

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 110 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：4701

考試科目：經濟學

—作答注意事項—

1. 請核對答案卷（卡）上之准考證號、科目名稱是否正確。
2. 考試開始後，請於作答前先翻閱整份試題，是否有污損或試題印刷不清，得舉手請監試人員處理，但不得要求解釋題意。
3. 考生限在答案卷上標記「 由此開始作答」區內作答，且不可書寫姓名、准考證號或與作答無關之其他文字或符號。
4. 答案卷用盡不得要求加頁。
5. 答案卷可用任何書寫工具作答，惟為方便閱卷辨識，請儘量使用藍色或黑色書寫；答案卡限用 2B 鉛筆畫記；如畫記不清（含未依範例畫記）致光學閱讀機無法辨識答案者，其後果一律由考生自行負責。
6. 其他應考規則、違規處理及扣分方式，請自行詳閱准考證明上「國立清華大學試場規則及違規處理辦法」，無法因本試題封面作答注意事項中未列明而稱未知悉。

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共 4 頁，第 1 頁 *請在【答案卷】作答

一、 單選題 (30 分，每題 5 分)

1. What impact might an increase in the budget deficit on interest rates and exchange rate?
 - A) Both interest rates and exchange rates increase.
 - B) Both interest rates and exchange rates decrease.
 - C) Interest rates decrease and exchange rates increase.
 - D) Interest rates increase and exchange rates decrease.

2. Three common measurements for the change in consumer welfare resulting from a price change are the change in consumer surplus, compensating variation, and equivalent variation. The value of these measurements will be closer to each other when
 - A) the price change is greater.
 - B) the income elasticity is smaller.
 - C) the budget share is greater.
 - D) none of the above.

3. Which of the following statement is **true** about real and nominal GDP?
 - A) If nominal GDP increases from one year to the next, we know the production of goods and services has risen.
 - B) Nominal GDP is a better measure than real GDP in comparing changes in the production of goods and services year after year.
 - C) Increases in average prices do not affect the calculation of nominal GDP.
 - D) If real GDP increases from one year to the next, we know that production of goods and services has risen.

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共 4 頁，第 2 頁

*請在【答案卷】作答

4. When an oligopoly market is in Nash equilibrium,
- A) firms always collude to in setting their prices.
 - B) firms do not behave as profit maximizers.
 - C) a firm will choose its best pricing strategy, given the strategies that it observes other firms have taken.
 - D) a firm will not take into account the strategies of its rivals.
5. Economists generally favor the use of tradable emission allowances to reduce pollution. However, the use of these allowances has been criticized by some environmentalists. Which of the following describes this criticism?
- A) Some environmentalists believe the allowances give firms a license to pollute.
 - B) Some environmentalists believe that the price of allowances is often too high for consumers to afford.
 - C) Some environmentalists believe that Pigouvian taxes are a more efficient way to reduce pollution.
 - D) None of the above.
6. Which one of the following would increase the unemployment rate?
- A) a law making it illegal to work more than 35 hours per week
 - B) a cut in unemployment compensation
 - C) an increase in unemployment insurance payments
 - D) a decrease in the minimum wage

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共 4 頁，第 3 頁 *請在【答案卷】作答

二、 短答題 (30 分，每題 10 分)

1. 相較於完全競爭，獨佔性競爭將會導致在長期均衡下，廠商產能將呈現過剩 (excess capacity) 的情況，何謂產能過剩？試用圖形說明為何會有此情況，對社會福利的影響為何？相較於完全競爭，獨佔性競爭對消費者的效用影響為何？
2. Suppose the expectations are adaptive and an economy is initially in a long run equilibrium. How will this economy adjust to a new long-run equilibrium in response to an expansionary monetary policy? Support your answer with a graph of Short-run and Long-run Phillips curves. Make sure you explain the adjustment process regarding with important economic variables such as real wage, unemployment rate, as well as inflation rate.
3. Consider a scenario of a golf club which serves as a monopolist in the local market and it faces a downward sloping demand curve. Assume that the marginal cost of providing golf service is constant and low, use a graph to demonstrate how this monopolist maximize its profit without any form of price discrimination. What if this monopolist can practice price discrimination using two-part tariff (兩部定價法)? What is strategy chosen by this monopolist. Which scenario (with and without two-part tariff) generate a larger social surplus? Show your results on the graph.

三、 長答題 (40 分，每題 20 分)

1. 1979 年由 Daniel Kahneman 和 Amos Tversky 所提出的展望理論 (Prospect Theory) 很大程度上填補了先期期望值理論 (Expectancy Theory) 與期望效用理論 (Expected Utility Theory)，在解釋人們面對風險下選擇結果與實際狀況不符合的問題。請簡述展望理論中對於利得 (gains) 和損失 (losses) 的價值評估函數 (value function) 裡的假設，並用一個 X 軸衡量相對損失/利得與 Y 軸衡量價值評估函數的圖形表達此假設，同時，決策者在面對相同幅度的損失或利得的態度為何？另外，決策者的主觀概率和客觀概率有和不同？最後，在以下四個情境下，展望理論預測人們的風險態度 (規避或尋求) 和其決策 (拒絕有利賭局或接受不利賭局) 分別為何？並簡單說明你的答案。(20 分)

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共 4 頁，第 4 頁 *請在【答案卷】作答

- a. 有高概率會獲利 (95% 概率獲得 10 萬元)
 - b. 有低概率會獲利 (5% 概率獲得 10 萬元)
 - c. 有高概率會損失 (95% 概率損失 10 萬元)
 - d. 有低概率會損失 (5% 概率損失 10 萬元)
2. Consider a pure exchange economy in which, there are two consumers (1 and 2) and two goods, X and Y. Suppose the total quantity of each good are 100 units. Answer the following questions: (20 分)
- a. What does a contract curve (契約曲線) on the Edgeworth Box represent?
 - b. Derive the equation for the contract curve when each consumer has Cobb-Douglas preferences given by $U(X, Y) = XY$.
 - c. How does the contract curve change when Consumer 1 has the utility function as $U(X, Y) = X^2Y$ while the other consumer's preferences are as before? Derive the equation for the contract curve.
 - d. Demonstrate the two contract curves on the Edgeworth Box and explain where does the difference between these two contract curves.