

Sample exam - Exam 1.

**Notre Dame University**  
**Department of Accounting, Finance and Economics**  
**Principles of Microeconomics- ECN 211**

Circle the correct answer. There is only one correct answer to each question.

Given the following table that shows Hazel's total output of math problems as hours of study increases:

Hours of study time	Number of math problems
1	4
2	9
3	15
4	20
5	23

M  
5005  
10000

Hazel experiences increasing returns for:

- a) the 1<sup>st</sup> hour
- b) the 1<sup>st</sup> two hours
- c) the 1<sup>st</sup> three hours
- d) the 1<sup>st</sup> four hours
- e) all five hours

The total cost curve usually

- a) slopes upward
- b) slopes downward
- c) slopes upward then downward
- d) slopes downward then upward
- e) is horizontal

If we know that ATC is decreasing, then which of the following must be true?

- a) MC must be decreasing
- b)  $ATC > MC$
- c)  $ATC < MC$
- d)  $ATC < AVC$
- e) None of the above

A perfectly competitive firm with the following cost schedule:

Q	TC
0	\$100
1	\$180
2	\$250

3	\$310
4	\$360
5	\$400

The average variable cost for  $Q = 5$  is equal to:

- a) \$80
- b) \$70
- c) \$60
- d) \$50
- e) More information is needed to answer this question

From the above table, if the output price is \$40, then the profit maximizing level of output is:

- a) 2 units
- b) 3 units
- c) 4 units
- d) 5 units
- e) none of the above

The demand curve for a perfectly competitive industry is:

- a) downward sloping
- b) perfectly elastic
- c) perfectly inelastic
- d) upward sloping

If  $P > MC$ , then a perfectly competitive firm must be

- a) making positive profits
- b) making negative profits
- c) making normal profits
- d) making positive or normal profits, but not negative profits
- e) none of the above

If  $MR = MC$ , then the firm must be making

- a) positive profits
- b) negative profits
- c) zero profits
- d) could be making positive or zero profits, but not negative profits
- e) could be making positive, negative or zero profits

The slope of a perfectly competitive firm's TR curve

- a) is positive and increasing
- b) is positive and decreasing
- c) is positive and constant
- d) is zero
- e) is negative

Suppose a company draws its total revenue curve and its total cost curve on the same diagram. If the firm wishes to maximize profits, it will select the level of output at which:

- a) total cost curve cuts the total revenue curve
- b) horizontal distance between the two curves is greatest
- c) vertical distance between the two curves is greatest
- d) slope of the total revenue curve is greatest
- e) slope of total revenue curve exceeds the slope of total cost curve

A company produces 100 units of output and sells them at \$5 per unit. The average variable cost at that level of output is \$2 and the company earned total profits of \$50. Then total fixed cost is equal to:

- a) \$250
- b) \$300
- c) \$350
- d) \$450
- e) cannot be calculated from the above information

MC is equal to AVC where:

- a) MC is minimum
- b) MC is maximum
- c) ATC is minimum
- d) AVC is maximum
- e) AVC is minimum

For a perfectly competitive firm, if  $MR > AVC$ , then the firm

- a) must be making positive profits
- b) must be making negative profits
- c) must be making zero profits
- d) could be making positive or zero profits, but not negative profits
- e) could be making positive, negative or zero profits

If fixed costs increase, then to maximize profits the firm should:

- a) increase its price and output
- b) decrease its price and output
- c) increase its price and decrease its output
- d) decrease its price and increase its output
- e) maintain its current price and output levels

If the goal of the firm is to maximize its revenues, then it should produce where:

- a)  $MR = MC$
- b)  $MR > MC$
- c)  $MR = 0$
- d)  $MR > 0$
- e) None of the above

MC is calculated as

- a) Total cost divided by quantity
- b) Total variable cost divided by quantity
- c) The slope of total cost
- d) (a) or (b)
- e) none of the above

Which of the following is not a characteristic of a perfectly competitive firm?

- a) It has a downward sloping demand
- b) It is a price taker
- c) Its D-curve is equal to MR curve
- d) Its P is equal to MR
- e) All of the above are characteristics of perfectly competitive firms.

Part II. Answer the following.

Given the cost structure of a hypothetical firm; assume that the market price is \$7.

a. Fill in the following table:

Q	TC	VC	AVC	ATC	MC
0	50				
2	70				
4			8.75		
6			7.5		
8	100				
10	110				5
12					7

b. How many units should the firm produce?

c. How much profits/losses does the firm make?