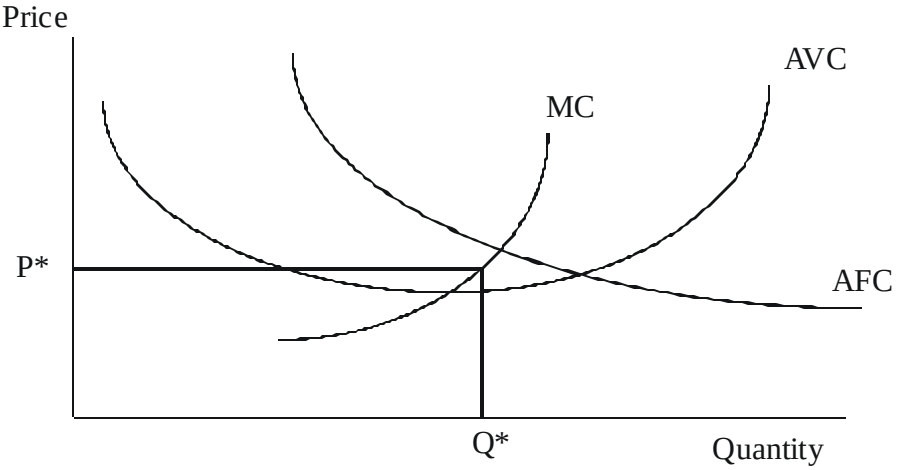
Test 1 – Econ 5000 Name_____
Spring 2002 – Dr. Rupp
(Keep your answers covered. Bubble in name and id#)

1.The profit maximizing output level for a perfectly competitive firm is where
A) P = MC.
B) P = AVC.
C) MC = ATC.
D) MC = AVC.
E) MC = AFC.

Use the following to answer question 2:



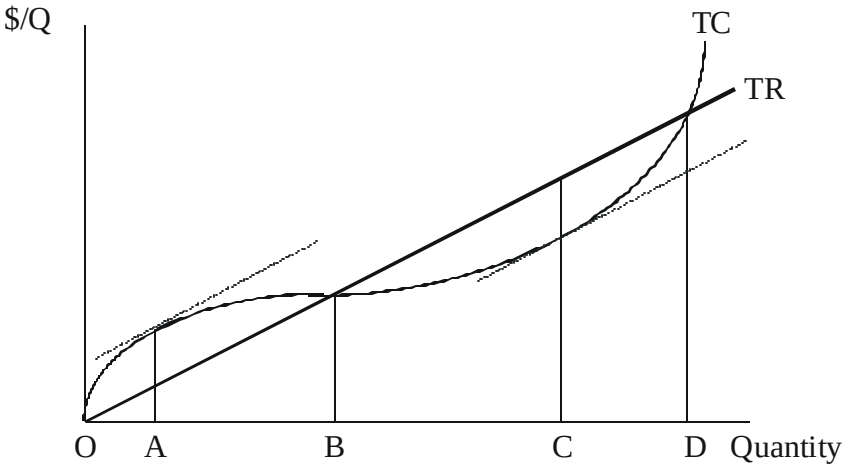
2. At a price of P*, in the above graph, the profit maximizing level of output is
A) Q*.
B) above Q*.
C) below Q*.
D) where MC equals AVC.
E) where MC equals AFC.

3. If price is below the AVC curve, then
A) the firm should shut down.
B) the firm should operate in the short run but not the long run.
C) set price = marginal cost.
D) the firm should operate in the long run but not in the short run.

4. If price is below the ATC curve yet above AVC, then
A) the firm should shut down.
B) the firm should operate in the short run but not the long run.
C) set price = marginal cost.
D) the firm should operate in the long run but not in the short run.

5. Which of the following is **not** a condition for perfect competition?
A) prices are free to adjust
B) the goods offered by sellers are largely the same
C) barriers to entry exist
D) firms can change output and not affect price
E) individuals can increase demand and not affect price

Use the following to answer question 6:



6. In the above diagram profit is maximized at point
A) A.
B) B.
C) C.
D) D.

7. Producer surplus for a firm is
A) the area above the marginal cost curve but below the price.
B) the area below the marginal cost curve.
C) the area below the demand curve but above the price.
D) the area below the demand curve but above the supply curve.

