

# 國立臺北大學九十七學年度碩士班招生考試試題

系(所)別：財政學系  
科 目：財政學

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可 不可使用計算機

一、是非不定題(每題 10 分，總分 50 分)

請評論下列敘述為對、錯或不一定，請說明理由，若有適當圖形，請畫圖輔助說明。

1. Government assignment and enforcement of property rights internalize an externality and this approach works better than direct government intervention.
2. Both adverse selection and moral hazard problems cannot be solved in social health insurance programs.
3. Food Stamps are not as good as cash for families who spend little on food, but they are better than cash for families who spend a lot on food.
4. Logrolling is a pareto improvement in social welfare.
5. If workers employed in a project would have been unemployed in the absence of the project, the wages paid to them can be treated as a project benefit.

二、假設社會中僅存在甲、乙兩位仁兄，並且兩人的效用函數分別為：

$$U^{\text{甲}}(X^{\text{甲}}, G) = 0.5 \ln X^{\text{甲}} + 0.5 \ln G$$

(其中  $X^{\text{甲}}$  為某甲的私有財消費量， $G$  為公共財數量)

$$U^{\text{乙}}(X^{\text{乙}}, G) = (X^{\text{乙}})^{\alpha} (G)^{\beta}$$

(其中  $X^{\text{乙}}$  為某乙的私有財消費量， $G$  為公共財數量)

又我們假設私有財的市場價格為  $P_X = 1$ ，而公共財生產之平均成本等於邊際成本等於 1，至於在甲、乙兩人的所得水準方面，則是分別為  $Y^{\text{甲}}$  以及  $Y^{\text{乙}}$ 。請在上述設定下：

- (1) 推導此一模型下的 Lindahl equilibrium。(10 分)
- (2) 推導此一模型下的最適公共財提供數量。(5 分)

三、A proposal for a negative income tax is designed to provide an income guarantee for each person, irrespective of his age or status, of \$24,000 per year. Thus, a family of four would have an income guarantee of \$96,000 per year. The transfers under the program will be phased out at a rate of 40 percent as earned income increases. Calculate the break-even level of income for a family of four。(5 分) If all families above the break-even level of income pay a flat-rate 25 percent tax on their earnings, plot disposable income as a function of earned income。(5 分)

四、請舉例驗證 Borda Count 投票法則違反無關選項的獨立性 (independence of irrelevant alternatives)。(5 分)

五、試證明課徵從量貨物稅之超額負擔(福利損失 WL)為：(10 分)

$$WL = \frac{1}{2} T^2 \frac{Q^*}{P^*} \left[ \frac{\epsilon_s |\epsilon_D|}{\epsilon_s + |\epsilon_D|} \right]$$

上式當中： $\epsilon_s$  為供給價格彈性；

$|\epsilon_D|$  為需求價格彈性係數；

$Q^*$  為稅前均衡數量；

$P^*$  為稅前均衡價格；

$T$  為單位從量貨物稅額。

六、請以圖形說明：政府為了收取相同的稅收，與其選擇較少的商品課以較高的租稅，不如選擇對較多的商品課徵較低的租稅，因為這將有助於降低稅課的福利成本。(10 分)

試題隨卷繳交