注意：考試開始鈴響前，不得翻閱試題，
並不得書寫、畫記、作答。

國立清華大學 112 學年度碩士班考試入學試題

系所班組別：科技管理研究所
　　　　　　甲組

科目代碼：4901

考試科目：經濟學

－作答注意事項－

一、單選題 (25 分，每題 5 分)

1. New growth theory

   A) states that the rate of technological change is determined outside the working of the market system.

   B) does not adequately explain the factors that determine productivity.

   C) states that the rate of technological change is caused by economic incentives.

   D) states that the rate of technological change is caused by random events.

2. An increase in the purchasing power of money would not, on average, result in an increase in the purchasing power of people's income because a _____ price level would likely mean _____ wages and salaries.

   A) rising; falling

   B) rising; rising

   C) falling; falling

   D) falling; rising

3. In a Bertrand model, market power is a function of

   A) marginal cost.

   B) the number of firms.

   C) price elasticity of supply.

   D) product differentiation.

4. Suppose that for each firm in the competitive market for potatoes, long-run average cost is minimized at 20 cents per pound when 500 pounds are grown. The demand for potatoes is $Q = \frac{10,000}{p}$. If the long-run supply curve is horizontal, then how many pounds of potatoes will be consumed in total?

A) 50,000

B) 10,000

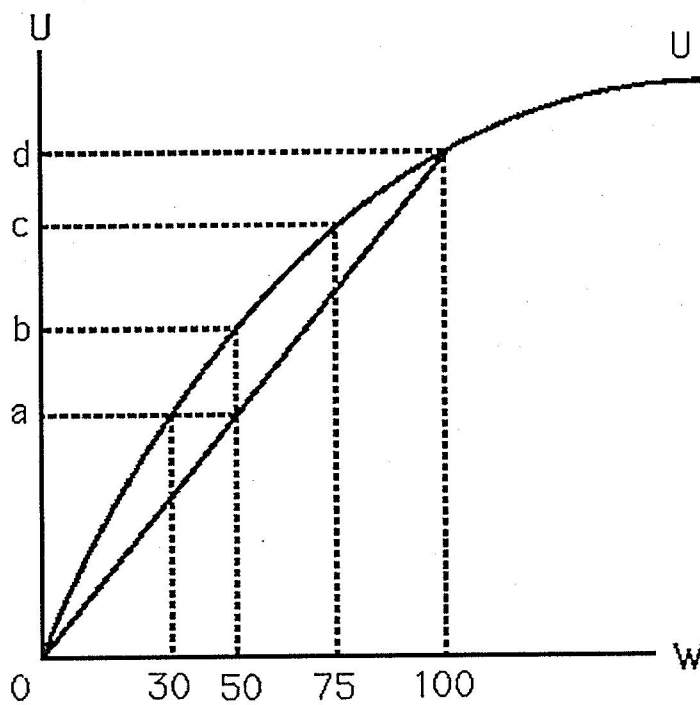C) 0

D) 500

5. The above figure shows Bob's utility function. He currently has $100 of wealth, but there is a 50% chance that it could all be stolen. Over and above the price of fair insurance, what is the risk premium Bob would pay to eliminate the chance of theft?

A) $0.

B) $20.

C) $30.

D) $50.

二、名詞解釋（25 分，每題 5 分）

1. 最適關稅（optimal tariff）

2. 學習外部性（learning externality）

3. 所得彈性（income elasticity of demand）

4. 停滯性通膨（stagflation）

5. 價格消費曲線（price consumption curve）

三、問答題（50 分）

1. Mergers between/among firms can be characterized into two types: horizontal mergers and vertical mergers. Explain the difference of these two kinds of mergers, as well as that of their welfare effects. What are criteria the government looks into for deciding whether a merger between two firms will be allowed or challenged? Which kind of merger is more likely to be challenged by the government? Why?（15 分）

2. If expectations are adaptive, how will the economy adjust to a new long-run equilibrium in response to expansionary monetary policy? Support your answer with a graph of the Phillips curve.（10 分）

3. A consumer has the quasi-linear utility function:

$$U(q_1, q_2) = 64q_1^{1/2} + q_2.$$

Assume that the price of good 2 $p_2 = \$1$ and income $Y = \$100$. Find the consumer's compensating and equivalent variations for an increase in p_1 from \$1 to \$2.（15 分）

4. 今年以來，美公債殖利率曲線呈現倒掛的現象引起了廣泛的討論。殖利率曲線倒掛具體是什麼？有何特別之處？為何市場需要關心此現象的發生？（10 分）