Homework 4

Due Date: Nov-15/16-2018

I. Multiple Choice Questions

1. A fixed cost is:
A) the cost of any input whose per-unit price has been fixed, whether by long-term contract or by some similar means.
B) a cost whose increases are exactly proportional to increases in output.
C) any component included in average cost which enters in AC as the same fixed per-unit amount, no matter what the level of plant output may be.
D) a cost which the firm would incur even if its output were zero.
E) none of the above.

2. A firm's MC curve:
A) is essentially its TC curve scaled for its fractional share of the market
B) shows the addition to total cost needed to produce each additional unit of output.
C) is its unit cost of output, TC/q.
D) is approximately equal to all the above.
E) is defined by none of the above.

3. Which of the following is true at the quantity of output where average cost has reached its minimum level?
A) AVC = FC.
B) MC = AVC.
C) MC = AC.
D) AC = AFC.
E) Output price = AVC.

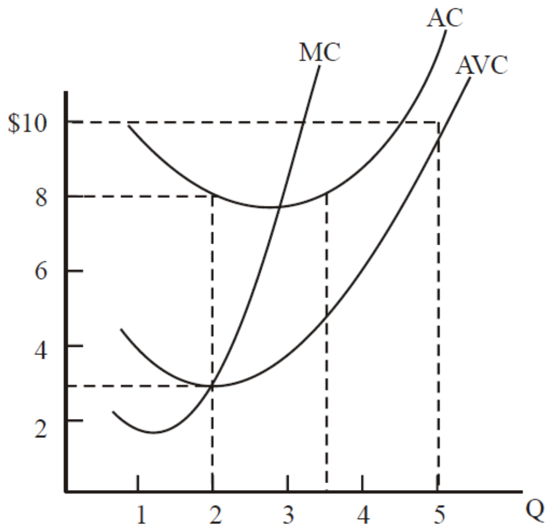
4. Which of the following is true if marginal cost is above average variable cost as output rises?
A) Average total cost must be falling.
B) Average fixed cost must be rising.
C) Average variable cost must be falling.
D) Average variable cost must be rising.
E) None of the above.

5. Diminishing returns to factors of production cause:
A) diminishing opportunity costs.
B) the ratio of fixed costs to total costs to increase.
C) average fixed costs to decrease.
D) marginal costs to rise.
E) none of the above.

6. If output rises and total costs remain fixed, then:
A) average cost will fall.
B) average cost will rise.
C) average cost will eventually increase.
D) fixed cost will eventually rise.
E) variable cost will eventually become fixed at some maximum level.

7. If the total cost of producing 6 units is $48 and the marginal cost of the seventh unit is $15, then:
A) the average total cost of 7 units is $9.
B) the average variable cost of 7 units is $9.
C) fixed costs are $8.
D) fixed costs are $33.
E) none of the above are true.

Use the following to answer questions 8-9:



8. In the figure above, what is AVC at Q = 5?
A) 9
B) 10
C) 12
D) 17.5
E) None of the above.

9. In the figure above, what are total fixed costs at Q = 2?
A) 5
B) 10
C) 13.75
D) 15
E) None of the above.

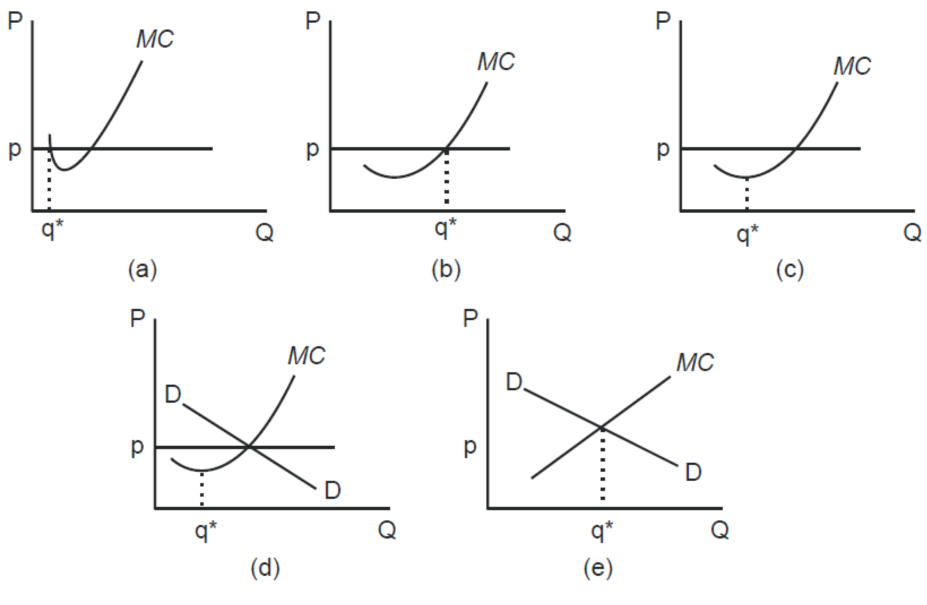
10. Profit maximization requires a firm to do which of the following:

A) manage internal operations efficiently.
B) prevent waste.
C) encourage worker morale.
D) choose efficient production processes.
E) all of the above.

