

注意：考試開始鈴響前，不得翻閱試題，
並不得書寫、畫記、作答。


國立清華大學 109 學年度碩士班考試入學試題

系所班組別：經濟學系

科目代碼：4502

考試科目：總體經濟學

—作答注意事項—

1. 請核對答案卷（卡）上之准考證號、科目名稱是否正確。
2. 作答中如有發現試題印刷不清，得舉手請監試人員處理，但不得要求解釋題意。
3. 考生限在答案卷上標記「由此開始作答」區內作答，且不可書寫姓名、准考證號或與作答無關之其他文字或符號。
4. 答案卷用盡不得要求加頁。
5. 答案卷可用任何書寫工具作答，惟為方便閱卷辨識，請儘量使用藍色或黑色書寫；答案卡限用 2B 鉛筆畫記；如畫記不清（含未依範例畫記）致光學閱讀機無法辨識答案者，其後果一律由考生自行負責。
6. 其他應考規則、違規處理及扣分方式，請自行詳閱准考證明上「國立清華大學試場規則及違規處理辦法」，無法因本試題封面作答注意事項中未列明而稱未知悉。

國立清華大學 109 學年度碩士班考試入學試題

系所班組別：經濟學系 (0545)

考試科目 (代碼)：總體經濟學 (4502)

共 2 頁，第 1 頁 *請在【答案卷、卡】作答

請依題號作答

1. (5 points) In a closed economy, *desired national saving* equals _____.
(若使用符號表示須先定義符號)
2. (5 points) If the price level is 1.25, the nominal money stock is \$600,000,000, and velocity is 10, then the real GDP is _____. (請寫出計算過程)
3. (5 points) Does an increase in risk cause money demand to rise, to fall, or to remain unchange? State your reason(s).
4. *Okun's law* can stated as $(\Delta Y/Y) = 3 - 2\Delta u$.
 - (a) (5 points) Use a diagram to illusatate *Okun's law*.
 - (b) (5 points) Explain the economic meaning of *Okun's law*.
 - (c) (5 points) Assume that unemployment rate increased by 3 percentage points between this year and next year, by how much will output change during the same period?
5. Suppose the proudction function is

$$Y = AF(K, L)$$

where Y is total output, K is total capital stock, L is total labor force, and A is productivity. The growth accouting equation is derived as

$$(\Delta Y/Y) = (\Delta A/A) + a_K(\Delta K/K) + a_L(\Delta L/L)$$

- (a) (5 points) What do a_K and a_L represent?
- (b) (5 points) What are the sources of economic growth according to the growth accounting equation?
- (c) (5 points) Derive the *Solow residual* and state its economic meaning.
- (d) (5 points) Assume that $a_K + a_L = 1$, derive the growth rate of average labor productivity.

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6. (15 points) List briefly the main stylized facts on quantities characterizing the movement and the comovement in business cycles (output, productivity, employment, consumption...).
7. (10 points) How an increase in the money supply affects the nominal interest rate differently in the short run and in the long run?
8. Under a fixed exchange rate regime with perfect capital mobility:
 - (1) (5 points) Show the relationship of nominal interest rates between two countries (Home (i_H) and Foreign (i_F)) implied by uncovered interest parity.
 - (2) (20 points) Using the IS-LM Model of an *open economy* to discuss the impacts of expansionary monetary policy (implemented through changes in the money supply) and expansionary fiscal policy (involving changes in government spending) on interest rates and GDP.

— 以下空白 —