

## 國立清華大學 101 學年度碩士班考試入學試題

系所班組別：經濟學系

考試科目（代碼）：個體經濟學(4001)

共\_\_1\_\_頁，第\_\_1\_\_頁 \*請在【答案卷、卡】作答

1. Let  $x_i, y_i$  be consumer  $i$ 's consumption of good  $x$  and numeraire, respectively. Suppose an economy with two consumers who have the same utility function:  $U_i(x_i, y_i) = 4 \ln(x_i) + y_i, i=1, 2$ . Consumer 1 is endowed with 5 units of good  $x$  and 2 units of numeraire while consumer 2 owns 3 units of good  $x$  and 6 units of numeraire.
  - a. What is the ordinary demand of  $x$  for agent 1? (5 分)
  - b. What is the definition of Pareto optimum? (5 分)
  - c. What is the contract curve for the above economy? (5 分)
  - d. What is the core for the economy? (5 分)
  - e. What is the competitive equilibrium price for the economy? (5 分)
2.
  - a. What is the definition of "completeness" property for a rational individual's preference? (5 分)
  - b. What is weak axiom of revealed preference (WARP)? (5 分)
  - c. Suppose a consumer consumes only two goods. In June, both the prices of good 1 and good 2 are 10 and she consumes 10 units of each good. In July, the price of good 1 is 10, the price of good 2 is 8, and she consumes 14 units of good 1 and 4 units of good 2. Whether her behavior violates WARP? (10 分)
  - d. Whether her consumption in June is directly revealed preferred to that in July or the other way around? (5 分)
3.
  - a. 試說明完全競爭廠商的短期因素需求曲線為負斜率的條件。(10 分)
  - b. 試證明完全競爭廠商的長期因素需求曲線為負斜率。(10 分)
4. 請討論以下三種不同加諸獨佔廠商的稅，對獨佔市場均衡的影響，並討論其福利效果：
  - a. 對獨佔廠商收取一筆定額  $\$T$  的特許費。(10 分)
  - b. 對獨佔廠商課徵每單位  $\$t$  的貨物稅。(10 分)
  - c. 對獨佔廠商課徵每單位  $t\%$  營利事業所得稅。(10 分)