

# 國立清華大學 102 學年度碩士班考試入學試題

系所班組別：經濟系 (0540)

考試科目 (代碼)：總體經濟學 (4002)

共 2 頁，第 1 頁 \*請在【答案卷、卡】作答

## PART I

- (15%) 一. 試問短期消費函數與長期消費函數有何不同？為什麼不同？又有什麼樣的理論可以支撐長期消費函數的性質（簡要回答）。
- (15%) 二. 何謂實質利率對勞動供給的“跨期替代效應” (intertemporal-substitution effect)？此效應的有或無對均衡的實質工資與勞動，以及供給面的產出水準有何指示 (可圖解說明)？
- (20%) 三. 在一般描述貨幣經濟體系的運作或總合的經濟活動時，多是集中在四個主要部門和四個主要市場的行為；其中家戶部門還會藉由儲蓄來積累財富。  
1. 試圖繪出這些主要部門與市場之間運作的循環圖。並回答民間財富的主要形式為何？  
2. 然而，教科書內的總體經濟模型往往省略了金融市場，是何原因？

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Part II:

1. (20 points) Due to the declining birth rate in Taiwan before 2012, we will have lower working-age population in the future.
  - 1.1. From the Classical view, please use a diagram to characterize the change of the labor market equilibrium when there is a decline in the working-age population. Moreover, please explicitly describe the details about how the system attains the new labor market equilibrium ( $L^S = L^D$ ) due to the change.
  - 1.2. Suppose that the marginal product of labor (MPL) in the economy is given by  $MPL=250-2L$  and the supply of labor is  $80+w$ , where  $L$  is the number of workers, and  $w$  is the real wage. If the government set the minimum wages equal 22, will such policy cause involuntary unemployment? Please explain your answer.
  - 1.3. Let's assume that the economy has been in equilibrium for all the markets. Based on the Keynesian view, what happens to the IS-LM-FE equilibrium and the price level in the long run due to the fall of working-age population?
  - 1.4. Let's assume that the economy has been in the steady state. Let's assume that the growth rate of working-age population was 2% and has been changed to 1% permanently since  $t=10$ . Based on the Solow diagram, please illustrate how the consumption per capita evolves over time due to such a change, ceteris paribus (all the other things being equal).
2. (10 points) A nation Titan produces yam and fishes domestically and uses gold as the medium of exchange. In year 2011, the producers harvested 400 kilograms of yam and caught 160 fishes. The residents can buy 4 kilograms of yam or 2 fish with one ounce of gold. In year 2012, the producers harvested 440 kilograms of yam of caught 176 fishes and they can buy 2 kilograms of yam or 1 fish with 1 ounce of gold.
  - 2.1. If yams and fish are the only output of Titan, please compute the economic growth rate of Titan.
  - 2.2. Yesterday, a gold comet hit Titan. Since the time and the spot of the hit were precisely estimated, nothing got damaged and it brought in the gold that doubles the amount of gold currently in circulation. Why it is possible that knowing the arrival of additional supply of gold may raise the price level right after the news is released in 2012, rather than after the gold actually arrived yesterday?
3. (20 points) True, False or Uncertain:  
Reminder: Please explain your answer. Otherwise, no point will be granted.
  - 3.1. Based on the Fisher model, higher real interest rate results in higher savings for all the individuals.
  - 3.2. Higher government expenditure results in higher GDP.
  - 3.3. Based on the Solow model, an increase in savings rate results in lower consumption per capita.
  - 3.4. For a closed economy, simultaneous increases in the expected future marginal product and in the expected future income result in a higher real interest rate and higher savings and investment in equilibrium.