Sample Questions for the Second (2/2) FREC 150 Exam

1. Firm A produces output \( Y \) with a variable input \( X_1 \) and several fixed inputs \( X_2 \ldots X_n \). Graph 2 represents various aspects of its production function. (15)

Graph 2

a. Label the X and Y axis in Graph 2.

b. Label the two (2) unlabeled curves.

c. Indicate on the graph the “rational range of production” for the firm.

d. Indicate on the graph, where the Total Physical Product reaches a maximum.

e. Carefully explain what how firm determines the “exact” optimum amount of the variable input \( X_1 \) to use.

**True - False**

1. One way to calculate Total Costs is to add Total Fixed Costs and Total Variable Costs at alternative levels of output.

2. For a typical production function, the MPP decreases, reaches a minimum and then increases, crossing APP at the maximum of APP.

3. A curve representing Total Fixed Costs is U-shaped as the level of output increases.
4. The food that a restaurant owner buys to prepare meals for is an example of an explicit cost of production.

Multiple Choice

1. The impact of new technology is usually represented by:
   A. a lateral movement to the right of a production function
   B. a shift down of a production function
   C. a shift up of a production function
   D. none of the above.

2. Marginal Costs are equal to Average Variable Costs at the level of output where:
   A. Average Variable Costs are a minimum
   B. Marginal Costs are a minimum
   C. Marginal Costs equal Marginal Factor Costs
   D. both A and C are true

3. A limited resource can be allocated to benefit society the most by:
   A. allocating quantities of the resource to the use society values most until it is gone
   B. making sure every user gets a share
   C. dividing the resource equally among all users
   D. none of the above

4. The term a “decrease in supply” is used to describe:
   A. a lower quantity supplied due to a higher price
   B. a higher quantity supplied due to a lower price
   C. a movement of the entire supply schedule to the right
   D. a movement of the entire supply schedule to the left