay
 - c. losses that accrue to providers of the product
 - d. a project in which costs exceed benefits
23. If a firm in a competitive market reduces its output by 20 percent, what is the price of its output likely to do?
 - a. decrease by more than 20 percent
 - b. decrease by less than 20 percent
 - c. remain unchanged
 - d. increase
24. When does a natural monopoly occur?
 - a. when the product is sold in its natural state (such as water or diamonds)
 - b. when there are economies of scale over the relevant range of output
 - c. when the firm is characterized by a rising marginal cost curve
 - d. when production requires the use of free natural resources, such as water or air

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25. When a new firm enters a monopolistically competitive market, what will happen to the individual demand curves faced by all existing firms in that market?
 - a. They will shift to the left.
 - b. They will shift to the right.
 - c. They will shift in a direction that is unpredictable without further information.
 - d. They will remain unchanged; only the supply curve will shift.
26. When a market is monopolistically competitive, what is the typical firm in the market likely to experience in the short and long run?
 - a. positive profit in the short run and in the long run
 - b. positive or negative profit in the short run and a zero profit in the long run
 - c. zero profit in the short run and a positive or negative profit in the long run
 - d. zero profit in the short run and in the long run
27. When an oligopoly market is in Nash equilibrium, what is the case?
 - a. The market price will be different for each firm.
 - b. Firms will not behave as profit maximizers.
 - c. A firm will choose its best strategy, given the strategies that it observes other firms taking.
 - d. A firm will not take into account the strategies of competing firms.
28. When oligopolistic firms interacting with one another each choose their best strategy given the strategies chosen by other firms in the market, what do we have?
 - a. a cartel
 - b. a group of oligopolists behaving as a monopoly
 - c. a Nash equilibrium
 - d. the temptation to cheat
29. When price is above marginal cost, selling one more unit of output at the going price will increase profit. What is this concept called?
 - a. the income effect
 - b. the price effect
 - c. the output effect
 - d. the cartel effect
30. In a game, what is a dominant strategy, by definition?
 - a. the best strategy for a player to follow only if other players are cooperative
 - b. the best strategy for a player to follow, regardless of the strategies followed by other players
 - c. a strategy that leads to a Nash equilibrium
 - d. a strategy that leads to one player's interests dominating the interests of the other players
31. What is the value of the marginal product of labour equal to?
 - a. the change in marginal cost caused by the addition of the last worker
 - b. the change in total cost caused by the addition of the last worker
 - c. the change in total revenue caused by the addition of the last worker
 - d. the change in total profit caused by the addition of the last worker

32. Which of the following events could decrease the demand for labour?
- an increase in migrant workers
 - an increase in the marginal productivity of workers
 - a decrease in demand for the final product produced by labour
 - a decrease in the labour supply
33. Suppose medical research provides evidence that eating bananas provides far greater health benefits than was previously thought. The resulting increase in the demand for bananas has which of the following results?
- It increases the marginal product of banana pickers for any given number of banana pickers.
 - It increases the value of the marginal product of banana pickers for any given number of banana pickers.
 - It increases the supply of banana pickers.
 - It increases the minimum wage for workers in general.
34. The rental price of capital is best described as which of the following?
- determined outside the realm of factor markets
 - the price paid to use capital for a limited time period
 - the price paid for ownership of the capital
 - generally more than the purchase price
35. Store clerks are known to have low wages. What is likely to be a partial explanation?
- Store clerk jobs are perceived to be relatively easy.
 - Store clerk jobs are perceived to be relatively difficult.
 - Store clerks often work evenings and holidays.
 - Store clerks are required to have a college degree.
36. For a "superstar" to emerge, what must be the case?
- It is possible to supply the good or service that the superstar produces at low cost to every customer.
 - Some customers are willing and able to pay large sums of money to enjoy the good or service provided by the superstar.
 - The superstar has a natural monopoly on his or her good or service.
 - The superstar is willing to settle for a level of pay that is less than his or her value of marginal product.
37. What does utility measure?
- the income a consumer receives from consuming a bundle of goods
 - the satisfaction a consumer receives from consuming a bundle of goods
 - the satisfaction a consumer places on her budget constraint
 - the satisfaction a consumer places on normal goods
38. What characteristic best describes asymmetric information?
- It is rare in economic transactions, but it is common in other aspects of life.
 - It can take the form of a hidden action or a hidden characteristic.
 - It always involves an employer-employee relationship.
 - It is a larger problem for firms than for consumers.

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39. Employers may choose to pay their workers a wage that exceeds the equilibrium wage according to which of the following theories?
- a. efficiency-wage theories
 - b. shortage-wage theories
 - c. monitoring theory
 - d. signalling theory
40. Because people with hidden health problems are more likely to buy health insurance than are other people, which of the following outcomes is the result?
- a. The price of health insurance reflects the costs of a sicker-than-average person.
 - b. The price of health insurance is too low, relative to the socially optimal price.
 - c. People in average health may be encouraged to buy too much health insurance, relative to the socially optimal quantity.
 - d. There is no problem of asymmetric information in the market for health insurance.
41. BONUS: Who are Wills and Robin? I'll let you figure this one out....
- a. famous game theorists
 - b. Professor Holmes' cats
 - c. teaching assistants for this course
 - d. characters used in the lecture on comparative advantage

END OF EXAMINATION