I. Choose the BEST Answer (3 points each, 36%)

1. Excess capacity in monopolistically competitive industries results because in equilibrium
   - **A** each firm's output rate is too great to minimize average cost.
   - **B** each firm's output rate is too small to minimize average cost.
   - **C** firms make positive economic profit.
   - **D** price equals marginal cost.

2. You are the producer of stereo components. There are two markets, foreign and domestic. The two groups of consumers cannot trade with one another. You will charge the higher price in the market with the
   - **A** lower own price elasticity of demand (more inelastic demand).
   - **B** higher own price elasticity of demand (more elastic demand).
   - **C** larger teenage population.
   - **D** greater consumer incomes.

3. In an unregulated, competitive market, producer surplus exists because some
   - **A** consumers are willing to pay more than the equilibrium price.
   - **B** producers are willing to take more than the equilibrium price.
   - **C** producers are willing to sell at less than the equilibrium price.
   - **D** consumers are willing to purchase, but only at prices below equilibrium price.

4. A farmer uses M units of machinery and L hours of labor to produce C tons of corn, with the following production function $C = L^{0.5} + M^{0.75}$. This production function exhibits
   - **A** decreasing returns to scale for all output levels
   - **B** constant returns to scale for all output levels
   - **C** increasing returns to scale for all output levels
   - **D** no clear pattern of returns to scale

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.

(背面仍有題目,請繼續作答)

6. Which would not increase the productivity of labor?
   - **A** An increase in the size of the labor force.
   - **B** An increase in the quality of capital.
   - **C** An increase in the quantity of capital.
   - **D** An increase in technology.

7. Sam spends all of his income on textbooks and hot dogs. The price of a textbook is $40 and the price of a hot dog is $0.50. If Sam is maximizing his utility and the marginal utility he derives from the last textbook he purchases is 400, then the marginal utility he derives from his last hot dog purchased must be
   - **A** 400
   - **B** 10
   - **C** 5
   - **D** 20

8. According to the paradox of value, expensive goods, such as gemstones, provide consumers with
   - **A** high total utility and low marginal utility.
   - **B** low total utility and low marginal utility.
   - **C** low total utility and high marginal utility.
   - **D** high marginal utility and high total utility.

9. An indifference curve shows
   - **A** the relationship between prices and a household's budget.
   - **B** all possible prices and preferences for a good.
   - **C** combinations of goods among which a household is indifferent.
   - **D** budget lines among which a consumer is indifferent.

10. Sam's income for gasoline and coffee currently is $60 per week. If Sam's budget for gasoline and coffee increased from $60.00 to $70.00, Sam would experience
    - **A** only an income effect.
    - **B** only a substitution effect.
    - **C** an increase in the marginal rate of substitution of both gasoline for coffee and coffee for gasoline.
    - **D** None of the above.

11. Throughout the 1990's, the price of four-wheel drive vehicles rose and each year more were purchased. This experience suggests that
   A there must have been tremendous technological advances in the way four-wheel drive vehicles are produced.
   B there must have been rightward shifts in the demand curve for four-wheel drive vehicles.
   C there must have movements leftward along the supply curve of four-wheel drive vehicles.
   D None of the above.

12. Total revenue for surfboards increases by $2 million when the price of a surfboard decreases by $10. The value for the elasticity of demand is
   A between 0 and 1.
   B greater than 1.
   C equal to 0.
   D some amount that is impossible to determine without more information.

II. Take the case of an individual who drives utility from income (y) and leisure (L). Denote hours worked in a day by W: the consumer has only T total hours in a day to divide between work and leisure. Income is derived from working, at the wage rate of r per hour. Assume the individual's utility function $U(L,y)=Ly$

(a) Write down the budget constraint for this consumer. (4%)

(b) Find income and leisure at the optimum. (4%)

(c) Suppose the wage rate r goes up, how does this affect the amount of leisure? (4%)

III. Consider two identical firms (no. 1 and no. 2) that face a linear market demand curve. Each firm has a marginal cost of zero and the two firms together face demand:

$$P = 60 - 0.5Q, \quad \text{where} \quad Q = Q_1 + Q_2$$

(a) Find the Cournot equilibrium Q and P for each firm. (6%)

(b) Find the equilibrium Q and P for each firm assuming that the firms collude and share the profit equally. (6%)

(背面仍有題目,請繼續作答)

IV. Consider the following misperceptions model of the economy:

$$AD: \qquad Y = 600 + 10 \cdot \left(\frac{M}{P}\right)$$

$$SRAS: \qquad Y = \bar{Y} + P - P^e$$

$$Okun's\ Law: \qquad \frac{Y - \bar{Y}}{\bar{Y}} = -2.5(u - \bar{u})$$

where Y denotes observed aggregate output; $\bar{Y}$ denotes full employment output; u is the observed unemployment rate and $\bar{u}$ is the natural rate of unemployment; P and P^e are the price level and the expected price level respectively. Let $\bar{Y} = 750$, $\bar{u} = 0.05$, $M = 600$, and $P^e = 40$.

(a) What is the price level? (2%)

(b) Suppose there is an unanticipated increase in the nominal money supply to 800. What is the short-run equilibrium level of output, the unemployment rate, and the price level? (6%)

(c) When price expectations adjust fully, what is the price level? (2%)

V. Suppose the Central Bank cares only about keeping the economy close to full-employment output. The Central Bank can target the real money supply (thus keeping the *LM* curve fixed) or it can target the real interest rate, changing the money supply and shifting the *LM* curve however is necessary to prevent a change in the real interest rate.

(a) Which is the best policy if the main shocks to the economy are shocks to real money demand? Explain why. (5%)

(b) Which is the best policy if the main shocks to the economy are shocks to the IS curve? Explain why. (5%)

VI. Essay Question:

(a) Analyze the effects of an increase in the money supply within the Keynesian model where both the price level and money wage are assumed to be variable. Include in your answer the effects on the level of real income, the price level, the interest rate, and the money wage. (12%)

(b) Explain the concept of rational expectation. Explain also the implications of the rational expectations assumption for the effectiveness of economic stabilization policy. (8%)