GRADO EN TURISMO

# Introduction to Economics

## Questions and exercises

## Units 3 and 4

1.- Given a tourist demand function, $Q^D = 1000 – 2P$ and a tourist supply function, $Q^O = 4/3\ P$ calculate the equilibrium price and quantity. Faced with a decrease in workers' wages, the supply becomes $Q^O = 3\ P$. Calculate the new equilibrium and explain the result. Represent it graphically.

2.- Which of the following factors of production in a hotel is fixed: a) the number of rooms, b) the cleaning workers, c) the chocolates that are given to customers, d) the consumption of electricity.

3.- A small hotel presents the following daily costs according to the number of rooms occupied:

| Occupied Rooms (Q) | Fixed Cost (FC) | Variable Cost (VC) | Total Cost (TC) | Marginal Cost (MC) | Average Cost (AC) |
|---|---|---|---|---|---|
| 0 | 300 | 0 | | | |
| 1 | 300 | 70,6 | | | |
| 2 | 300 | 121,3 | | | |
| 3 | 300 | 156 | | | |
| 4 | 300 | 178,6 | | | |
| 5 | 300 | 193,3 | | | |
| 6 | 300 | 204 | | | |
| 7 | 300 | 214,6 | | | |
| 8 | 300 | 229,3 | | | |
| 9 | 300 | 252 | | | |
| 10 | 300 | 286,6 | | | |
| 11 | 300 | 337,3 | | | |
| 12 | 300 | 408 | | | |
| 13 | 300 | 502,6 | | | |
| 14 | 300 | 625,3 | | | |

a) Complete the table.

b) Represent graphically the average cost and the marginal cost.

c) If the price per room is 72 euros per day, what number of rooms determines the maximum profit? Give reasons for the answer.

d) And if the price were 52 euros, would the hotel be interested in offering rooms? Give reasons for the answer.

4.- A charter company has chartered a plane to take tourists to the Canary Islands. Two days before departure, he has five seats to sell. Is the company interested in selling these seats at a price below average cost?

a) No, because it would get losses

b) Yes, because the marginal cost is almost zero

c) It depends on what price

5.- The total cost function of a tourist company is $TC = 3\ Q^2 + 10\ Q$ and the total revenue function is $TR = 40\ Q$. Calculate the maximum profit production level and the corresponding profits.