國立嘉義大學 100 學年度

行銷與運籌研究所碩士班(乙組)招生考試試題

科目:經濟學

- 1. (1) Define the Indifference Curves? and draw a graph to show the properties (10 分)
 - (2) Define the Externalities? and how to deal with this problem? (10 %)
 - (3) Draw graphs and explain the relationships between Long-run average cost curve and Short-run average cost curve? (10 分)
- 2. A freight forwarding company has \$30 of fixed costs, \$40 of trading costs per delivery service, and labor costs of $0.5Q^2$, Q is the number of the delivery service. Total costs are defined as $TC = 30 + 40Q + (1/2)Q^2$. Also the demand function is Q = 25 (1/3)P
 - (1) Calculate the quantity that maximizes profits? (5分)
 - (2) Calculate the price at the maximum profits? (5分) and the price elasticity? (5分)
 - (3) Calculate the price elasticity if demand Q reduces by 10% and the price P increases by 20%? (5 分)
- 3. The domestic supply demand curves for hula beans are as follows:

Supply: P = 50 + QDemand: P = 200 - 2Q

Where P is the price in cents per pound and Q is the quantity in millions of pounds. The U.S. is a small producer in the world hula bean market, where the current price (which will not be affected by anything we do) is 60 cents per pound. Congress is considering a tariff of 40 cents per pound.

- (1) Find the domestic price of hula beans that will result if the tariff is imposed. $(13 \ \%)$
- (2) Compute the dollar gain or loss to domestic consumers, domestic producers, and government revenue from tariff. (12 %)

- 4. Suppose the income elasticity of demand for food is 0.5 and the price elasticity of demand is -1.0. Suppose also that Felicia spends \$10,000 a year on food, the price of food is \$2, and that her income is \$25,000.
 - (1) If a sales tax on food caused the price of food to increase to \$2.50, what would happen to her consumption of food? (13 分)
 - (2) Suppose that Felicia gets a tax rebate of \$2500 to ease the effect of sales tax. What would her consumption of food be now? (12 %)