

## QUIZ 8

## VERSION 1

- 1) A monopolistically competitive firm and a monopoly are similar because
  - A) each firm has a large number of insignificant competitors.
  - B) both firms will earn zero profits in the long run.
  - C) both firms always operate at their point of minimum average total cost.
  - D) both firms must behave strategically toward other firms in the industry.
  - E) each firm sets price above marginal cost.
  
- 2) Unlike perfectly competitive and monopolistically competitive firms, oligopolists
  - A) always make positive profits.
  - B) always face only a small number of competing firms in their industry.
  - C) earn zero profits in the long run.
  - D) take account of the reactions of their competitors to their output decisions.
  - E) operate where  $MR = MC$ .
  
- 3) Compared with perfect competition, monopolistic competition results in
  - A) the same degree of variety of the good, but higher unit costs.
  - B) a more efficient social outcome.
  - C) a wider variety of the good produced at higher unit cost.
  - D) fewer varieties of the good produced at higher unit costs.
  - E) fewer varieties of the good produced at lower unit costs.
  
- 4) Long-run equilibrium for a monopolistically competitive industry results in
  - A) price equal to  $MC$  at the minimum level of the firm's  $ATC$  curve.
  - B) each firm's demand curve tangent to its  $ATC$  curve.
  - C) each firm earning positive profits.
  - D) the firm's demand curve cutting its  $MC$  curve at the minimum level of the  $ATC$  curve.
  - E) each firm's  $MC$  curve intersecting  $MR$  at the minimum level of its  $ATC$  curve.
  
- 5) In long-run equilibrium a monopolistically competitive industry operates where
  - A)  $P > AC$ .
  - B)  $AC$  is increasing.
  - C)  $AC >$  minimum average cost.
  - D)  $MR > MC$ .
  - E)  $AC = MC$ .
  
- 6) Oligopolists make decisions after taking into account the expected reaction of their competitors. Oligopolists are exhibiting
  - A) collusive behaviour.
  - B) cooperative behaviour.
  - C) strategic behaviour.
  - D) non-rational behaviour.
  - E) non-strategic behaviour.
  
- 7) A Nash equilibrium
  - A) is an example of a cooperative equilibrium.
  - B) will in general produce the greatest welfare.
  - C) where all players are better off than they would be with any other combination of strategies.
  - D) is an unstable equilibrium.
  - E) occurs where all players are maximizing their payoffs given the current behaviour of the other players.

- 8) Characteristics of a monopolistic competitive market include
- A) a small number of firms in the industry.
  - B) ease of entry and exit.
  - C) difficult in exiting the industry.
  - D) economic profits in the long run.
  - E) a horizontal demand curve facing each individual firm.

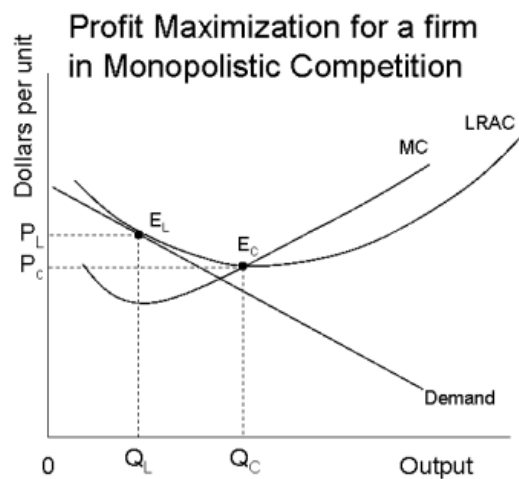


FIGURE 1

- 9) Refer to Figure 1. In the long run a monopolistically competitive firm will
- A) produce  $Q_C$  at Price  $P_C$ .
  - B) produce  $Q_L$  at Price  $P_L$ .
  - C) produce the output where  $AC$  is at its minimum.
  - D) produce  $Q_L$  at Price  $P_C$ .
  - E) produce  $Q_C$  at Price  $P_L$ .
- 10) Refer to Figure 1. The excess capacity theorem of a monopolistically competitive in equilibrium is shown
- A) because  $Q_L$  is less than  $Q_C$ .
  - B)  $AC$  at  $Q_L$  is not at its minimum.
  - C) by  $P_L = MC$  with zero profits, is greater than  $AC$ .
  - D) by  $P_L = AC$  with zero profits.
  - E) by  $P_L$  is greater than  $P_C$ .

