國立臺北大學 111 學年度碩士班一般入學考試試題

系(所)組別:國際企業研究所

科 目:經濟學

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☑可 □不可 使用計算機

1. Assuming that an entrepreneur's cubic total cost function is

 $C = q^3 - 8.5q^2 + 14q + 60$, where q is the output level. Please answer the following 3 questions:

- (1)Determine the output level at which he maximizes profits if the price of q is 4 dollars per unit (e.g., p=4). (10%)
- (2)In addition, what is the profit? (10%)
- (3) Should he discontinue production? (10%)
- 2. A farmer is engaged in ploughing the fields. He buys a mini cultivator for 200 dollars, incurs a cultivation cost flow at a rate of G(t) = 0.4t dollars per year during the life of the cultivator, and sells it at t = T for $R(T) = 4 + 20T T^2$ dollars. The market rate of interest is 20%. Please answer the following 2 questions:
 - (1)Determine the optimal length for his cultivation period. (10%)
 - (2)Also verify that your solution is a maximum. (10%)
- 3. Please graphically analyze the impact of raising taxes on the equilibrium interest rate, exchange rate, general price level, net export and GDP of the economy under:
 - (1)flexible exchange rate regime. (10%)
 - (2) fixed exchange rate regime. (10%)
- 4. (1)Please apply the law of one price to derive the absolute purchasing power parity stating that exchange rates equal relative price levels across countries. (5%)
 - (2)Please apply the absolute purchasing power parity to derive the relative purchasing power parity stating that the percentage change in the exchange rate between two currencies over any period equals the difference between the percentage changes in national price levels. (10%)
- 5. (1)Please briefly explain the RCEP (Regional Comprehensive Economic Partnership). (5%)
 - (2)Please compare and contrast the RCEP with the CPTPP (Comprehensive and Progressive Agreement for Trans-Pacific Partnership). (10%)