

考試科目	總體經濟學	系所別	經濟學系	考試時間	2月7日(五)第三節
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I. Multiple Choice (2 point each)

- Michelle grows apples and catches fish. Last year she harvested 1500 apples and 600 fish. She values one fish as having a worth of three apples. She gave James 300 apples and 100 fish for helping her to harvest apples and catch fish, all of which were consumed by James. Michelle set aside 200 fish to help with next year's harvest. In terms of fish, consumption would equal
(A) 700 fish. (B) 900 fish. (C) 1100 fish. (D) 2700 fish.
- What is the unemployment rate if there are 180 million people employed, 6 million people unemployed, and 14 million not in the labor force?
(A) 3.00% (B) 3.23% (C) 3.33% (D) 3.65%
- In forecasting consumer spending using surveys of consumer confidence, research suggests that
(A) the forecasts are not improved when using consumer confidence measures.
(B) the forecasts are improved when using consumer confidence measures.
(C) the forecasts are improved when using consumer confidence measures for forecasts made during recessions, but not expansions.
(D) the forecasts are not improved when using consumer confidence measures for forecasts made during expansions, but not recessions.
- An increase in the price of capital goods will
(A) increase the expected future marginal product of capital.
(B) reduce the expected future marginal product of capital.
(C) increase the interest cost and the depreciation cost of capital.
(D) increase the interest cost but not affect the depreciation cost of capital.
- Suppose output is \$25 billion, government purchases are \$9 billion, desired consumption is \$12 billion, and desired investment is \$6 billion. Net foreign lending would be equal to
(A) -\$4 billion. (B) -\$2 billion. (C) \$2 billion. (D) \$4 billion.
- 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.
- If real income rises 4%, prices rise 1%, and nominal money demand rises 4%, what is the income elasticity of real money demand?
(A) 3/4 (B) 4/5 (C) 1 (D) 5/3
- If the asset market is to remain in equilibrium, then if the money supply increases, output is unchanged, the price level is unchanged, and the expected inflation rate is unchanged, then
(A) the real interest rate must rise. (B) the real interest rate must decline.
(C) the nominal interest rate must rise. (D) the inflation rate must rise.
- The Conference Board Leading Economic Index (LEI) for US includes 10 data series that are used to forecast economic activity about _____ in advance.

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- 作答於試題上者，不予計分。
- 試題請隨卷繳交。

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(A) one month (B) six to nine months (C) one to two years (D) five to ten years

10. Which of the following is *true*?

(A) Employment is procyclical and unemployment is coincident with the business cycle.
 (B) Industries that are extremely sensitive to the business cycle are the capital goods and nondurable goods sectors.
 (C) Nominal interest rates are procyclical and leads the business cycle.
 (D) Research on the effects of recessions on the real level of GDP shows that recessions cause both temporary and permanent declines in real GDP, but most of the decline is temporary.

11. Which of the following is *true*?

(A) Based on the sticky-price model, the short-run aggregate supply curve will be steeper, the greater the proportion of firms with flexible prices.
 (B) According to the sticky-wage model, an unexpected increase in the price level raises the real wage, increases the quantity of labor hired, and increases the quantity of output produced.
 (C) The imperfect-information model bases the difference in the short-run and long-run aggregate supply curve on procyclical real wages.
 (D) The sticky-wage model predicts that the real wage is procyclical and data indicate that the real wage in the United States is countercyclical.

12. Which of the following is *true*?

(A) A speculative attack on a currency occurs when a central bank adopts a currency board to back the domestic currency with a foreign currency.
 (B) If short-run equilibrium in the Mundell-Fleming model is represented by a graph with Y along the horizontal axis and the exchange rate along the vertical axis, then the LM^* curve is vertical because the exchange rate does not enter into the LM^* equation.
 (C) Assuming there is perfect capital mobility, compared to a *large* open economy, a *small* open economy is one in which the exchange rate is floating.
 (D) If the exchange rate of currency A is fixed to a unit of currency B, then a potential problem for the central bank in charge of currency A is running out of currency A.

13. Which of the following is *true*?

(A) In the Keynesian model in the long run, a decrease in the money supply will cause no change in the real interest rate and a decrease in the price level.
 (B) In the Keynesian model in the long run, an increase in taxes causes the price level to fall and the real interest rate to rise.
 (C) Keynesians explain the procyclical behavior of average labor productivity by introducing the concept of menu costs.
 (D) In the efficiency wage model with the efficiency wage above the market-clearing wage, when employment is at its full-employment level there is an excess demand for labor.

14. Which of the following is *false*?

(A) Other things being equal, an increase in the effective tax rate on capital would cause the IS curve to shift down and to the left.
 (B) The Federal Reserve has increased the money supply to avoid a recession. For a given price level, you would expect the LM curve to shift down and to the right as the real money supply rises.