## QUIZ 8

## VERSION 2

- 1) A characteristic of a monopolistically competitive market is that
  - A) each firm's marginal revenue curve lies above its demand curve.
  - B) the firms sell an identical product.
  - C) each firm faces a downward-sloping demand curve.
  - D) entry into the industry is difficult.
  - E) the firms in the industry engage in price competition.
- 2) If entry into a monopolistically competitive industry occurs, the
  - A) demand curve for each existing firm will shift to the left.
  - B) demand curves for the existing firms will remain unchanged.
  - C) industry demand curve will shift to the right.
  - D) demand curve for each existing firm will shift to the right.
  - E) industry demand curve will shift to the left.
- 3) In long-run equilibrium, a monopolistically competitive industry is characterized by
  - A) positive profits as a result of barriers to entry.
  - B) zero profits for all firms in the industry.
  - C) positive profits for all firms in the industry.
  - D) a perfectly elastic demand curve facing each firm in the industry.
  - E) all firms operating at the minimum point of their long-run average cost curves.
- 4) In the long run a monopolistically competitive firm will
  - A) produce where  $P > \min ATC$ .
  - B) operate where price = marginal cost.
  - C) produce the output where  $AC$  is at its minimum.
  - D) lose money.
  - E) earn positive economic profits.
- 5) A monopolistically competitive firm maximizes profits
  - A) when  $P = ATC$ .
  - B) by maximizing total revenue.
  - C) by equating  $MC$  with  $MR$ .
  - D) when  $P = AVC$ .
  - E) by equating  $MC$  with price.

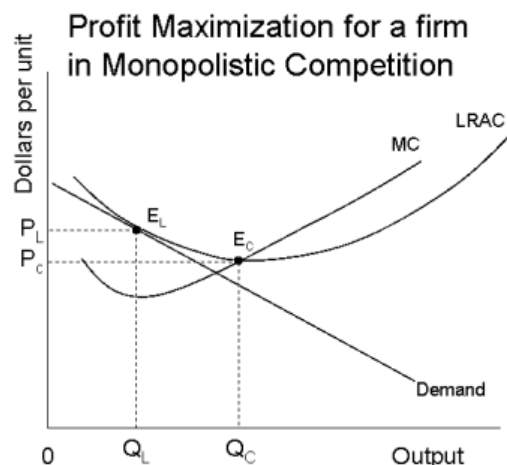


FIGURE 1

6) Refer to Figure 1 on the previous page. In the long run a monopolistically competitive firm will

- A) make profit by producing at  $Q_C$  and charging Price  $P_L$ .
- B) lose money by producing at  $Q_L$  and charging Price  $P_C$ .
- C) maximize profit but break even by producing at  $Q_L$  and charging Price  $P_L$ .
- D) produce the output  $Q_C$  where  $AC$  is at its minimum.
- E) maximize profit and make positive profit by producing at  $Q_L$  and charging Price  $P_L$ .

7) Refer to Figure 1. If demand were greater, that is higher and to the right of the demand shown, the average firm in the industry would

- A) be making losses and some firms would exit the industry in the long run.
- B) would expand its output in the long run.
- C) increase costs in order to break even at  $P_L$  and  $Q_L$  in the long run.
- D) decrease costs in order to break even at  $P_L$  and  $Q_L$  in the long run.
- E) be making profits and firms would enter the industry in the long run.

8) One characteristic of oligopolistic markets is

- A) mutual interdependence between firms.
- B) ease of entry and exit.
- C) zero profits in the long run.
- D) a horizontal demand curve facing each individual firm.
- E) a very large number of firms in the industry.

9) If joint profits are to be maximized in an oligopolistic industry, firms

- A) must form a cartel in order to be legal.
- B) can produce whatever output at the agreed to price.
- C) then jointly decide on an advertising program.
- D) need to determine the share of output each will produce.
- E) have no incentive to cheat.

10) Two firms may make a sealed bid on a contract of either \$100 or \$180. The lowest bid wins, or if both firms bid the same price the job is shared equally and each firm earns half the value of its bid.

The cooperative outcome in this situation is

- A) one firm bids \$100 and the other does not bid.
- B) both firms bid \$180.
- C) one firm bids \$100, the other bids \$180.
- D) both firms bid \$100.
- E) one firm bids \$180 and the other does not bid.

## QUIZ 8

## VERSION 3

- 1) A characteristic of a monopolistic competitive markets is
  - A) barriers to entry into the market.
  - B) a downward-sloping demand curve facing each firm.
  - C) economic profits in the long run.
  - D) inelastic demand facing each firm.
  - E) few firms in the industry.
  
- 2) Monopolistic competition is similar to perfect competition in that
  - A) neither has significant barriers to entry.
  - B) firms in both types of market structure engage in non-price competition.
  - C) each firm faces a horizontal demand curve.
  - D) non-price competition is a characteristic of both market structures.
  - E) firms in both types of market structures produce a standardized product.
  
