※注意：作答時，請於答案卷上標明作答之部分及其題號。

一、個體部分（答題時請對深度和廣度並重）：

1. 如果美伊戰爭時間拉長，造成石油價格大漲，請問它會如何影響到我們台灣的個人、家庭和社會的經濟生活？ 請盡可能以圖形或模型來進行分析。（25 分）
2. 在加入世界貿易組織之後將嚴重衝擊農業，政府計劃以一千億台幣成立農業發展基金協助農民，但是如何使用這項基金各有不同看法。有人說直接補貼虧損的農民，有人說對所有的農民發農民津貼，有人說應該投資在農業研究發展上...。請以經濟理論說明你的看法，需要時輔以圖形或使用模型。（25 分）

二、總體部分：

1. (32 分) This problem is about factor payments in the Solow model. Consider an economy that has an aggregate production function denoted by Y=F(K,AL), where Y is output, K is capital, L is labor, and A is an efficiency index that grows at a rate equal to g. Assume that the production function exhibits constant returns to scale, i.e., F(cK,cAL)=cF(K,AL), where c>0. Suppose that k=K/AL. Let c=1/AL, then F(K,AL)/AL=F(K/AL,1)= $f(k)$. Assume that $f'(k)>0$ and $f''(k)<0$. Assume also that both labor and capital are paid their marginal products. Let w denote F(K,AL)/L and r denote F(K,AL)/K. Please answer the following questions.
   a. Show that the marginal product of labor, w, is A[$f(k)$ -k $f'(k)$].
   b. Show that if both capital and labor are paid their marginal products, constant returns to scale implies that the total amount paid to the factors of production equals total output. That is, show that under constant returns, wL+rK=F(K,AL).
   c. Two additional stylized facts about growth listed by Kaldor (1961) are that the return to capital (r) is approximately constant and that the shares of output going to capital and labor are each roughly constant. Does a Solow economy on a balanced growth path exhibit these properties? What are the growth rates of w and r on a balanced growth path?
   d. Suppose the economy begins with a level of k less than k^*. As k moves toward k^*, is w growing at a rate greater than, less than, or equal to its growth rate on the balanced growth path? What about r?

2. (18 分) Consider the following income-expenditure model. Suppose that Y=C+I+G, where Y is income, and C, I, and G are expenditures on private consumption, investment, and public consumption, respectively. Suppose that expenditure on private consumption is an increasing function of after-tax income and that the marginal propensity to consume is less than one, i.e., C= $f((1-t)Y)$ and $1>f'((1-t)Y)>0$, where t is the proportional income tax rate. Please answer the following questions.
   a. Is it possible for a decrease in the tax rate t to induce an increase in income Y?
   b. Is it possible for a decrease in the tax rate t to induce an increase in tax revenues tY?

試題隨卷繳回