

THE HONG KONG POLYTECHNIC UNIVERSITY
HONG KONG COMMUNITY COLLEGE

Subject Title : Business Economics

Subject Code : CCN2105

Session : Semester One, 2017/18

Numerical Answers

Question C1

(a) $Q_{dT} = 1,500 - 0.07P_T + 1.1P_C - 3P_D + 0.03A$

(d) $Q_{dT} = 1,500 - 0.07(12,000) + 1.1(9,800) - 3(3,200) + 0.03(50,000) = 3,340$.
Own-price elasticity = $-0.07 \times (12,000/3,340) = -0.25$

Question C4

Suppose the marginal cost to the golf course of each visit is zero, the most a customer is willing to pay is his or her total valuation of the quantity of goods consumed. Hence, the most a property owner is willing to pay is $0.5(\$100)(200) = \$10,000$ per month. The most a tourist is willing to pay is $0.5(\$40)(400) = \$8,000$ per week. Hence, your optimal pricing policy is: charge property owners a membership fee of \$10,000 per month per person; charge tourists a membership fee of \$8,000 per week per person and then let each golfer play golf for free.

Question C5

If it is a repeated game, they should consider trigger strategy - "Don't offer free gifts, provided the rival has not given in the past. If the rival ever provides free gifts, one should "punish" its rival by offering free gifts forever." The benefits of cheating is \$4 million ($\$2 + \$0.2/0.1$) while the benefit of cooperation is \$16.5 million ($\$1.5 + \$1.5/0.1$). Thus, cooperation is a Nash equilibrium in the infinitely repeated game.