- 3) When a monopolistically competitive industry is in long-run equilibrium, each firm will be operating where price is
  - A) greater than marginal cost but equal to average total cost.
  - B) less than marginal cost and equal to average total cost.
  - C) greater than average total cost and greater than marginal cost.
  - D) greater than average total cost but equal to marginal cost.
  - E) equal to average total cost and to marginal cost.
  
- 4) When a monopolistically competitive industry is in long-run equilibrium, the excess capacity in an individual firm is indicated by the difference between
  - A) the output at which  $ATC$  is at a minimum and the output at which marginal revenue is equal to marginal cost.
  - B) zero and the output at which the demand curve is tangent to the  $ATC$  curve.
  - C) price and marginal cost.
  - D) the output at which  $ATC$  is at a minimum and the output at which price equals marginal cost.
  - E) price and average cost.
  
- 5) Assume a monopolistically competitive firm decides to raise its price. The theory of monopolistic competition predicts that
  - A) this firm would lose some but not all of its customers due to product differentiation.
  - B) this firm would lose all of its customers due to the nature of the demand curve facing the firm.
  - C) this firm would increase its profits.
  - D) increasing the price has no effect on profits.
  - E) a large loss of customers as the demand facing the firm is inelastic.

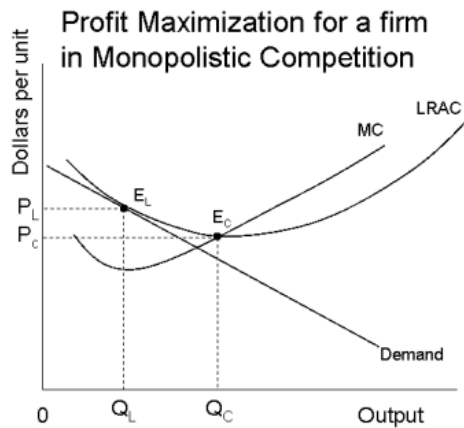


FIGURE 1

- 6) Refer to Figure 1. In the long run a monopolistically competitive is allocatively inefficient because at equilibrium
- $MC$  is greater than price ( $P_L$ ).
  - $MC$  is greater than  $AC$ .
  - $AC$  at  $Q_L$  is not at its minimum.
  - price is greater than  $AC$  at  $Q_L$ .
  - price( $P_L$ ) is greater than  $MC$  at  $Q_L$ .
- 7) Refer to Figure 1. If demand were smaller, that is lower and to the left of the demand shown, the average firm in the industry would
- increase costs in order to break even at  $P_L$  and  $Q_L$  in the long run.
  - be making losses and some firms would exit the industry in the long run.
  - decrease costs in order to break even at  $P_L$  and  $Q_L$  in the long run.
  - be making profits and firms would enter the industry in the long run.
  - exit the industry and the industry would shut down.
- 8) Unlike perfectly competitive and monopolistically competitive firms, oligopolists
- take account of the reactions of their competitors to their output decisions.
  - operate where  $MR = MC$ .
  - earn zero profits in the long run.
  - always make positive profits.
  - always face only a small number of competing firms in their industry.
- 9) When an oligopoly is in a cooperative equilibrium (i.e., maximizing joint profits), which of the following is not true?
- No individual firm will have an incentive to change output.
  - An individual firm could increase profits by cheating.
  - $P > MC$  for each individual firm.
  - $MR > MC$  for each individual firm.
  - The firms in the industry will jointly be earning monopoly profits.
- 10) A Nash equilibrium
- is an unstable equilibrium.
  - will in general produce the greatest welfare.
  - occurs where all players are maximizing their payoffs given the current behaviour of the other players.
  - where all players are better off than they would be with any other combination of strategies.
  - is an example of a cooperative equilibrium.