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- (C) Other things being equal, the *IS-LM* model predicts that a temporary beneficial supply shock increases output, national saving, and investment, but not the real interest rate.
- (D) An increase in taxes (when Ricardian equivalence doesn't hold) causes the real interest rate to fall and the price level to rise in general equilibrium.
15. Which of the following is *false*?
- (A) A temporary adverse productivity shock would decrease the level of employment.
- (B) An adverse supply shock would directly decrease labor productivity by changing the amount of output that can be produced with any given amount of capital and labor. It would also indirectly increase average labor productivity through changes in the level of employment.
- (C) One important reason why the Solow residual may be strongly procyclical even if the actual technology used in production doesn't change is that employment is procyclical.
- (D) Prescott's calibrated RBC model was able to match the data in terms of the correlation between many key macroeconomic variables and GNP; that is, in terms of how closely they moved with GNP over the business cycle.
16. Which of the following is *false*?
- (A) Advocates of passive policy argue that because monetary and fiscal policy lags are long and variable these policies should not be used to offset shocks.
- (B) If people's expectations of inflation are formed rationally rather than based on adaptive expectations and if policymakers make a credible policy move to reduce inflation, then the costs of reducing inflation will be much lower than traditional estimates of the sacrifice ratio.
- (C) Policy is conducted by rule if policymakers announce in advance how policy will respond to various situations and commit themselves to following through on this announcement.
- (D) An argument in favor of allowing discretionary macroeconomic policy is that policymakers may make erratic shifts in policy in response to changing political situations.
17. Which of the following is *false*?
- (A) The relationship between short-run aggregate supply curves and Phillips curves is that there is exactly one Phillips curve corresponding to each short-run aggregate supply curve.
- (B) Based on the Phillips curve, unexpected movements in inflation are related to unemployment and based on the short-run aggregate supply curve, unexpected movements in the price level are related to output.
- (C) Inflation inertia is represented in the aggregate supply and aggregate demand model by continuing upward shifts in the long-run aggregate supply curve.
- (D) According to the natural-rate hypothesis, fluctuations in aggregate demand affect output in only in the short run.
18. The reason that the income response to a fiscal expansion is generally less in the *IS-LM* model than it is in the Keynesian-cross model is that the Keynesian-cross model assumes that:
- (A) investment is not affected by the interest rate whereas in the *IS-LM* model fiscal expansion lowers the interest rate and crowds out investment.
- (B) investment is not affected by the interest rate whereas in the *IS-LM* model fiscal expansion raises the interest rate and crowds out investment.
- (C) investment is autonomous whereas in the *IS-LM* model fiscal expansion encourages higher investment, which raises the interest rate.
- (D) the interest rate is fixed whereas in the *IS-LM* model it is allowed to vary.

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19. In the classical model, a temporary decrease in government spending would cause a decrease in
 (A) output, employment, the real interest rate, and the price level.
 (B) output, employment, real wages, and the price level.
 (C) output, the real interest rate, real wages, and the price level.
 (D) employment, the real interest rate, real wages, and the price level.
20. The Fed's forward guidance in late 2012 through mid-2015 was framed in terms of keeping interest rates low
 (A) until the next Presidential election.
 (B) at least until a particular date in the future.
 (C) for an extended period.
 (D) based on outcomes for the unemployment rate and inflation rate.

II. Analytical Questions (60 points in total)

1. (10 points) In the Keynesian model, suppose the Fed sets a target for the real interest rate. Describe how the real interest rate changes in a Keynesian model if a decrease in the effective tax rate on capital causes the movement of the IS curve and the Fed changes its policy to keep output unchanged.
2. 金融海嘯期間，商品市場需求減少，信用市場違約風險增加，銀行資產減計也不時衝擊經濟。請用總體經濟模型分析並回答下列問題：
 (1)、信用市場違約和銀行資產減計加重了商品市場需求干擾的經濟效果。(15分)
 (2)、引進信貸市場的IS-LM模型，流動性陷阱下的貨幣政策是否有效？(10分)
3. 底下是一個總和需求-總和供給的動態模型：
 總和需求： $Y_t = \bar{Y}_t - \alpha(r_t - \rho) + \varepsilon_t$
 Fisher方程式： $r_t = i_t - E_t \pi_{t+1}$
 Phillips曲線： $\pi_t = E_{t-1} \pi_t + \varphi(Y_t - \bar{Y}_t) + v_t$
 貨幣政策法則： $i_t = \pi_t + \rho + \theta_\pi(\pi_t - \pi_t^*) + \theta_Y(Y_t - \bar{Y}_t)$
 其中， Y_t 是總和產出； \bar{Y}_t 是自然產出水準； r_t 是實質利率； ε_t 和 v_t 分別是需求面和供給面的隨機干擾； α 、 ρ 、和 φ 是大於零的參數； $E_t \pi_{t+1}$ 代表著在 t 期對 $t+1$ 期通貨膨脹的預期。進一步地，通貨膨脹的預期形式是： $E_{t-1} \pi_t = \pi_{t-1}$ 。請利用上述模型回答下列問題：
 (1)、計算出該經濟體系的短期均衡與長期均衡。(10分)
 (2)、令 $\bar{Y}_t = 100$ 、 $\pi_t^* = 2$ 、 $\alpha = 1$ 、 $\rho = 2$ 、 $\varphi = 0.25$ 、 $\theta_\pi = \theta_Y = 0.5$ 。假設供給面的隨機干擾 v_t 出現一次性增加、增加幅度是1%，之後回復至0的衝擊，則總和產出 Y_t 、通貨膨脹 π_t 、實質利率 r_t 在衝擊發生後的六個期間裡，它們的衝擊反應函數(impulse response functions)是如何變動？請繪圖呈現衝擊反應函數並說明理由。(15分)