8. The perfectly competitive firm has ATC = 10/Q + Q, MC = 2Q, and TC = 10 + Q^2. If the profit maximizing output is 2, how much are fixed cost?
A) 0.
B) 4.
C) 7.
D) 10.
E) 14.

9. In the long-run, perfectly competitive firms make:
A) zero economic profits.
B) positive economic profits.
C) negative economic profits.
D) positive or zero economic profits.
E) positive, negative or zero economic profits.

Use the following figure to answer the next two questions:

10. In the above diagram the profit maximizing output level is
A) 5
B) 10
C) 15
D) 20
E) 25

11. In the above diagram, at the profit maximizing output level profit is:
A) 40
B) 75
C) 0
D) 80
E) 100

Fill in all of the blanks in the table below:

Q	Fixed Cost	Variable Cost	Total Cost	Marginal Cost	Average Fixed Cost	Average Variable Cost	Average Total Cost
0	50			--	--	--	--
1			70				
2		35					
3				10			
4							25

12. In the table above how much is marginal cost of producing the first unit of output?
A) 10
B) 15
C) 20
D) 50
E) 70

13. In the table above what is the total cost of producing the third unit of output?
A) 10
B) 75
C) 45
D) 85
E) 95

14. In the table above what is the average variable cost of producing the fourth unit of output?
A) 10
B) 12.5
C) 15
D) 17.5
E) 20

15. What economic concept displays the relationship between inputs and output?
A) average fixed cost.
B) positive externalities.
C) invisible hand.
D) production function.

16. In the long run
A) all factors of production are fixed.
B) all factors of production are variable.

17. A production function where inputs are doubled and output more than doubles is called:
A) diminishing returns.
B) decreasing returns to scale.
C) constant returns to scale.
D) increasing returns to scale.

18. Total cost is broken down into two components:
A) average cost and marginal cost.
B) average cost and fixed cost.
C) variable cost and marginal cost.
D) variable cost and fixed cost.

19. The short run total cost of zero output is equal to
A) variable cost.
B) fixed cost.
C) zero.
D) marginal cost.

20. Determine the returns to scale for the following function: Q = 10K + 2L
A) Constant returns to scale
B) Decreasing returns to scale
C) Increasing returns to scale

21. Determine the returns to scale for the function: Q = KL
A) Constant returns to scale
B) Decreasing returns to scale
C) Increasing returns to scale

Use this table to answer the next three questions:

Q	ATC	AVC	MC
1	44	4	4
2	28	8	12
4	26	16	32
6	31	24	48
8	37	32	64

22. At a price of $32, how many units of output will this firm produce in the **short run**?
A) 0
B) 1
C) 2
D) 4
E) 6

23. At a price of $32, how many units of output will this firm produce in the **long run**?
A) 0
B) 1
C) 2
D) 4
E) 6

24. What is the profit (or loss) at price of $32 in the **short run**?
A) 0
B) -40
C) 8
D) 6
E) 24

25. A perfectly competitive firm has the cost curves: MC = 2 + 4Q and AVC = 2 + 2Q. How many units of output (if any) will it produce at a market price of $14?
A) 0
B) 2
C) 3
D) 4
E) 6

26. Using the information from the previous question, at what level of fixed cost does this firm earn zero economic profit?
A) 0
B) 24
C) 12
D) 18
E) 42

27. How much is producer surplus?
A) 0
B) 24
C) 12
D) 18
E) 42

28. What is the Herfindahl-Hirschman Index for three firms with market share: 50%, 30%, and 20%?
A) 100
B) 10,000
C) 2,500
D) 2,800
E) 3,800

29. What has happened to the market share of the largest five brewers since WWII?
    A) Increased
    B) Decreased
    C) Unchanged

30. Comparing budget beers (Milwaukee's Best) with super-premium beers (Michelob). What is the biggest difference between these types of beers?
    A) Taste
    B) Advertising
    C) Yeast
    D) Hops
    E) Barley

I have neither given nor received aid on this examination_____.
(signature)