## 國立中山大學 107 學年度碩士暨碩士專班招生考試試題

科目名稱:個體經濟學【經濟所碩士班】 ※本科目依簡章規定「不可以」使用計算機(問答申論題)

題號: 403002 共1頁第1頁

- 1. (10pts) If a binding minimum wage, <u>w</u>, is imposed, what happens to the equilibrium in the labor market? Furthermore, is it possible that the minimum wage could make total wage payments (wage times employment) rise? If it is possible, how can all workers benefit from the minimum wage, not just the workers who remain hired after the implementation of the minimum wage? (Please use a graph to illustrate the effect.)
- 2. (10pts) If a government decides to temporarily suspend the current gasoline tax, which is a unit tax, will this policy benefit the firms or consumers in the short run? (Note: In the short run, all the oil refineries can produce at most  $\bar{Q}$  units of gasoline and please draw a graph to support your answer.)
- 3. (10pts) The property of local nonsatiation of consumer preferences states that for any bundle of goods there is always another bundle of goods arbitrarily close that is preferred to it. What this means is that a consumer always either prefers more of an item or less of an item. Please draw an indifference curve that violates such a property.
- 4. (10pts) Is it possible for all goods to be inferior? Please provide the assumption made on the preferences that leads to your answer. We do sometimes observe that an individual does not buy more usual goods and services when her income goes up. Where can the rest of the money go? Does this observation contradict the answer you had for the first part of this question?
- 5. (10pts) Suppose that two linear demand curves go through the initial equilibrium,  $(p_1, q_1)$ . One demand curve is less elastic than the other at  $(p_1, q_1)$ . For which demand curve will a price increase cause the larger consumer surplus loss? Please draw a graph to illustrate your answer.
- 6. (10pts) Please use the Edgeworth box to show the difference between a Pareto efficient point and a competitive equilibrium point.
- 7. (10pts) Will the price be lower if duopoly firms engage in a Cournot competition or if they engage in a Bertrand competition? Under what conditions can you give a definite answer to this question?
- 8. (10pts) Consider the following sequential game: If the potential entrant stays out of the market, it makes no profit,  $\pi_e = 0$ , and the incumbent firm makes the monopoly profit,  $\pi_i = \pi_m$ . If the potential entrant enters the market, the incumbent earns  $\pi_d$  and the entrant makes  $\pi_d F$ . Now, if the incumbent firm can choose to pay the landlord b for exclusive rights to deter the potential entry, will it pay?
- 9. (20pts) John has a house worth \$80,000. Because John is risk-averse, he wants to fully insure his house. Assume that his house has 25% chance to burn next year. If it does burn, the house will be worth \$40,000. The insurance company offers a fair insurance to let John trade \$1 in the good state (no fire) for \$3 in the bad state (fire). In other words, John can pay \$1 premium and he will receive \$3 if the house burns. Now, the local government assesses a property tax of \$4,000 on John's house. If the tax is collected whether or not the house burns, how much fair insurance does John buy? If the tax is only collected when the house does not burn, how much fair insurance does John buy? Explain the results.