Fall 2012 Economics 103h: Review questions for final exam, part 2

Below are the remaining questions on monopolistic competition and on oligopoly.

Short answer/graphing questions on oligopoly (review questions part 1 had questions on monopolistic competition).

1. Draw on a graph and explain in words how firms collude to make monopoly profits.
2. Draw on a graph and explain in words what happens to industry price and quantitty if one firm cheats.
3. Draw on a graph and explain in words what happens to the price and output in the industry when two firms cheat. Draw a graph for the individual firm and a graph for the industry.
4. Draw and explain a duopoly payoff matrix.
5. Draw and explain a prisoners' dilemma payoff matrix.

Multiple choice questions

1) Monopolistic competition is a market structure in which:
A) A small number of firms compete.
B) Firms produce identical products.
C) Firms compete only on product price.
D) Firms are free to enter and exit the market.
Answer: D

2) In monopolistic competition, a firm has some ability to affect the price for its product because of
A) easy entry and exit.
B) economic profits.
C) product differentiation.
D) many competitors.
Answer: C

3) Monopolistic competition differs from monopoly because in monopolistic competition
A) firms maximize profits.
B) firms set marginal revenue equal to marginal cost to maximize profit.
C) firms are free to enter and exit.
D) All of the above are differences between monopoly and monopolistically competitive firms.
Answer: C

4) Which of the following best explains why monopolistically competitive firms face a downward sloping demand curve while perfectly competitive firms do not?

A) monopolistically competitive firms sell a differentiated good
B) monopolistically competitive industries have only a few firms
C) monopolistically competitive firms have barriers to entry
D) only industries with free entry and exit have firms that face horizontal demand curves
Answer: A

5) Firms in monopolistic competition make products that are
A) perfect complements.
B) close but not perfect complements.
C) perfect substitutes.
D) close but not perfect substitutes.
Answer: D

6) The best example of a good sold in a monopolistically competitive market is
A) pizza.
B) the local newspaper.
C) sewer services.
D) peaches.
Answer: A

7) In monopolistic competition, each firm has a demand curve with a ________ and there ________ barriers to entry into the market.
A) negative slope; are no
B) slope equal to zero; are no
C) negative slope; are
D) slope equal to zero; are
Answer: A

8) In monopolistic competition, each firm's marginal revenue curve lies ________ its demand curve because of ________.
A) below ; barriers to entry
B) below; product differentiation
C) above; barriers to entry
D) above; product differentiation
Answer: B

9) In monopolistic competition, each firm's marginal revenue curve has a ________ and its demand curve has a ________.
A) slope equal to zero; slope equal to zero
B) slope equal to zero; negative slope
C) negative slope; a slope equal to zero
D) negative slope; negative slope
Answer: D

10) A firm in monopolistic competition has some degree of price-setting power because

A) in the long run it earns a normal profit.
B) it can never earn less than normal profit.
C) the price it charges is never more than its marginal cost.
D) if it raises its price, the quantity it can sell will not decrease to zero.
Answer: D

11) For a firm in monopolistic competition, the marginal cost curve intersects the average total cost curve
A) at the minimum average total cost.
B) to the left of the minimum average total cost.
C) to the right of the minimum average total cost.
D) at no point.
Answer: A

12) In the short run, a monopolistically competitive firm chooses
A) both its price and its quantity.
B) its price but not its quantity.
C) its quantity but not its price.
D) neither its price nor its quantity.
Answer: A