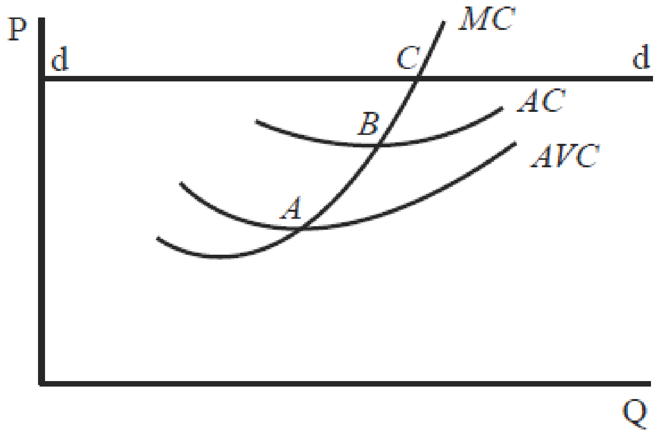
11. The long-run supply curve of an individual firm in perfect competition is the same thing as:
A) the rising segment of its marginal cost curve, above average cost.
B) the rising segment of its average cost curve.
C) its entire average cost curve.
D) that entire part of its total cost curve in which total cost rises or remains constant as output increases.
E) none of the above.

12. If you are a wheat farmer and you want to earn as much profit as you can, you should do which of the following:
A) try to produce and sell that quantity of output at which marginal cost has risen to equality with price.
B) try to produce and sell that quantity of output at which marginal cost is equal to average variable cost.
C) try to produce and sell that quantity of output at which marginal cost has reached its minimum possible level.
D) never let marginal cost reach equality with price, since this is the point at which profits become zero.
E) keep marginal cost above price.

13. Which panel in the figure below most accurately indicates by q* the level of output which a single supplier in a perfectly competitive industry will produce, given it produces a positive amount?



14. Which of the following statements is correct in reference to the figure below?



A) B is the shutdown point.
B) B is the profit-maximizing point.
C) C is the zero-profit point.
D) A is the shutdown point.
E) C is the shutdown point.

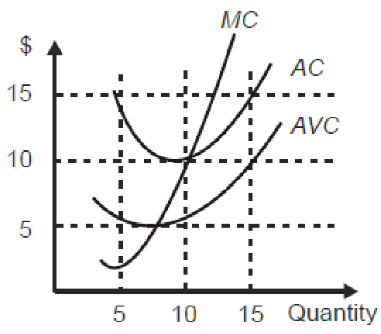
15. The zero-profit point for a perfectly competitive firm occurs where the price equals the minimum point of the:
A) AVC curve.
B) AC curve.
C) MC curve.
D) AFC curve.
E) none of the above.

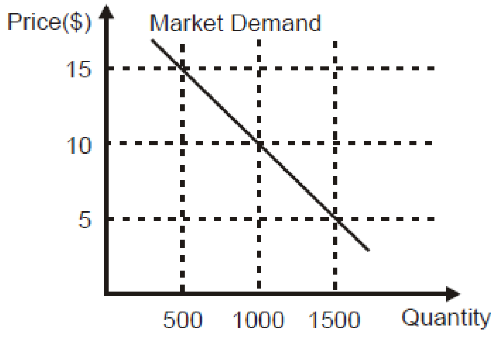
16. "I'm losing money, but with my investment in equipment I can't afford to shut down at this time." If this entrepreneur is attempting to maximize profits, his behavior is:
A) rational if the firm is covering its variable costs.
B) rational if the firm is covering its fixed costs.
C) irrational since plant closing is necessary to eliminate losses.
D) irrational since fixed costs are eliminated if a firm shuts down.
E) none of the above.

17. An individual firm in a perfectly competitive industry faces a demand curve which is:
A) downward sloping.
B) relatively inelastic.
C) perfectly elastic.
D) specific to each firm.
E) upward sloping.

18. Suppose that all the firms in a given market can be characterized by the cost structure illustrated in the figure on the left. If market demand is as indicated in the

figure on the right, the number of firms required to support long run equilibrium is:





A) 90.
B) 100.
C) 110.
D) 120.
E) some number greater than 50 that cannot be determined with the information provided.

19. If, in long run equilibrium, the competitive price of some good is $16.67, then, for each and every firm in the industry,
A) marginal cost > average cost = $16.67.
B) marginal cost < average cost = $16.67.
C) $16.67 = marginal cost = average cost.
D) $16.67 = marginal cost > average cost.
E) $16.67 = marginal cost < average cost.

20. If prices fall in a perfectly competitive industry, then the firms in that industry will in the short run:
A) not decrease in number unless price falls below ATC for some firms.
B) try to reduce production or shut down.
C) keep output at the same level but make losses.
D) advertise.
E) both A and B.

21. Pareto efficiency occurs:
A) when no possible reorganization of production or distribution can make anyone better off without making someone else worse off.
B) when everyone gets a fair share of the goods produced.
C) when reorganizing the production makes everyone better off.
D) when I am better off and everyone else stays the same.
E) none of the above.

22. The zero-profit price for a firm in perfect competition:
A) is a price just sufficient to cover fixed cost.
B) is at the point where total revenue from sales is at its minimum level.

C) occurs at the point where marginal and average cost are equal.
D) occurs at the point where marginal cost is at its minimum level.
E) is not correctly described by any of the above.

23. Allocative efficiency does not necessarily mean:
A) a socially desirable distribution of resources.
B) zero economic profits for firms.
C) price is equal to marginal cost.
D) price is equal to average costs.
E) there are many firms in the industry.

II. Short Answers

24. Question 2, "Questions for Discussion", Chapter 7 of the textbook.

25. Question 5, "Questions for Discussion", Chapter 7 of the textbook.

26. Question 4, "Questions for Discussion", Chapter 8 of the textbook.

27. Question 8, "Questions for Discussion", Chapter 8 of the textbook.