O.K.

所別：產業經濟研究所碩士班 乙組 科目：個體經濟學

I Multiple Choice Questions (40%)

1. When marginal revenue is greater than zero, the point price elasticity of demand is
   A. greater than one.
   B. greater than zero but less than one.
   C. equal to one.
   D. equal to zero.

2. When the slope of the average product curve equals zero:
   A. total product is maximized.
   B. marginal product equals average product.
   C. returns to the variable input are increasing.
   D. marginal product equals zero.

3. If the production of two goods is complementary, a decrease in the price of one will
   A. decrease supply of the other.
   B. increase supply of the other.
   C. increase the quantity supplied of the other.
   D. decrease the price of the other.

4. The incidence of a per unit tax will fall primarily on customers when:
   A. the tax is collected from customers.
   B. demand is highly elastic with respect to price.
   C. demand is highly inelastic with respect to price.
   D. The tax is collected from producers.

5. The demand curve for a unique product without substitutes is
   A. upward sloping.
   B. downward sloping.
   C. vertical.
   D. horizontal.

6. A monopoly employer facing a perfectly competitive supply of labor would pay a wage:
   A. greater than the perfectly competitive wage.
   B. less than the perfectly competitive wage.
   C. equal to marginal revenue product.
   D. greater than marginal revenue product.

7. If a total product curve exhibits increasing returns to a variable input, the cost elasticity with respect to output is:
   A. unknown, without further information.
   B. equal to one.
   C. greater than one.
   D. less than one.

8. A monopolistically competitive firm will earn short run positive economic profits if the firm can set a price:
   A. equal to minimum average cost.
   B. higher than average cost.
   C. equal to marginal revenue.
   D. higher than minimum average cost.

注意：背面有試題

II. Answer each of the following statements as true or false, and explain your answer. (35%)

1. A tax on price advertising and increase import quotas will both increase the ability of manufacturers to raise prices and profit margins.
2. If the marginal product of capital increases as capital usages grows, the returns to capital are decreasing.
3. In a quadratic total cost relation, the average variable cost curve is U-shaped, but the marginal cost relation is linear with a positive slope.
4. A positive relation between product demand and price is a natural byproduct of falling advertising expenditures.
5. An increase in product differentiation will tend to decrease the slope of firm demand curves.

III. Problem (25%)

1. Firm A and firm B supply a generic modular phone jack that connects telephone cords to phone outlets. Proprietary cost and output information for each company reveal the following relations between marginal cost and output:

$$MC_A = 1 + 0.00002Q_A \qquad \text{(Firm A)}$$

$$MC_B = 1.5 + 0.000005Q_B \qquad \text{(Firm B)}$$

The wholesale market for modular phone jacks is vigorously price-competitive, and neither firm is able to charge a premium for its products. Thus, $P = MR$ in this market.

A. Calculate the quantity supplied by each firm. (8%)
B. Determine the industry supply curve at $P = 1.6$ and $P = 1.2$. (9%)
C. If the market demand is $Q = 300{,}000 - 75{,}000P$, what is the market equilibrium price-output combination. (8%)