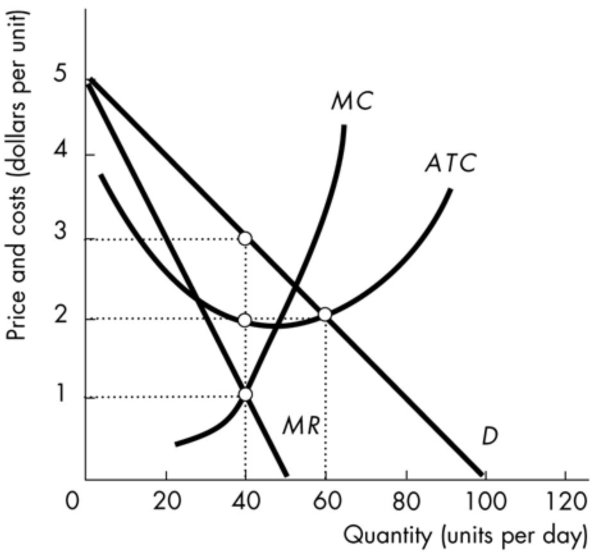
13) In the short run, a firm in monopolistic competition produces where
A) $MR = MC$ and economic profit is equal to zero.
B) $MR = MC$.
C) the given market price is equal to MC and economic profit is equal to zero.
D) the given market price is equal to MC.
Answer: B

14) How is a monopolistically competitive firm similar to a monopoly firm?
A) both produce where marginal revenue equals marginal cost
B) both will observe entry into the industry if economic profit is positive
C) both produce a unique good
D) both produce where price equals marginal cost
Answer: A

15) In the short run, for a firm in monopolistic competition,
A) the firm's economic profit must equal zero.
B) marginal revenue exceeds marginal cost.
C) price exceeds marginal cost.
D) the firm is a price taker.
Answer: C

16) In monopolistic competition, firms can make an economic profit in
A) the short run and in the long run.
B) the short run but not in the long run.
C) the long run but not in the short run.

D) neither the long run nor the short run.
Answer: B



17) In the above figure, if the firm is in monopolistic competition, it will produce
A) 40 units.
B) 60 units.
C) between 61 and 99 units.
D) 100 units.
Answer: A

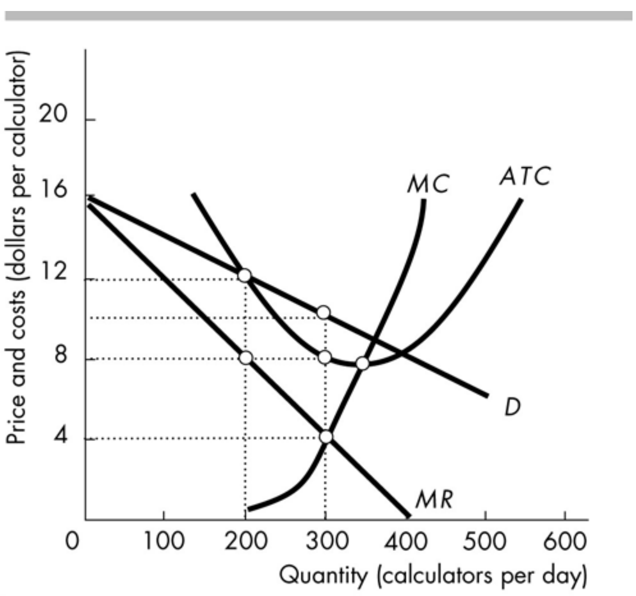
18) In the above figure, if the firm is in monopolistic competition, its price will be
A) $1.
B) $2.
C) $3.
D) $4.
Answer: C

19) In the above figure, the monopolistically competitive firm makes an economic profit of
A) $0.
B) between $0 and $50 per day.
C) between $50.01 and $100 per day.
D) greater than $100.01 per day.
Answer: B

20) The above figure is for a firm in monopolistic competition. The diagram represents the short run rather than the long run because the
A) *MR* curve cuts the *ATC* curve from below.

B) *MR* curve and the *D* curve do not coincide.
C) firm is incurring an economic loss.
D) firm is making an economic profit.
Answer: D

21) In a monopolistically competitive industry, the firms are currently making an economic profit. When this market moves to its long-run equilibrium, the firms' demand curves will have ________ and their economic profit will have ________.
A) shifted leftward; decreased to zero
B) shifted leftward; decreased but remain greater than zero
C) shifted rightward; decreased to zero
D) remained the same; decreased to zero
Answer: A



22) The figure above shows the situation facing Smart Digit, Inc., a firm in monopolistic competition that produces calculators. The firm's markup is ________ per calculator.
A) zero
B) $2
C) $4
D) $6
Answer: D

23) The figure above shows the situation facing Smart Digit, Inc., a firm in monopolistic competition that produces calculators. The firm's economic profit in the long run is
A) zero.

