

# Who Wants to be an Economist?

## Part II

Disclaimer: questions in the exam will not have this kind of multiple choice format. The type of exercises in the exam will look like the ones in the Practice Exam.

# Question #1

A firm with a constant returns to scale technology makes:

1. Zero profits in both the short and long run.
2. Always strictly positive profits.
3. Zero profits in the long-run, but not necessarily in the short-run.
4. Strictly positive profits only if competitors are not allowed to enter that market.

## Question #2

The price elasticity of demand measures by how much:

1. The quantity demanded changes as the price of the good increases by \$1.
2. The quantity demanded changes as the price of the good increases by 1%.
3. The price of the good has to change to induce an increase in demand by 1%.

# Question #3

According to the Laffer curve:

1. Tax revenue always decreases as tax rates increase.
2. Tax revenue might increase as tax rates decrease if the elasticity of labor supply is sufficiently low.
3. Tax revenue might increase as tax rates decrease if the elasticity of labor supply is sufficiently high.

# Question #4

The deadweight loss produced by a tax is zero when:

1. The supply or the demand curves are perfectly elastic.
2. The tax is rebated to the consumers.
3. Never.
4. The supply or the demand curves are perfectly inelastic.

# Question #5

When the supply curve is horizontal, a quantity tax is:

1. Passed along to the consumers.
2. Passed along to the producers.
3. Neutral: does not affect prices or quantities.
4. Paid by both consumers and producers.

# Question #6

The long-run average cost curve associated with a constant returns to scale technology is:

1. Increasing.
2. Decreasing.
3. First decreasing and then increasing.
4. Constant.

# Question #7

The system  $TRS(x_1, x_2) = \frac{w_1}{w_2}$

obtain:  $y = f(x_1, x_2)$  can be solved to

1. The quantity of inputs that maximizes profits.
2. The quantity of inputs that minimizes costs.
3. Profits as function of output.



# Question #8

A firm with a fixed proportions technology will minimize costs by:

1. Using only the cheapest input.
2. Using both inputs in the same proportion.
3. Using both inputs in fixed proportions at different levels of output.
4. Fixing one input and adjusting the utilization of the other as output changes.

# Question #9

A firm that is making negative profits in the short-run:

1. Should produce zero output (i.e. shutdown).
2. Could produce a positive amount of output.
3. Is going to make negative profits in the long-run as well.

# Question #10

The user cost of capital represents:

1. The interests a firm has to pay when borrowing money to buy capital.
2. The loss of interest payments that a firm incurs when using its own money to buy capital.
3. An amount that by definition is always equal to the rental rate of capital.
4. A firm's implicit cost of using its own capital in a given period.

# Question #11

The condition  $pMP_X(x, z) = w_X$  :

1. Represents the first order condition for cost minimization.
2. Does not hold when the firm can freely choose its inputs.
3. Represents the first order condition for profit maximization when the firm is optimally choosing inputs.

# Question #12

In computing economic profits you should take into account:

1. All the expenditures the firm incurs in a given year.
2. The opportunity cost of all inputs used in production.
3. The actual cost of all inputs used in production.

# Question #13

A firm's factor demand is:

1. Downward sloping if the marginal product of the factor is diminishing.
2. Upward sloping if the marginal product of the factor is diminishing.
3. Constant if the marginal product of the factor is diminishing.
4. It depends on the marginal product of the other factor.

# Question #14

A cost function is found by:

1. Minimizing costs subject to the production function.
2. Optimally choosing inputs in order to maximize profits.
3. Finding the average cost of producing a certain level of output.
4. Setting the marginal product of an input equal to its price.

# Question #15

A marginal cost represents:

1. The cost of producing an extra unit of output, appropriately adjusting for the presence of fixed costs.
2. The increase in total cost when output is increased by one unit.
3. A small cost.



# Question #16

When the deadweight loss of a tax is zero:

1. Consumer's and producer's surpluses do not change.
2. Government revenue equals the loss in consumer's and producer's surpluses.
3. There is a transfer of surplus between consumers and producers.

# Question #17

The marginal cost curve:

1. Intersects the AC curve, but not the AVC curve, at its minimum point.
2. Intersects both the AC and the AVC curves at their minimum points.
3. Intersects the AVC curve, but not the AC curve, at its minimum point.

# Question #18

A situation is Pareto efficient when:

1. It is not possible to make somebody better off without making somebody else worse off.
2. It is not possible to make somebody better off.
3. Making somebody better off would make more than one other individual worse off.

# Question #19

The long-run cost function for a DRS technology is:

1. Increasing in output, but less than proportionally.
2. Increasing linearly with output.
3. Increasing more than proportionally with output.
4. Decreasing and then increasing with output.

# Question #20

An isoquant measures:

1. The combinations of inputs that yield the same quantity of output.
2. The combinations of inputs that minimize costs.
3. The combinations of inputs that give the same total costs.
4. The profit maximizing quantity of output.

# Question #21

The Cobb-Douglas production function

$$y = (x_1)^{0.3} (x_2)^{0.8}$$

exhibits:

1. CRS and diminishing marginal product for input 2.
2. IRS and increasing marginal product for input 2.
3. IRS and decreasing marginal product for both inputs.

# Question #22

Renting capital is equivalent to buying it, from the firm's perspective, when:

1. The user cost of capital is lower than the rental rate.
2. Never, since it is better to own than to rent.
3. The interest rate at which future profits are discounted is zero.
4. The rental market is competitive.

# Question #23

Variable costs represent:

1. The total cost of producing a variable level of output.
2. The difference between total costs and average costs.
3. The part of the total cost of producing a certain level of output that depends on how much output is produced.



# Question #24

A competitive firm:

- Is a firm that makes plenty of profits.
- Is a firm that has a chance of making positive profits.
- Is a firm that sells a particular variety of a good, and is thus likely to make profits.
- ■ Is a firm that takes the output price as given because it sells an homogeneous product.