## 國立政治大學 106 學年度 碩士班 招生考試試題

第1頁,共1頁

考試科目 個體經濟學 系所別 經濟學系 考試時間 2月19日(星期日)第一節 216(

- 1. (三十分,每小題五分)請解釋並說明下列專有名詞,並指出其在經濟學上的重要性為何。
  - a. Two-part tariffs
  - b. Production function
  - c. Producer surplus
  - d. Mixed strategies
  - e. Subgame perfect Nash equilibrium
  - f. Efficiency wages
- 2. (二十分,每小題五分)請解釋並說明下列敘述為『真』、『偽』、或是『不確定』。
  - a. 利潤函數為產品價格的一次齊次(homogeneous of degree one)函數。
  - b. 成本函數為要素價格與產量的一次齊次(homogeneous of degree one)函數。
  - c. 條件要素需求(conditional factor demand)函數為要素價格的一次齊次(homogeneous of degree one) 函數。
  - d. 市場供給函數的斜率一定是正數。
- 3. (二十五分) A consumer has the preference for consumption as the following quasi-linear utility function describes:

$$u(x_1, x_2) = x_1 + ln(x_2).$$

- a. Derive the demand functions of this consumer for the two goods,  $x_1$  and  $x_2$ , with respect to the prices of these two goods, and the consumer's available budge,  $\frac{1}{2}$  m.
- b. Depict the map of indifference curves (for three separate levels of utility). Label numerically the selected bundles on the indifference curves. Explain the features of a quasi-linear preference based on your depiction.
- c. Calculate the change in consumer surplus, compensating variation and equivalent variation for the scenario where the given budget and initial prices for goods 1 and 2 are: m = 200, p<sub>1</sub> = 2, p<sub>2</sub> = 1; and p<sub>2</sub> rises to 4. Justify your calculations for the three indicators based on the features of the quasi-linear preference.
- 4. (二十五分) Explain the consumption duality and features of the Marshallian and Hicksian demand functions. Address particularly the following questions. In what circumstances the Marshallian and the Hicksian demand curves would meet? How does the implied consumer wealth or budget differ at the price levels other than where the aforementioned two demand curves meet? Explain why the Marshallian demand curve, as opposed to the Hicksian demand curve, would present better and more sensibly the consumer's response with regard to the goods that take up a large portion of her/his expenditure. What do the relative slopes of the Marshallian and the Hicksian demand curves suggest for the demand property of the commodity described?