B) $600.
C) $900.
D) $2,400.
Answer: A
24) If the market served by a monopolistically competitive industry expands, a likely result in the long run will be
A) less elastic demand curves facing each firm.
B) a higher ratio of price to average cost.
C) a larger number of firms producing a similar product.
D) a transition from monopolistic competition to oligopoly.
Answer: C

25) Which of the following is <u>FALSE</u> regarding the long run for a firm in monopolistic competition?
A) The firm makes zero economic profit.
B) Price equals average total cost.
C) Output is not produced at minimum average total cost.
D) None of the above are false statements.
Answer: D

26) Which of the following is true regarding the long run for a firm in monopolistic competition?
A) The firm can make an economic profit because of product differentiation.
B) Marginal cost equals average total cost.
C) Output is produced at minimum average total cost.
D) Price equals average total cost.
Answer: D

27) In the long run, a firm in monopolistic competition has its price equal to ________ and also has its price ________.
A) marginal cost; exceeding its average total cost.
B) marginal cost; equal to its average total cost
C) average total cost; exceeds its marginal cost
D) average total cost; less than its marginal cost
Answer: C

28) In the long-run, a firm in monopolistic competition produces at an output level where
A) $P > ATC$ and $MR = MC$.
B) $P > ATC$ and $MR > MC$.
C) $P = ATC$ and $MR = MC$.
D) $P = ATC$ and $MR > MC$.
Answer: C

29) If firms in a monopolistically competitive industry are making an economic profit, then definitely there is
A) a leftward shift in each firm's demand curve as new firms enter the market.

B) a rightward shift in each firm's marginal revenue curve as new firms enter the market.
C) an upward shift in each firm's cost curves as new firms enter the market.
D) All of the above answers are correct.
Answer: A
30) Which of the following is true regarding the long run for a firm in monopolistic competition?
A) The firm's price equals its marginal cost.
B) The firm's economic profit equals zero.
C) The firm's average total cost is minimized.
D) The firm's marginal cost equals its average total cost.
Answer: B

31) Which one of the following statements is TRUE for BOTH perfect competition and monopolistic competition?
A) Each type of firm faces a downward sloping demand curve.
B) Each type of firm produces a homogeneous product.
C) In the long run, firms in both industries make zero economic profit.
D) Each type of firm competes on product quality and price.
Answer: C

32) Excess capacity is the
A) difference between a perfectly competitive firm's and a monopolistically competitive firm's output.
B) difference between a perfectly competitive firm's and a monopoly's output.
C) output at the maximum point of the *ATC* curve.
D) None of the above answers is correct.
Answer: D

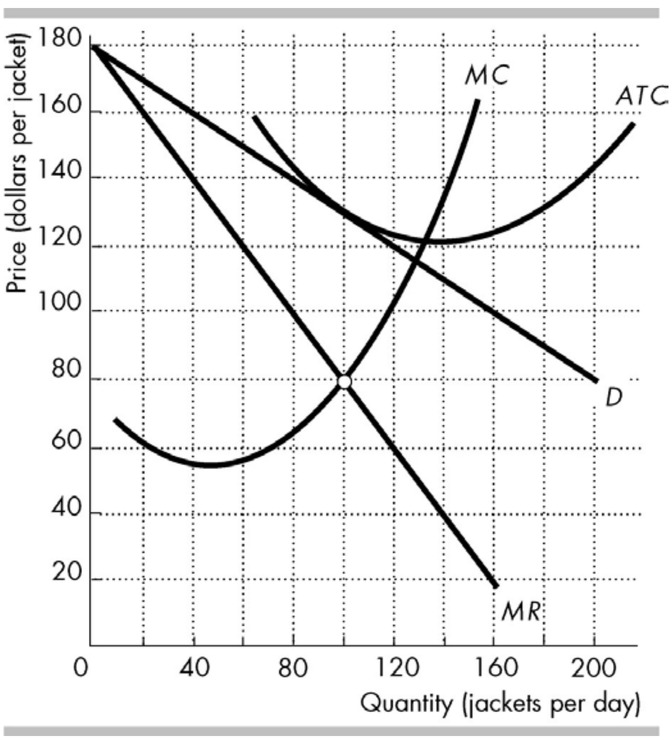
33) In the long run, monopolistically competitive firms produce where
A) excess capacity exists
B) the markup is equal to zero
C) the demand curve has shifted so that it intersects the minimum average total cost point
D) average total cost is minimized
Answer: A