## QUIZ 8

## VERSION 4

- 1) Characteristics of a monopolistic competitive market include
  - A) a horizontal demand curve facing each individual firm.
  - B) price taking firms.
  - C) economic profits in the long run.
  - D) a very large number of firms in the industry.
  - E) barriers to entry into the market.
- 2) In a monopolistically competitive industry the freedom of entry and exit implies
  - A) a negatively sloped demand curve for the industry.
  - B) zero profits in long-run equilibrium.
  - C) strategic behaviour with regard to other firms in the industry.
  - D) brand proliferation.
  - E) excess capacity in the industry.
- 3) The excess-capacity theorem predicts that in long-run equilibrium
  - A) monopolistically competitive firms produce where average total costs exceed the minimum.
  - B) monopolys restrict output below the level where average total costs are minimized.
  - C) profit-maximizing firms choose to operate with some degree of excess capacity.
  - D) perfectly competitive firms operate with some excess capacity.
  - E) the economy will always produce more than current demand.
- 4) The main difference between perfect competition and monopolistic competition is
  - A) there are more firms in perfect competition.
  - B) monopolistic competition has lower costs.
  - C) monopolistic competition has product differentiation.
  - D) firms earn profits in the long run in monopolistic competition.
  - E) perfect competition has freedom of entry and exit.
- 5) Assume a monopolistically competitive firm decides to raise its price. The theory of monopolistic competition predicts that
  - A) this firm would lose some but not all of its customers due to product differentiation.
  - B) increasing the price has no effect on profits.
  - C) this firm would lose all of its customers due to the nature of the demand curve facing the firm.
  - D) a large loss of customers as the demand facing the firm is inelastic.
  - E) this firm would increase its profits.

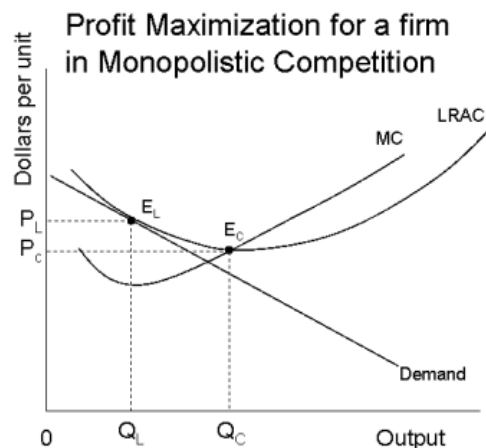


FIGURE 1

6) Refer to Figure 1 on the previous page. In the long run a monopolistically competitive is productively inefficient because at equilibrium

- A) price is greater than  $AC$  at  $Q_L$ .
- B) price( $P_L$ ) is greater than  $MC$  at  $Q_L$ .
- C)  $AC$  at  $Q_L$  is not at its minimum.
- D)  $MC$  is greater than price ( $P_L$ ).
- E)  $MC$  is greater than  $AC$ .

7) Refer to Figure 1.  $P_C$   $Q_C$  shows the perfectly competitive industry equilibrium and  $P_L$   $Q_L$  shows the monopolistic competitive industry equilibrium. This illustrates

- A) the excess capacity theorem.
- B) the 'goodness' of perfect competition.
- C) the 'badness' of monopolistic competition.
- D) the higher price and lower quantity under monopolistic competition as compared to perfect competition.
- E) that any monopolistic competitive industry will eventually become perfectly competitive.

8) A duopoly is

- A) a monopoly that behaves as an oligopolist.
- B) an oligopoly with only two buyers.
- C) a monopolistic competitor that behaves as an oligopolist.
- D) an oligopoly with only two products.
- E) an oligopoly with only two sellers.

9) Oligopolistic firms can maximize their joint profits

- A) by advertising and raising the overall minimum scale of operation.
- B) by increasing set-up costs.
- C) by product differentiation and brand-image advertising.
- D) with brand proliferation.
- E) if they cooperate to produce the monopoly output.

10) Consider an example of the prisoner's dilemma where 2 firms are making sealed bids on a contract and each firm is allowed to bid either \$100 or \$180. If both firms bid the same price, the job is shared equally and each firm earns half the value of its bid. Otherwise the lowest bidder wins the contract and receives the full value of its bid. The strategic (non-cooperative) outcome in this situation is

- A) both firms bid \$100.
- B) both firms bid \$180.
- C) one firm bids \$100, the other bids \$180.
- D) both firms refuse to bid but share the contract.
- E) both firms refuse to bid under such conditions.



**QUIZ 8      VERSION 1**  
**Answer Section**

- 1) E
- 2) D
- 3) C
- 4) B
- 5) C
- 6) C
- 7) E
- 8) B
- 9) B
- 10) A

**QUIZ 8      VERSION 2**  
**Answer Section**

- 1) C
- 2) A
- 3) B
- 4) A
- 5) C
- 6) C
- 7) E
- 8) A
- 9) D
- 10) D

**QUIZ 8      VERSION 3**  
**Answer Section**

- 1) B
- 2) A
- 3) A
- 4) A
- 5) A
- 6) E
- 7) B
- 8) A
- 9) A
- 10) C

**QUIZ 8      VERSION 4**  
**Answer Section**

- 1) D
- 2) B
- 3) A
- 4) C
- 5) A
- 6) C
- 7) D
- 8) E
- 9) E
- 10) A