

國立中央大學97學年度碩士班考試入學試題卷

所別：經濟學系碩士班 科目：總體經濟學 共 2 頁 第  /  頁

\*請在試卷答案卷(卡)內作答

一、是非題：每題 8 分 (共 48 分)。請先回答是或非，再寫理由；不寫理由，以零分計；沒繪圖亦以零分計。

1. In the Solow-Swan model, the higher the labor-force growth rate, the higher the Golden Rule capital-labor ratio.
2. According to the Laffer curve, the higher the tax rate, the smaller the tax revenue.
3. Other things equal, the short-run equilibrium real GDP level will increase if people expect that the general price level will rise.
4. According to the IS-LM model, the larger the sensitivity of investment to the interest rate (in absolute terms), the larger the effect of an increase in the money supply on national income.
5. Suppose that the interest rate is determined by the supply and demand for loanable funds. Other things equal, both the interest rate and national investment increase with government spending.
6. In the IS-LM and AD-AS models, the lower the short-run equilibrium general price level, the lower the short-run equilibrium interest rate.

二、計算與問答題：(共 52 分):

1. (10 分) An economy has the per-worker production

$$y_t = 3k_t^{0.5},$$

where  $y_t$  is output per worker and  $k_t$  is the capital-labor ratio. The depreciation rate is 0.1, and the population growth rate is 0.05. Saving is

$$S_t = 0.3Y_t,$$

where  $S_t$  is total national saving and  $Y_t$  is total output. What are the steady-state values of the capital-labor ratio and output per worker?

參考用

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注意：背面有試題

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2. (22 分) Suppose the economy is characterized by the following equations.

$$\text{IS curve: } r = 20.20 - 0.002Y$$

$$\text{LM curve: } M/P = Y - 250(r + \pi^e)$$

$$\text{SRAS curve: } Y = \bar{Y} + 100(P - P^e)$$

The nominal money supply is  $M = 19,800$ , expected inflation is  $\pi^e = 0.20$ , and full-employment output is  $\bar{Y} = 10,000$ .

- (a) (10 分) If the economy begins in general equilibrium, what are the equilibrium values of the price level and the real interest rate?
- (b) (12 分) If the expected price level is the price level you found in part (a), what happens to the price level, output, and the real interest rate in the short run if there's an unanticipated decrease in the nominal money supply to 14,737.5?

3. (20 分)

- (a) Analyze the effects of a temporary increase in the price of oil on current output, the real wage, and the real interest rate.
- (b) Analyze the effects of a permanent increase in the price of oil on current output, the real wage, and the real interest rate.

注意：背面有試題