34) In monopolistic competition, in the long run firms produce
A) less output than that which minimizes their *ATC*.
B) more output than that which minimizes their *ATC*.
C) the amount of output that minimizes their *ATC* and their *AVC*.
D) the amount of output that minimizes their *ATC* but not their *AVC*.
Answer: A

35) A firm has excess capacity if its output is
A) less than the quantity at which marginal cost is minimized.
B) less than the quantity at which economic profit is maximized.
C) less than the quantity at which average total cost is minimized.

D) more than the quantity at which average total cost is minimized.
Answer: C

36) A firm's markup is the amount by which ________ exceeds ________.
A) price; average total cost
B) price; marginal cost
C) average total cost; marginal cost
D) price; average variable cost
Answer: B



36) In the figure above, Gap maximizes its profit if it charges ________ per jacket.
A) $130
B) $80
C) $115
D) $100
Answer: A
Topic: Monopolistic Competition, Long-Run Price

37) In the figure above, what is Gap's economic profit?
A) Zero
B) $5,000

C) -$5,000
D) -$1,160
Answer: A

38) In the figure above, the market for jackets ________ in long-run equilibrium, and there is ________ for new firms to enter.
A) is; no incentive
B) is; an incentive
C) is not; an incentive
D) is not; no incentive
Answer: A
Topic: Monopolistic Competition, Long-Run Equilibrium
Skill: Analytical
Question history: Previous edition, Chapter 14
AACSB: Analytical Skills

39) In the figure above, if the market for jackets were perfectly competitive, in long-run equilibrium, each firm would sell ________ jackets per day at ________ per jacket.
A) 132; $122
B) 100; $130
C) 100; $80
D) 128; $114
Answer: A
Topic: Monopolistic Competition, Long-Run Equilibrium
Skill: Analytical
Question history: Previous edition, Chapter 14
AACSB: Analytical Skills

40) In the figure above, what is Gap's excess capacity?
A) 32 jackets per day
B) Zero
C) 4 jackets per day
D) 132 jackets per day
Answer: A
Topic: Monopolistic Competition, Long-Run Excess Capacity
Skill: Analytical
Question history: Previous edition, Chapter 14
AACSB: Analytical Skills

41) In the figure above, what is Gap's markup?
A) $50
B) $15
C) $35
D) Zero
Answer: A

42) An oligopoly is a market structure in which there are
A) only a few buyers but many sellers.
B) only a few sellers selling either an identical or differentiated product.
C) many sellers selling a differentiated product.
D) a few products sold by many sellers.
Answer: B

43) The distinguishing features of oligopoly are ________ and a ________ in the industry.
A) barriers to entry; large number of firms
B) no barriers to entry; few firms
C) barriers to entry; few firms
D) no barriers to entry; large number of firms
Answer: C

44) Oligopoly is
A) like monopoly because there are barriers to entry.
B) like perfect competition because oligopoly firms all sell homogeneous goods.
C) like monopolistic competition because oligopoly firms all sell differentiated goods
D) like perfect competition because there are many firms in the industry
Answer: A

45) Natural oligopoly is a situation where
A) the level of demand can support only a few firms.
B) there is only one firm.
C) there are only two firms.
D) there are legal barriers to entry.
Answer: A

46) Consider a market in which each firm must predict the price and quantity decisions of other firms, as well as how those price and quantity decisions will affect the first firm's revenue and profit. This market is best described as
A) an oligopoly.
B) monopolistic competition.
C) a monopoly.
D) perfect competition.
Answer: A

47) A duopoly occurs when ________.

