

注意：請依題目順序作答於答案紙，不須抄題目。

(20分) 1. 計算題

(1) Find the price elasticity of demand for the following functions at  $P = 3$

(a)  $Q = 75 - 5P$

(b)  $Q = 42 - 6P$

(2) Find the price elasticity of supply for the following functions at  $P = 3$

(a)  $Q = -2 + 0.8P$

(b)  $Q - 1.5P + 3 = 0$

(20分) 2. 計算題

(1) Given the demand function  $P_d = 25 - Q^2$  and the supply function  $P_s = 2Q + 1$ . Assuming pure competition, find (a) the consumers' surplus and (b) the producers' surplus.

(2) Find the profit-maximizing level of profit for the monopolistic producer with the demand functions,

$$Q_1 = 49\frac{1}{2} - \frac{1}{2}P_1$$

$$Q_2 = 36 - \frac{1}{2}P_2$$

and the joint cost function  $c = Q_1^2 + 2Q_1Q_2 + Q_2^2 + 120$ .

(20分) 3. 解釋名詞

(1) Law of Diminishing Marginal Rate of Substitution

(2) Natural Monopoly

(3) Liquidity Preference Theory

(4) GDP

(背面仍有題目,請繼續作答)

## (20分) 4. 計算題

Information about the economy of X is given as below :

- Autonomous Consumption Expenditure is \$100
- Marginal Propensity to Consume is 0.9
- Investment is \$460
- Government Purchases of Goods and Services are \$400
- Taxes are a constant \$400
- Exports are \$350
- Imports are 10 percent of income
- The government of X makes no transfer payments

- (1) Calculate the slope of the Aggregate Demand Curve.
- (2) What is the equilibrium level of income ?
- (3) The government cuts taxes to \$300. What is the new equilibrium income ? What is the tax multiplier ?
- (4) The government simultaneously cuts both its purchases of goods and services and taxes to \$300. What is the change in equilibrium income ? What is the name of the multiplier now at work ? And What is its value ?

## (20分) 5. 申論題

美國政府最近一年(1999~2000)連續6次提高利率,請就此貨幣政策所可能造成的效果,對我國的總體經濟面、外貿、外匯市場及股市會產生何種影響,作一深入說明。