

注意：(1) Part I 有 18 題單選題。請依題號，將答案填至答案卷第一頁，選擇題作答區對應空格內。答對一題得 2 分，答錯或未作答 0 分。請選出最佳的答案。

(2) 選擇題不要求任何計算過程，依答案格內答案對錯給分。

**Part I：單選題（每題 2 分，共 36 分）**

1. John Maynard Keynes believed in all of the following EXCEPT
  - (A) Wages and prices are downwardly sticky.
  - (B) Unemployment is inevitable.
  - (C) Economy is self-corrected.
  - (D) In the short run, fiscal policies should be used to stabilize the economy.
2. Suppose the Federal Reserve raised the reserve requirement ratio from 10 percent to 12 percent. Other things the same, the money multiplier would \_\_\_\_\_
  - (A) increase and the money supply would increase.
  - (B) decrease and the money supply would increase.
  - (C) increase and the money supply would decrease.
  - (D) decrease and the money supply would decrease.
3. Suppose the nominal exchange rate between Taiwan and the U.S is  $\$1 = \text{NT\$}30$ . One hamburger costs  $\$5$  in the U.S and costs  $\text{NT\$}110$  in Taiwan. This implies that
  - (A) The real exchange rate between Taiwan and the U.S. is equal to one.
  - (B) Nominal exchange rate reflects the relative price of hamburgers in the U.S. and Taiwan.
  - (C) Purchasing power parity does not hold.
  - (D) The same hamburger is cheaper in the U.S.
4. Who benefits from hyperinflation?
  - (A) People who earn fixed incomes.
  - (B) People who have savings in the bank.
  - (C) People who have debts.
  - (D) Both (A) and (B) benefit from hyperinflation.
5. Which of the following statements is Correct?
  - (A) Fiat money has intrinsic value.
  - (B) Credit cards are included in M1, but not in M2.
  - (C) The federal funds rate is the short-term interest rate that the Fed charges banks for loans.
  - (D) During a recession, the federal funds rate is set lower in order to recover the economy.
6. The Reserve Bank of New Zealand aims to maintain a targeted inflation rate at 1 to 3 percent on average. According to the short-run Phillips curve, if the government prefers low inflation,
  - (A) The economy will also have a low unemployment rate.
  - (B) The economy will experience a high unemployment rate.
  - (C) There is no tradeoff between inflation rate and unemployment rate.
  - (D) The economy will have a zero unemployment rate.

(請翻次頁，繼續作答)

7. Suppose the banking system currently has \$303 billion in total reserves; the reserve requirement is 15 percent; and excess reserves amount to \$3 billion. What is the level of deposits?  
 (A) \$4500 billion. (B) \$45 billion. (C) \$2000 billion. (D) \$20 billion.
8. When the economy is having an inflationary gap, which of following actions should the government take to help the economy get back on track?  
 (A) Decrease the tax rate.  
 (B) Conduct open market sales.  
 (C) Conduct open market purchases.  
 (D) Increase government purchases.
9. Given the production function  $Y = AK^{0.4}L^{0.6}$ , if output  $Y$  grows by 5%, the capital input  $K$  grows by 5%, and the labor input  $L$  grows by 2%, the Solow residual will be  
 (A) -2%. (B) 1.8%. (C) 3%. (D) 12%.
10. Let  $Y$  be aggregate output and  $\pi$  be the inflation rate. The aggregate demand curve is  $Y = 11 - 0.5\pi$ , and the short-run aggregate supply curve is  $\pi = 2 + 1.5(Y - 10)$ . The equilibrium inflation rate should be  
 (A) 2%. (B) 1%. (C) 0%. (D) 5%.

The following table represents the unemployment rates and inflation rates for one economy from 1978 to 1981. Use this information to answer question (11).

Year	Unemployment rate (%)	Inflation rate (%)
1978	6.0	7.6
1979	6.1	11.3
1980	7.0	13.5
1981	7.2	14.0

11. Which of the following best describes this situation?  
 (A) Contraction.  
 (B) Depression.  
 (C) Stagflation.  
 (D) Recession.
12. Suppose the economy was initially in long-run equilibrium. After negative supply shocks occur, which of the following statements is Correct?  
 (A) If the government does nothing, the ultimate long-run effect is a lower output level and a higher inflation rate.  
 (B) If the central bank uses expansionary monetary policy, the output will return to its original level but the inflation rate will be higher.  
 (C) If the central bank uses contractionary monetary policy, the output will return to its original level but the inflation rate will be higher.  
 (D) If the central bank uses expansionary monetary policy, both the inflation rate and output will return to their original levels.

