一、選擇題 (40%)

1. In the classic prisoners' dilemma game the dominant strategy is to
   a. not confess.
   b. confess.
   c. confess if you believe that your partner is irrational.
   d. confess only if you trust your partner.

2. In a competitive equilibrium, the marginal rate of substitution of one good for another, for each competitor, is
   a. equal to the ratio of prices of the goods.
   b. divided by the respective price to produce efficiency.
   c. multiplied by the respective price to produce efficiency.
   d. none of the above.

3. The market structure in which strategic considerations are most important is
   a. monopolistic competition.
   b. oligopoly.
   c. pure competition.
   d. pure monopoly.

4. The essence of the Cournot model is the assumption that
   a. each firm treats the output level of its competitor firms as a fixed value, then it decides its own production rate.
   b. each firm treats the outputs of its competitor firms as a variable, then it decides its own production rate.
   c. each firm treats the prices of its competitors as a given, then it decides its own production rate.
   d. each firm treats the price of its competitor firms as a given, then it decides its own production rate.

5. At the optimum combination of two inputs,
   a. the slopes of the isoquant and isocost curves are equal.
   b. costs are minimized for the production of a given output.
   c. the marginal rate of technical substitution equals the ratio of input prices.
   d. all of the above.
   e. a and c only.

6. A firm's short run average cost curve is U-shaped. Which of the following conclusions can be reached regarding the firm's returns to scale?
   a. The firm experiences increasing returns to scale.
   b. The firm experiences increasing, constant, and decreasing returns in that order.
   c. The firm experiences first decreasing, then increasing returns to scale.
   d. The short run average cost curve reveals nothing regarding returns to scale.

7. In the case of the Giffen good, which of the following concepts are consistent?
   a. The price of the good rises, the income effect is opposite to and greater than the substitution effect, and consumption falls.
   b. The price of the good falls, the income effect is in the same direction as the substitution effect, and consumption rises.
   c. The price of the good falls, the income effect is in the opposite direction to the substitution effect, and consumption falls.
   d. The price of the good falls, the income effect is in opposite direction to the substitution effect and consumption rises.

8. The area below the demand curve and above the price line measures
   a. consumer surplus.
   b. economic profit.
   c. elasticity of demand.
   d. the total value obtained from consuming the good or service.

考用

9. Price elasticity of supply for most products is
   a. the same in the long-run and the short-run.
   b. greater in the long-run than the short-run.
   c. greater in the short-run than in the long-run.
   d. too uncertain to be estimated.

10. Which of the following is <u>not</u> necessarily true in equilibrium? (This individual consumes two goods, X and Y).
   a. $MRS = P_x/P_y$.
   b. $MU_x/MU_y = P_x/P_y$.
   c. $P_x/P_y = I$ (money income).
   d. P_x/P_y = slope of indifference curve.
   e. none of the above.

二、問答題 (60%)

1. (18%) Derive the demand curves for x_1, x_2 assuming utility function

(1) $u = x_1 x_2$ (9%)

(2) $u = x_1^{\alpha_1} x_2^{\alpha_2}$ (9%)

What are the price and income elasticities for x_1 and x_2 ?

2. (15%) A competitive industry faces a demand

$$x = 800 - 8p$$

Each firm faces identical cost conditions

$$C_i = 200 + 10x_i + 2x_i^2$$

Where x_i is the output of firm and C_i its cost. There is free entry and an unlimited number of potential entrants. What is the equilibrium output and price? (10%) How many firms in this industry? (5%)

3. (20%) Suppose a monopolist can sell electricity in two markets. The demand curves are:

$$p_1^D = 3 - \frac{1}{2} x_1$$
$$p_2^D = 2 - \frac{1}{2} x_2$$

The escapable costs of output are

$$C = 2\frac{1}{3} + (x_1 + x_2)$$

(1) What are profit-maximising prices in each market and what are the corresponding elasticities of demand? (12%)

(2) What would happen to output if price discrimination was banned? (8%)

4. (7%) Suppose a person has a utility function

$$u = y + 2T^{\frac{1}{2}}$$

where y is goods and T is leisure time.

(1) Derive his labor supply function. (4%)

(2) What is the minimum wage at which he is willing to work at all? (3%)

注意：背面有試題