

Name _____

Pledge: *No Aid; No Violations*

Sign _____

Mike Lovell

November 5, 1997

Quiz #2

Please Note:

In order to make sure that no students will be late for the next class, the examination must end at 9:50 sharp!

Start your answers in the space provided, but continue if necessary on the back of the page or on a separate sheet of paper. Extra sheets are available in the front of the room.

Show your calculations in order that you may receive partial credit even if you make a numerical error.

Help! I will not remain in the classroom during the examination, but I will drop in occasionally to answer any questions you may have. If you have a serious problem, you can find me in my office, room 308 PAC, x2355

Part I: Tricky Statements: [80 points] Place a “T” in front of each correct statement; otherwise an “F”. Then carefully correct all incorrect statements appropriately.

1. The income statement is a snapshot picture reporting a firm’s assets and liabilities and net worth at the end of the fiscal year (e.g., Dec 31, 1996).
2. Accountants prefer accelerated depreciation to straight-line depreciation because it is the most accurate way of evaluating the firm’s physical assets.
3. If you sell an asset (e.g. stock in a corporation or your investment in an apartment house) for more than you paid for it, you will have to pay Uncle Sam a tax on your “realized capital gain.” However, if you hold on to the asset until you die, your heirs will only have to pay the capital gains tax on any increase in value that occurs after your death.
4. Tax *avoidance* is legal; tax *evasion* is illegal!
5. At the “shut-down point” marginal cost is equal to average variable cost.
6. At the “break-even point” marginal cost is equal to average total cost.

7. An oligopoly is characterized by a small number of sellers, a monopoly by a single seller and a monopsony by a single buyer. All are price-setters rather than price-takers.
8. The production function $Q = 10L^{3/4} K^{1/5}$ is homogeneous of degree one; i.e., there are constant returns to scale in labor (L) and capital (K).
9. If the production function is $Q = 10L^{3/4} K^{1/5}$, the marginal product of labor is $\partial Q/\partial L = 7.5L^{-1/4}K^{1/5} = 3/4 Q/L$.
10. Firms buying labor in a competitive market at wage w and selling their product in a competitive market at price p will employ enough workers to make sure that the wage equals the value of the worker's marginal product; i.e., $w = p \partial Q/\partial L$.
11. Cobb and Douglas argued that under competition labor's share in manufacturing (wL/pQ) will be constant at 0.807 because the production function for the economy is $Q = 10L^{0.807}K^{0.232}$.
12. A monopoly would never produce at a point where its demand curve is inelastic.
13. A discriminating monopoly equates marginal cost with marginal revenue in each market.
14. Workers are said to be "exploited" if they are paid less than their average product.
15. Liabilities plus Net Worth \equiv Assets.
16. Under monopolistic competition (and imperfect competition), price is greater than marginal cost, marginal cost is greater than marginal revenue, and total revenue equals total cost.

17. A profit maximizing firm will always shut down its factory rather than produce where price is below average total cost.
18. Economists argue that monopolies are too small, because they do not produce enough output to make price $p = dC/dq \equiv$ marginal cost.
19. Competition will not be efficient if there are pollution costs or other negative externalities generated by the production process. One remedy is to impose a tax equal to the marginal pollution cost that is not shouldered by the producers. However, imposing a pollution tax on the output of a monopoly will not always contribute to efficiency.
20. Under monopolistic competition, all the firms in the industry face downward sloping demand curves. Therefore, price is greater than marginal cost. Also, marginal cost equals marginal revenue because the firm's are profit maximizers. Nevertheless, firms make positive economic profit because they are price-setters rather than price-takers.

Stop! Did you remember to correct all incorrect statements?

Part II: (20 points] The graphs show the total cost, average total cost, average variable cost and demand curves for a monopolist.

1. Label the curves appropriately.
2. Add to the top graph the Total Revenue and Total Profit curves.
3. On the bottom graph draw in the Marginal Cost Curve and the Marginal Revenue Curve.
4. Label the “break-even-point” and the “shut-down-point.”
5. The profit maximizing level of output is _____ and the resulting price is _____.

