

Below you shall find the McQs and Theoretical questions on **Perfect competition**.

### **Multiple Choice Questions**

1. Perfect competition is an industry with -

- A) a few firms producing identical goods.
- B) many firms producing goods that differ somewhat.
- C) a few firms producing goods that differ somewhat in quality.
- D) many firms producing identical goods.

2. In a perfectly competitive industry, there are -

- A) many buyers and many sellers.
- B) many sellers, but there might be only one or two buyers.
- C) many buyers, but there might be only one or two sellers.
- D) one firm that sets the price for the others to follow.

3. In perfect competition, restrictions on entry into an industry -

- A) do not exist.
- B) apply to labor but not to capital.
- C) apply to both capital and labor.
- D) apply to capital but not to labor.

4. In perfect competition, -

- A) there are significant restrictions on entry.
- B) Each firm can influence the price of the goods.
- C) there are few buyers.
- D) all firms in the market sell their product at the same price.

5. Economists assume that a perfectly competitive firm's objective is to maximize its -

- A) revenue.
- B) economic profit.
- C) output price.
- D) quantity sold

### **Theoretical Questions**

1. Suppose a firm operates in a perfectly competitive market. Market price of the product that the firm sells is \$10. The firm's cost functions are-

$$TC = 2 + 10Q - 4Q^2 + Q^3$$

$$MC = 10 - 8Q + 3Q^2$$

- What level of output should the firm produce to maximize profits?
- Determine the level of profit at profit maximizing equilibrium.
- What is the minimum price required by the firm to stay in the market?

2. A perfectly competitive firm sells its products for \$300. Complete the table below. Find the following: profit-maximizing price, profit-maximizing quantity, and greatest possible profit. Be sure to use the profit-maximization condition to find the profit-maximizing quantity.

Q	P	TR	TC	Profit	MR	MC
0			100			
1			200			
2			400			
3			700			
4			1100			
5			1600			
6			2200			
7			2900			

3. Draw diagram of the following situations:

- All the potential choice a firm has when it is experiencing an Economic loss.
- When no firms are entering and leaving the market in the long-run.

4. In a small, but perfectly competitive market for pineapples, there are 5 identical growers. Each grower has the following total cost function:

$TC = 2 + 10q - 4q^2 + q^3$ , where  $q$  is thousands of pounds of pineapples produced.

The market demand for pineapple is  $P = 100 - 0.001Q$  and the market supply is  $Q = 5q$ , where  $P$  denotes the market price of pineapple in USD, which all pineapple producers take as given.

- Find the equilibrium price and quantity in the market of pineapples.

- b. Each grower's marginal cost based upon the TC equation is given by  $MC = 4 + 4q$ . Given this information, and using the answer in part (a), what is an individual grower's profit-maximizing level of production in the short-run?
- c. Calculate the grower's total revenue, total cost, and profit at the profit-maximizing level of production.
- d. Find the equation for a representative grower's average variable cost (AVC) curve. Why would a grower choose to operate at a loss in the short run?

## **Solutions**

### **McQs**

- 1. D
- 2. A
- 3. A
- 4. D
- 5. B