(請翻次頁，繼續作答)

13. Suppose consumption is \$500 billion, investment is \$120 billion, government purchases equal \$90 billion, and net exports are negative \$20 billion. The national saving is \_\_\_\_\_.
- (A) \$310 billion.
  - (B) \$270 billion.
  - (C) \$140 billion.
  - (D) \$100 billion.
14. The Great Depression of the 1930s resulted from the burst of \_\_\_\_\_ bubbles, and the recent Great Recession (2007-2009) resulted from the burst of \_\_\_\_\_ bubbles.
- (A) stock; stock.
  - (B) stock; technology.
  - (C) housing; stock.
  - (D) stock; housing.
15. In the simple Keynesian model, if the marginal propensity to consume (MPC) is 0, which of the following statements is **False**?
- (A) The expenditure multiplier is 1.
  - (B) Households will save every extra dollar that they earn.
  - (C) When MPC becomes 0.5, the expenditure multiplier will be greater than 1.
  - (D) Each dollar spent by the government will raise aggregate demand by more than a dollar.
16. When automated teller machines (ATMs) become more available and people reduce their cash holdings, according to Keynes's liquidity preference framework, the value of money will
- (A) increase given the same money supply.
  - (B) be unchanged if the central bank decreases the money supply at the same time.
  - (C) be unchanged if the central bank increases the money supply at the same time.
  - (D) be uncertain given the same money supply.
17. When a country's central bank increases the money supply, its domestic
- (A) price level rises and its currency appreciates relative to other currencies in the world.
  - (B) price level rises and its currency depreciates relative to other currencies in the world.
  - (C) price level falls and its currency appreciates relative to other currencies in the world.
  - (D) price level falls and its currency depreciates relative to other currencies in the world.
18. According to Ricardian Equivalence, a tax cut will not have a significant impact on consumption spending since \_\_\_\_\_.
- (A) the value of the tax multiplier is one.
  - (B) a tax cut leads to an increase in prices, which leaves the real value of consumption unchanged.
  - (C) households understand a tax cut today will lead to a tax increase in the future. They will simply save the money received from the tax cut.
  - (D) the government will balance the budget by decreasing government spending.

(請翻次頁，繼續作答)

注意：(1) Part II 有三大題計算說明題 (A、B、C)，請從答案卷第二頁之後作答。

(2) 請將題號標示清楚，並將所有過程、步驟交代清楚；沒有說明過程者，不給分。  
每大題之下的小題分數，如括號內所示。

(3) 如果沒有特別指示，請將答案約分至最簡分數表示。

**Part II：計算說明題 (64 分)**

A. (14 points) Consider a two-period model.  $C_1$  is consumption in period 1, and  $C_2$  is consumption in period 2. Each consumer receives  $Y_1$  in the first period and receives nothing in the second period. In addition, there is a store technology available. One consumption good stored at  $t = 1$  yields  $x$  units of the consumption good at  $t = 2$ .

(1) (4 points) Derive a two-period budget constraint involving  $C_1$  and  $C_2$ .

(2) (6 points) Suppose the utility function is given as  $U(C_1, C_2) = \ln C_1 + \ln C_2$ . Find the optimal  $C_1$  and  $C_2$ .

(3) (4 points) Now suppose one consumption good stored at  $t = 1$  yields  $x'$  units of the consumption good at  $t = 2$  and  $x' > x$ . What will happen to  $C_1$  and  $C_2$ ? Briefly explain your answer.

B. (25 points) Suppose Ms. Ma receives utility from leisure consumed during a day,  $h$ , and from a daily income,  $I$ , according to the preferences  $U(h, I) = 3 \ln h + \ln I$ . Ms. Ma attempts to maximize her utility subject to constraints  $\ell + h = 24$  and  $I = w\ell + Y$ , where  $\ell$  is the number of hours worked during a day,  $w$  is the hourly wage and  $Y$  is income from nonlabor sources.

(1) (5 points) Set up the optimization problem.

(2) (10 points) Solve the optimization problem to derive Ms. Ma's labor supply curve.

(3) (5 points) Is Ms. Ma's labor supply curve backward-bending? Explain.

(4) (5 points) If  $Y = 0$  and  $w = \$3$ , how many hours a day will Ms. Ma work?

(請翻次頁，繼續作答)

C. (25 points) We observe the consumption behaviors of Ms. Ai, Ms. Bi, Mr. Cu and Mr. Du in January and February. Suppose they only consume two goods, X and Y. Their tastes are unchanged in these two months. The prices of X and Y differ over time. The observed data are shown in the following table.

Month	Prices	Consumption quantities			
		Ms. Ai	Ms. Bi	Mr. Cu	Mr. Du
January	(4, 10)	(12, 2)	(12, 2)	(12, 2)	(12, 2)
February	(3, 12)	(11, 3)	(10, 3)	(9, 3)	(8, 3)

Note: # of the first cell in the parentheses is for good X and the second for good Y.

- (1) (5 points) What is the definition of the Weak Axiom of Revealed Preference (WARP)?
- (2) (5 points) Is Ms. Ai's behavior consistent with the WARP, why?
- (3) (5 points) Is Ms. Bi's behavior consistent with the WARP, why?
- (4) (5 points) Is Mr. Cu's behavior consistent with the WARP, why?
- (5) (5 points) Is Mr. Du's behavior consistent with the WARP, why?