

國立臺北大學 106 學年度學士班暨進修學士班轉學生招生考試試題

系別：財政學系 3 年級(學士班、進修學士班)

科目：個體及總體經濟學

考試時間：80 分鐘

第 1 頁，共 2 頁

可 不可使用計算機

**Microeconomics**

一、Multiple Choice Question (Please choose the best answer) (單選題)(25 分)

- When two consumers have the same preference, that means
  - They must have the same utility functions.
  - They must have the same marginal utility functions.
  - They must have the same marginal rates of substitution.
  - They must have the same optimal consumption bundles.
- Which of the following statements is correct?
  - If leisure is a normal good, an income tax will cause workers to work more.
  - If leisure is a normal good, an income tax will cause workers to work less.
  - If leisure is an inferior good, an income tax will cause workers to work more.
  - If leisure is an inferior good, an income tax will cause workers to work less.
- Which of the following statements is correct?
  - The uncompensated demand curve is always downward sloping.
  - The compensated demand curve is always downward sloping.
  - The uncompensated demand curve for an inferior good is always upward sloping.
  - The compensated demand curve for an inferior good is always upward sloping.
- Which of the following statements is false?
  - A risk-loving individual's marginal utility of money is positive and increasing.
  - A risk-averse individual's marginal utility of money is positive and decreasing.
  - A risk-neutral individual's marginal utility of money is positive and constant.
  - A risk-averse individual must not buy insurance if the insurance premium is higher than fair insurance.
- What is true about the lemon car market?
  - The market has the problem of adverse selection.
  - The market will end up with having low-quality used cars only.
  - The owners of high-quality used cars are not willing to sell their cars.
  - All of the above.

二、Short-answer(簡答題)(25 分)

Consider a market with a market demand  $P = 150 - Q$ . Answer the following independent questions.

- If this market is monopolized by only one firm and this firm has a cost function  $TC(Q) = 60Q$ , what price and quantity will this firm set if this firm adopts single-pricing strategy? (4 分)
- Following part (a), what prices will this monopoly set if it conducts perfect price discrimination? (4 分)
- Following part (a), what prices will this monopoly set if it conducts quantity discrimination by setting two prices? (4 分)
- Now suppose that this market is a homogeneous-product duopoly and both firms have the same cost functions  $TC(Q) = 60Q$ . Find the Cournot equilibrium. (5 分)
- Following part (d), find the Bertrand equilibrium. (3 分)
- Following part (d), suppose that one of the firms is the leader and the other one is the follower, find the Stackelberg equilibrium. (5 分)

# 國立臺北大學 106 學年度學士班暨進修學士班轉學生招生考試試題

系別：財政學系 3 年級(學士班、進修學士班)

考試時間：80 分鐘

科目：個體及總體經濟學

第 2 頁，共 2 頁

可 不可使用計算機

## Macroeconomics

### 三、Sentence correction (改錯題，請將錯誤的地方更正)(50 分)

1. 在肯亞工作的美國人，他的產出應計入當年度美國的 GDP 和 GNP。
2. 當一個國家有資本帳剩餘(current account surplus)時，該國所持有的淨外國資產會下降。
3. M2 的流動性比 M1 大，但是 M1 的定義比 M2 廣。
4. 在 Solow 成長模型中，若人口成長率為一常數  $a$  且  $a > 0$ ，在無技術進步的狀況下，總產出和平均每單位勞動資本使用量( $K/N$ )在穩定狀態(steady state)下會是常數。
5. 失業，消費和貨幣供給均為反景氣循環(countercyclical)的經濟變數。
6. In a Cobb-Douglas production function,  $Y = AK^\alpha N^{1-\alpha}$  ( $A > 0$ ;  $0 < \alpha < 1$ ), an adverse supply shock, such as a reduced supply of capital ( $K$ ), would decrease the marginal product of capital but have no effect on the marginal product of labor.
7. Prices of items included in the CPI are weighted according to amount of the items produced in GDP.
8. A beneficial supply shock would shift the FE line to the right but a decrease in money supply would shift the FE line to the left.
9. Real business cycle theorists think that most business cycle fluctuations are caused by shocks to the size of government purchases.
10. In the efficiency wage model, an increase in labor supply would increase output but decrease the real wage.