國立嘉義大學 104 學年度 應用經濟學系碩士班招生考試試題

科目: 經濟學

一、選擇題:(每題3分,共30分)

- 1. Economic booms should stimulate investment spending because during booms:
 - (A) the real interest rate increases.
 - (B) corporate tax rates usually increase.
 - (C) the purchase price of capital increases.
 - (D) higher levels of employment increase the marginal product of capital.
- 2. In Irving Fisher's two-period model, if consumption in both periods is a normal good, then an increase in income in period two:
 - (A) increases consumption in period one only.
 - (B) increases consumption in period two only.
 - (C) increases consumption in both periods.
 - (D) does not increase consumption in either period.
- 3. According to the Mundell-Fleming model for a small open economy with flexible exchange rates, if the government decreases the money supply, then in the new short-run equilibrium:
 - (A) income falls and the exchange rate rises.
 - (B) the exchange rate falls and income rises.
 - (C) ncome remains unchanged but the exchange rate rises.
 - (D) the exchange rate remains unchanged but income falls.
- 4. In the Mundell-Fleming model with fixed exchange rates, attempts by the central bank to decrease the money supply:
 - (A) lead to a lower equilibrium level of income.
 - (B) lead to a higher equilibrium level of income.
 - (C) must be abandoned in order to maintain the fixed exchange rate.
 - (D) must be offset by expansionary fiscal policy.

5. Over the past year, output grew 4%, capital grew 2%, and labor grew 1%. If the income shares of output with respect to capital and labor are 0.3 and 0.7, respectively, how much did total factor productivity grow?

(A) 2.0%

(B) 2.7%

(C) 3.0%

(D) 3.3%

- 6. According to the Solow model, an increase in the capital-labor ratio will
 - (A) always reduce steady state consumption per worker.
 - (B) always increase steady state consumption per worker.
 - (C) reduce steady state consumption per worker if the capital-labor ratio is below the Golden rule capital stock.
 - (D) increase steady state consumption per worker if the capital-labor ratio is below the Golden rule capital stock.
- 7. The Bigdrillcompany drills for oil, which it sells for \$200 million to the Bigoil company to be made into gas. The Bigoilcompany's gas is sold for a total of \$600 million. What is the total contribution to the country's GDP from companies Bigdrill and Bigoil?

(A) \$200 million

(B) \$400 million

(C) \$600 million

(D) \$800 million

8. The country of Old Jersey produces milk and butter, and it has published the following macroeconomic data, where quantities are in gallons and prices are dollars per gallon.

	Yea	r 1	Year 2		
Good	Quantity	Price	Quantity	Price	
Milk	500	\$2	900	\$3	
Butter	2000	\$1	3000	\$2	

Between Year 1 and Year 2, the percent change in real GDP (based on Year 1 as a base year) was

(A) 58%

(B) 60%

(C) 130%

(D) 190%

- 9. Consider the money demand function that takes the form $(M/P)^d = kY$, where M is the quantity of money, P is the price level, and Y is real output. If the money supply is growing at a 10 percent rate, real output is growing at a 3 percent rate, and k is constant, what is the rate of inflation in this country?
 - (A) 3 percent

(B) 7 percent

(C) 10 percent

(D) 13 percent

- 10. According to the theory of Ricardian equivalence, if consumers are forward-looking, they will view a tax cut that has no plans to reduce government spending as ______, so their consumption will ______.
 - (A) additional disposable income; increase
 - (B) additional disposable income; remain unchanged
 - (C) a rescheduling of taxes into the future; increase
 - (D) a rescheduling of taxes into the future; remain unchanged

二、 簡答題:(共 70 分)

- 1. Recently the World is experiencing declining energy prices. Assume that Taiwan's energy prices are decreasing, the Taiwan economy was in long-run equilibrium before these declines begin.
 - (A) Use the aggregate demand—aggregate supply model to illustrate graphically the short-run and long-run impact of this decline on output and prices.(5 分)
 - (B) If the Central Bank attempted to offset this deviation from the natural rate in the short run, should the money supply be increased or decreased? (5 分)
- 2. Suppose that the Central Bank raises the interest rate at which the average household can borrow and lend. Assume that the typical household behaves according to Irving Fisher's two-period model, that consumption in both periods is a normal good, and that households are initially savers. Illustrate graphically how the increase in the interest rate in period one affects consumption in both periods. (10 分)
- 3. 假設商品 X 的市場中有 2 位消費者與 2 家廠商。設若商品 X 的價格為 p_x ,商品 Y 的價格則為 p_y = 1 。 2 位消費者的可支配所得各有 100,他們對於商品 X 與商品 Y 的偏好分別可以函數 $U_i(x_i,y_i)=100\cdot x_i-0.5\cdot x_i^2+y_i$,i=1,2,來表示;

其中 x_i 為商品 X 的消費數量, y_i 為商品 Y 的消費數量。2 家廠商的生產函數分別可以函數 $Q_j(L_j,K_j)=L_j^{0.5}\cdot K_j$,j=1,2,來表示;其中 L_j 為勞動投入要素數量, K_j 為資本要素投入數量。我們假設 $K_1=K_2=1$,勞動投入要素的價格為 w=0.5,資本投入要素的價格則為 r=1。

- (A) 設若商品 X 的市場結構為完全競爭。請求取商品 X 的市場需求函數(5 分) 及市場供給函數(5 分)。市場均衡的交易價格為多少 ? (5 分)
- (B) 設若商品 X 市場中,2 家廠商進行 Cournot 數量競爭。市場均衡的交易價格為多少?(10分)
- (C) 設若商品 X 市場中,2 家廠商勾結。市場均衡的交易價格為多少?(10 分)
- 4. 請求取以下賽局所有的 Nash 均衡策略組合。(15 分)

		李四			
		L	M	R	
張三	U	(5,10)	(2,2)	(4,5)	
	С	(1,5)	(8,8)	(10,4)	
	D	(10,8)	(6,7)	(2,3)	