國立成功大學 105 學年度碩士班招生考試試題

系　　所：經濟學系

考試科目：總體經濟學

考試日期：0227，節次：3

※ 考生請注意：本試題不可使用計算機。請於答案卷(卡)作答，於本試題紙上作答者，不予計分。

1. Specify a simple aggregate demand schedule: AD: $m + v = p + y$. Using the natural logarithms of the indicted variables, m is the money supply; v is velocity and is assumed to be constant; p is the price level; and y is GDP. Specify a simple short-run aggregate supply, one that emphasizes the role of price expectations: $p = p^e + \lambda(y - y^*)$; p^e is the expected price level and y^* is potential GDP; λ is a parameter and presents the slope of the aggregate supply curve. Please answer the following questions:
   (1) Find the equilibrium output and price in our model economy. (10%)
   (2) Assume that the slope of the aggregate supply is 2/3; that the values of the money supply, velocity, and potential GDP are 9, 8, 7, respectively; and that the expected price level is 5. Forecast both the price level and the level of output. (6%)
   (3) Evaluate your forecast in light of the Lucas critique. (4%)
   (4) How does this forecast differ from that which would result from a perfect-foresight model?(4%)
   (5) Is this forecast better or worse? Explain. (3%)

2. (1) Determine the optimal strategy for cash management for a person who earns $1600 per month, can earn 0.5 percent interest per month in a savings account, and has a transaction cost of $1. (4%)
   (2) What is the individual's average cash balance? (3%)
   (3) Suppose income rises to $1800. By what percentage does the individual's demand for money change?(3%)

3. Suppose that 70 percent of a country's population, as a consequence of liquidity constraints, behaves in accordance with the traditional model of consumption and thus consumes, every period, a given fraction of its disposable income. The other 30 percent of the population behaves in accordance with the Life-cycle theory and permanent income hypothesis (LC-PIH).
   (1) If the marginal propensity to consumption (MPC) in the traditional model is 0.8 and disposable income changes by $10 million (you may assume that this change is due entirely to a change in transitory income), by how much will consumption change? (7%)
   (2) What if 70 percent of the population behaves in accordance with the LC-PIH, and 30 percent behaves in accordance with the traditional model? (7%)
   (3) What if 100 percent of the population behaves in accordance with the LC-PIH. (6%)

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4. Consider a two-sector model of growth, with two kinds of investment opportunities-one with a diminishing marginal product and one with a constant marginal product.
   (1). What does the production function for this problem look like?(10%)
   (2). Characterize the set of equilibria for this model. Does output in any of the equilibria have nonzero per capita growth?(8%)
   (3). What can this model help us explain that strict endogenous and neoclassical growth models cannot?(7%)

5. "If wages are rigid, then the government can easily reduce inflation without creating higher unemployment." Comment on this statement. (18%)