A) there are only two producers of a particular good competing in the same market
B) there are two producers of two goods competing in an oligopoly market
C) there are numerous producers of two goods competing in a competitive market
D) the one producer of two goods sells the goods in a monopoly market
Answer: A

48) ________ is a group of firms that have colluded to limit their output and raise their price.
A) A cartel
B) An oligopoly
C) A strategy
D) A duopoly
Answer: A

49) A monopolistically competitive firm is like an oligopolistic firm insofar as
A) both face perfectly elastic demand.
B) both can earn an economic profit in the long run.
C) both have *MR* curves that lie beneath their demand curves.
D) neither is protected by high barriers to entry.
Answer: C

50) Game theory can be used for studying which of the following types of market structure?
A) monopoly
B) monopolistic competition
C) oligopoly
D) perfect competition
Answer: C

51) Game theory is applicable to oligopoly behavior because oligopolists
A) use strategic behavior.
B) ignore rival firms.
C) are price takers.
D) can only be profitable if they collude.
Answer: A

52) The prisoners' dilemma describes a single-play game that features
A) an outcome in which the participants collude.
B) a large number of rivals cooperating with each other.
C) a situation in which one player has better odds than the other.
D) two players who are unable to communicate with each other.
Answer: D

53) The simplest prisoners' dilemma is a game that, in part, requires
A) two players who are able to communicate with each other.
B) two players who are unable to communicate with each other.

C) monopolistic competition.
D) an oligopoly with one very large firm.
Answer: B

54) In a prisoner's dilemma game, each person will pick
A) their best outcome given what the other person will do
B) their best outcome.
C) their worse outcome.
D) their best outcome after consulting with the other person
Answer: A

55) The outcome of a prisoners' dilemma game with a Nash equilibrium is that ________.
A) both players deny
B) one player denies and one player confesses
C) both players confess
D) there is no equilibrium
Answer: C

56) In a prisoners' dilemma game, which of the following strategies gives the best outcome for *both* prisoners?
A) Both deny (collusion).
B) Both confess (not collude).
C) One confesses while the other denies.
D) none of the above
Answer: A

Player A

		Confess	Don't confess
	Confess	A: 3 years B: 3 years	A: 10 years B: 1 year
Player B			
	Don't confess	A: 1 year B: 10 years	A: 2 years B: 2 years

57) The table above shows the payoff matrix for a prisoners' dilemma game. The Nash equilibrium is that
A) both prisoners do not confess.
B) both prisoners confess.
C) prisoner A confesses while prisoner B does not confess.
D) prisoner A does not confess while prisoner B confesses.
Answer: B

58) The table above shows the payoff matrix for a prisoners' dilemma. In the Nash equilibrium,
A) both prisoners get 3 years in jail.

B) both prisoners get 2 years in jail.
C) both prisoners get 1 year in jail.
D) both prisoners get 10 years in jail.
Answer: A
Topic: Prisoners' Dilemma
Skill: Analytical
Question history: Previous edition, Chapter 15
AACSB: Analytical Skills

59) The problem for the prisoners in the prisoners' dilemma game in the above table is that
A) the Nash equilibrium is not the best outcome.
B) there is no equilibrium outcome.
C) neither prisoner has a workable strategy.
D) None of the above answers is correct.
Answer: A

			Firm A
		R&D	No R&D
	R & D	A: \$25 B: \$15	A: -\$3 B: \$60
Firm B			
	No R&D	A: \$60 B: -\$3	A: \$50 B: \$35

60) Firms A and B can conduct research and development (R&D) or not conduct it. R&D is costly but can increase the quality of the product and increase sales. The payoff matrix is the economic profits of the two firms and is given above, where the numbers are millions of dollars. A's best strategy is to
A) conduct R&D regardless of what B does.
B) not conduct R&D regardless of what B does.
C) conduct R&D only if B conducts R&D.
D) conduct R&D only if B does not conduction R&D.
Answer: A
Topic: Game Theory
Skill: Analytical
Question history: Previous edition, Chapter 15
AACSB: Analytical Skills

61) Firms A and B can conduct research and development (R&D) or not conduct it. R&D is costly but can increase the quality of the product and increase sales. The payoff matrix is the economic profits of the two firms and is given above, where the numbers are millions of dollars. The Nash equilibrium occurs when
A) both A and B conduct R&D.
B) only A conducts R&D.

