



BUEC 311: Business Economics, Organization and Management

Problem Set #7

Firm Theory and Perfect Competition

November 19, 2020

Single Answer

1) A _____ is a governance structure where owners are not personally liable.

- A) sole proprietorship
- B) partnership
- C) mixed enterprise
- ☒ D) corporation

Answer: D

2) Economists typically assume that the owners of firms wish to

- A) produce efficiently.
- B) maximize sales revenues.
- ☒ C) maximize profits.
- D) All of the above.

Answer: C

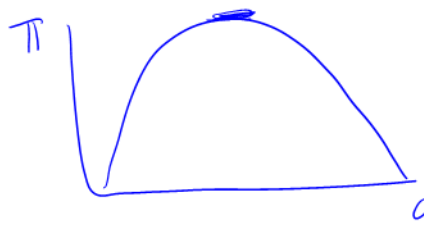
3) A small business owner earns \$50,000 in revenue annually. The explicit annual costs equal \$30,000. The owner could work for someone else and earn \$25,000 annually. The owner's accountant would likely measure profit as 20k but an economic assessment would estimate a profit of 5k.

- A) \$20,000, \$20,000
- ☒ B) \$20,000, -\$5,000
- C) \$25,000, -\$5,000
- D) \$25,000, \$20,000

Answer: B

4) A firm optimally sets its output where

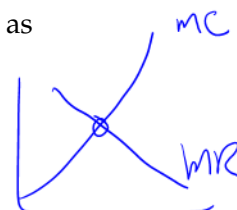
- A) marginal profit is zero. ✓
- B) marginal revenue is maximized. ✗
- C) marginal profit equals marginal revenue. ✗
- D) marginal profit is maximized. ✗



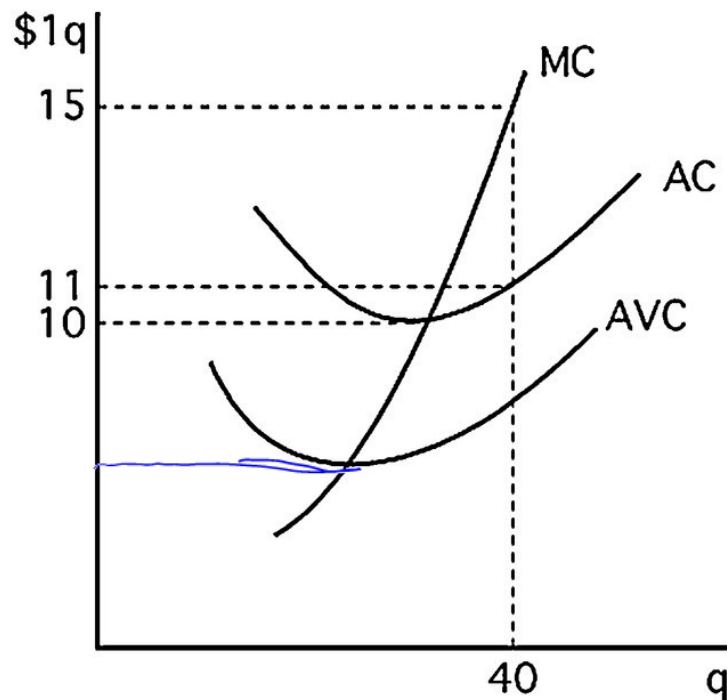
Answer: A

5) If marginal revenue equals marginal cost, the firm is maximizing profits as long as

- A) the resulting profits are positive. ✗
- ☒ B) marginal cost exceeds marginal revenue for greater levels of output.
- C) the average cost curve lies above the demand curve.
- D) All of the above are required.



Answer: B



6) The above figure shows the cost curves for a competitive firm. If the firm is to earn economic profit, price must exceed

- A) \$0.
- B) \$5.
- C) \$10.
- D) \$11.

