Multiple Choice (10 points each)

1. Marginal physical product is:
   A) Total output divided by the quantity of input.
   B) Input divided by output.
   C) The change in total output divided by the change in input quantity.
   D) The change in productivity associated with an additional unit of input.

2. The law of diminishing returns indicates that marginal physical product of a factor declines as:
   A) More output is produced with the most efficient combination of factors.
   B) More of the factor is used, holding output constant.
   C) More of the factor is used, holding other inputs constant.
   D) All of the above.

3. Profit is:
   A) The difference between total cost and variable cost.
   B) The difference between total revenue and total cost.
   C) Earned at all points along the production function.
   D) Only possible with technical efficiency.

4. Marginal cost:
   A) Is the change in total output from hiring one more factor of production.
   B) Is the change in total cost from producing one additional unit of output.
   C) Falls when there are diminishing returns.
   D) Is the change in the total cost when hiring one more factor of production.

5. Rising marginal costs result from:
   A) Rising prices of fixed inputs.
   B) Rising prices of variable inputs.
   C) Falling marginal physical product.
   D) All of the above.

6. The market value of all resources used in producing a good or service is expressed by:
   A) Total costs.
   B) Implicit costs.
   C) Fixed costs.
   D) Variable costs.

7. Costs of production that do not change with the rate of output are:
   A) Nonexistent.
   B) Variable costs.
   C) Fixed costs.
   D) Marginal costs.
8. Which of the following is equivalent to \( ATC \)?
A) \( FC + VC \).
B) \( AFC + AVC \).
C) Change in output divided by change in total cost.
D) Total cost times the quantity produced.

9. The marginal cost curve intersects the minimum of the curve representing:
A) \( TC \).
B) \( ATC \).
C) \( AFC \).
D) All of the above.

10. Economic cost:
A) Includes both implicit and explicit costs.
B) Is the sum of actual monetary payments made for resources used to produce a good.
C) Includes only implicit costs.
D) Decreases as the level of production increases.

11. Economies of scale are reductions in:
A) Average total costs that result from declining average fixed costs.
B) Fixed costs that result from reducing the firm's scale of operations.
C) Marginal costs resulting from improved technology and production efficiency.
D) Minimum average total costs that result from using operations of larger size.