

國立中央大學100學年度碩士班考試入學試題卷

所別：經濟學系碩士班 不分組(一般生) 科目：總體經濟學 共 2 頁 第 1 頁

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*請在試卷答案卷(卡)內作答

請依題號寫下答案

一、是非題：每題8分。請先回答是或非，再寫理由；沒寫理由或沒繪圖
均以零分計。

1. In the Solow model, a productivity improvement causes the Golden Rule consumption per worker to increase.
2. Suppose that there are only two large countries, home and foreign. Other things equal, a raise in the investment tax credit of the home country causes the level of investment of the foreign country to fall.
3. In the short run, a higher expected inflation rate results in a higher inflation rate and a higher unemployment rate.
4. Other things equal, a higher real interest rate results in lower current consumption.
5. In the IS-LM and AD-AS models, the short-run equilibrium interest rate and the short-run equilibrium general price level move in the same direction.
6. According to the efficiency wages model, a beneficial supply shock causes the unemployment rate to fall.

參考用

PART II: Short-Answer Questions and Problems (52 points).

7. (16 points) Data shows that Taiwanese aboriginal people's wage rates are lower than other people.
 - (a) (8 points) Please use the formation of labor-supply and labor-demand, as well as the concept of equilibrium to explain this wage difference.
 - (b) (8 points) Suppose the government forces firms to pay the same wage to all people. Please discuss and illustrate the economic impact of this regulation.

注意：背面有試題

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8. (24 points) Consider an economy with the following production technology:

$$Y = AK^{1/3}L^{2/3}$$

Where Y denotes the total output, A denotes the constant state of technology (assume $A=1$), K denotes the aggregate capital stock, and L denotes the aggregate labor. In addition, assume that the marginal propensity to save is 0.4 (saving becomes capital) and the depreciation rate is 10%. Moreover, assume that the government expenditure is zero. (Note: Please write down your derivation or you will get zero point.)

- (a) (9 points) Suppose the amount of labor is fixed at 100. Please solve for the equilibrium output, consumption, and saving.
- (b) (10 points) Instead of having a fixed amount of labor, assume that the growth rate of labor is 3%. Please solve for the equilibrium output per capita and equilibrium growth rate.
- (c) (5 points) Compare your answers in (a) and (b). Evaluate the assumption of having a fixed amount of labor.
9. (12 points) Data shows that the Taiwanese real national income per capita was NT 26,603 in 1951 and NT 471,405 in 2009. Could you use the Solow-Swan neoclassical growth model to explain this phenomenon? If yes, please explain. If no, please provide another model to explain this phenomenon.

參考用

注意：背面有試題