Answer: C

7) Using the above figure which shows the cost curves for a competitive firm, you can conclude that the firm should shut down in the short run if the price is equal to any number below:

- A) \$15.
- B) \$10.
- C) \$11
- D) None of the above

Answer: D

8) If a competitive firm maximizes short-run profits by producing some quantity of output, which of the following must be TRUE at that level of output?

- A) $p = MC$
- B) $MR = MC$
- C) $p \geq AVC$
- D) All of the above.

Answer: D

9) If a profit-maximizing firm finds that, at its current level of production, $MR < MC$, it will

- ☒ A) decrease output.
- ☐ B) increase output.
- ☐ C) shut down.
- ☐ D) operate at a loss.

Answer: A

10) True or false: If a firm sets marginal revenue equal to marginal cost it will make an economic profit.

Answer: ☒ False. When a firm sets $MR = MC$ it maximizes profits, but the profit-maximizing level of output might still be negative (the smallest loss possible).

11) Economists define a market to be competitive when the firms

- ☐ A) spend large amounts of money on advertising to lure customers away from the competition.
- ☐ B) watch each other's behavior closely.
- ☒ C) are price takers.
- ☐ D) All of the above.

Answer: C

12) Firms that exhibit price-taking behavior

- ☐ A) wait for other firms to set price, take it as given, and charge a higher price.
- ☐ B) have outputs that are too small to influence market price and thus take it as given. ✓
- ☐ C) take pricing behavior in their own hands.
- ☐ D) are independently capable of setting price.

Answer: B

13) In a perfectly competitive market

- ☐ A) firms can freely enter and exit.
- ☒ B) firms sell a differentiated product.
- ☐ C) transaction costs are high.
- ☐ D) All of the above.

Answer: A

14) In a perfectly competitive market

- ☒ A) buyers are price-takers.
- ☐ B) buyers view products from different firms as differentiated.
- ☐ C) individual buyers have horizontal demand curves.
- ☐ D) firms' demand curves are vertical.

Answer: A

15) The economist's definition of the short run is

- ☐ A) usually 3-6 months.
- ☒ B) when at least one of the firm's input choices are fixed

- C) when a firm has to decide whether or not to exit.
- D) identical to the long run for most firms.
- E) All of the above

Answer: B

16) In the short run

- ☒ A) firms will shut down if operating at a loss.
- ☒ B) profit maximizing firms have identical short run supply curves.
- ☒ C) firms may choose to operate at a loss.
- ☒ D) most firms have short run supply curves that are the same as their long run supply curves.

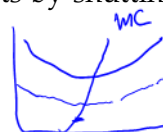
Answer: C

16) In the long run

- ☒ A) firms will shut down if operating at a loss.
 - ☒ B) profit maximizing firms have identical supply curves.
 - ☒ C) firms may choose to operate at a loss.
 - ☒ D) most firms have supply curves that are the same as their long run average cost curves.
 - E) all of the above
- Answer: A

17) If a competitive firm finds that it maximizes short-run profits by shutting down, which of the following must be TRUE?

- ☒ A) $p < AVC$ for all levels of output.
 - B) $p < AVC$ only for the level of output at which $p = MC$.
 - C) $p < AVC$ only if the firm has no fixed costs.
 - D) The firm will earn zero profit.
- Answer: A



18) The competitive firm's supply curve is equal to

- A) its marginal cost curve. — *short run vs long run*
 - ☒ B) the portion of its marginal cost curve that lies above AC.
 - ☒ C) the portion of its marginal cost curve that lies above AVC.
 - D) the portion of its marginal cost curve that lies above AFC.
- Answer: C

19) In the long run, profits will equal zero in a competitive market because of

- ☒ A) constant returns to scale.
 - B) identical products being produced by all firms.
 - C) the availability of information.
 - ☒ D) free entry and exit.
- Answer: D, although you'd win an argument if you said that this only holds with identical firms

20) A firm will enter a competitive market when

- A) it can gather market share at the expense of incumbent firms.
 - B) it would not be the last firm entering.
 - ☒ C) it can earn a positive long-run profit.
 - D) the long-run supply curve is upward sloping.
- Answer: C