C) only B conducts R&D.
D) neither A nor B conduct R&D.
Answer: A

			Disney
		Thanksgiving release	Christmas release
	Thanksgiving release	D: $100 F: $80	D: $105 F: $95
Fox			
	Christmas release	D: $110 F: $100	D: $95 F: $85

62) Disney and Fox must decide when to release their next films. The revenues received by each studio depends in part on when the other studio releases its film. Each studio can release its film at Thanksgiving or at Christmas. The revenues received by each studio, in millions of dollars, are depicted in the payoff matrix above. Which of the following statements correctly describes Fox's strategy given what Disney's release choice may be?
A) If Disney chooses a Thanksgiving release, Fox should choose a Christmas release.
B) If Disney chooses a Christmas release, Fox should choose a Thanksgiving release.
C) Fox should release on Christmas regardless of what Disney does.
D) Both answers A and B are correct.
Answer: D

63) Disney and Fox must decide when to release their next films. The revenues received by each studio depends in part on when the other studio releases its film. Each studio can release its film at Thanksgiving or at Christmas. The revenues received by each studio, in millions of dollars, are depicted in the payoff matrix above. Which of the following statements correctly describes Disney's strategy given what Fox's release choice may be?
A) If Fox chooses a Thanksgiving release, Disney should choose a Christmas release.
B) If Fox chooses a Christmas release, Disney should choose a Thanksgiving release.
C) Disney should release on Thanksgiving regardless of what Fox does.
D) Both answers A and B are correct.
Answer: D

64) In an oligopoly price-fixing game, each player tries to
A) minimize the market shares of its opponents.
B) maximize its own market share.
C) minimize the profits of its opponents.
D) maximize its own profit.
Answer: D

65) A cartel usually has a collusive agreement to
A) restrict output.
B) boost output.
C) lower the price.

D) increase the number of firms in the industry.
Answer: A

66) A cartel is a group of firms that
A) produce differentiated products.
B) produce products that are complements.
C) agree to restrict output to boost their profit.
D) agree to boost output to boost their profit.
Answer: C

67) The maximum economic profit that can be made by a duopoly that colludes is equal to the ________.
A) economic profit made by duopolists who cheat
B) normal profit made by an oligopoly
C) economic profit made by a monopoly
D) normal profit made by firms in perfect competition
Answer: C

68) Two firms, Alpha and Beta, produce identical computer hard drives. They have identical costs, and the hard drives they produce are identical. The industry is a natural duopoly. Alpha and Beta enter into a collusive agreement, according to which they split the market equally. If both firms cheat on the agreement so the market is the same as a competitive market,
A) they will operate in a way indistinguishable from a monopoly.
B) each firm will make zero economic profit.
C) each firm will increase its economic profit.
D) the price of a hard drive will be above marginal cost.
Answer: B

69) Cartels are typically subject to cheating by their members because
A) if the other firms stick to the agreement, a firm can increase its profits by cutting its price.
B) barriers to entry do not exist so new entrants will join.
C) the U.S. Justice Department will punish any cartel agreement before the cartel has had a chance to operate.
D) product differentiation allows the firms in the cartel to cheat.
Answer: A

			American
		Cheat	Comply
	Cheat	A: \$0 N: \$0	A: -\$2,000 N: \$4,000
National			
	Comply	A: \$4,000 N: -\$2,000	A: \$3,000 N: \$3,000

70) There are two can companies, American and National, which have entered into a collusive agreement. The payoff matrix of economic profits is above. If both firms cheat on the collusive agreement, what amount of economic profit is made by American?
A) $0
B) $3,000
C) $4,000
D) -$2,000
Answer: A

71) There are two can companies, American and National, which have entered into a collusive agreement. The payoff matrix of economic profits is above. If National is able to cheat on the agreement but American complies with the agreement, what amount of economic profit is made by National?
A) $2,000
B) $3,000
C) $4,000
D) $6,000
Answer: C