1. Explain the following terms briefly (5% for each)
(1) Opportunity Cost
(2) Market Failure
(3) Economy of Scale
(4) External Cost
(5) Public Good

2. After joining World Trade Organization (WTO), Taiwan government is no longer able to monopolize occupy the market of alcoholic drinks. (Note: use supply-demand curve to analyze)
(1) Please analyze the possible effects on market price and quantity after joining WTO. (15%)
(2) If the plan of levying tax based on market quantity was proposed to retrieve the lost of government income, please tell us how to decide the unit tax rate? (15%)

3. The demand curves for one monopolistic factory in different markets are shown in equation (3.1) and equation (3.2), in which $P_i$ is the price in market $i$ and $Q_i$ is the demand in market $i$. If the total cost function for this factory is $TC=1+3Q$, in which $TC$ is the total cost and $Q=Q_1+Q_2$, please answer the following questions.

$$P_1=5-Q_1 \quad (3.1)$$
$$P_2=8-Q_2 \quad (3.2)$$

(1) What kind of conditions must be satisfied, when price discrimination is existed for this factory? (10%)
(2) If price discrimination existed, please decide the market price and the quantity of supply for this factory. (15%)
4. A vegetable fiber is traded in a competitive world market, and the world price is $9 per pound. Unlimited quantities are variable for import into Taiwan at this price. Taiwan domestic supply and demand for various price levels are shown below. Please answer the following questions. (20%)

(1) What is the equation for demand?

(2) At a price of $9, what is the price elasticity of demand?

(3) What is the price elasticity of supply at $12

(4) In a free market, what will be Taiwan price and level of imports?

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<th>Demand (LBS)</th>
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