

考 試 科 目	經濟學	所 別	財政學系	考 試 時 間	7月10日 星期五	第 2 節
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一、單一選擇題（20題，每題2分，計40分。）

1. Potential GDP is :

- (A) another name for real GDP. (B) always different from real GDP.
 (C) the maximum GDP that an economy actually achieves throughout its entire history.
 (D) the value of production when all the nation's resources are fully employed.

2. If national saving (S) is \$1,000,000, net taxes (T) equal \$500,000 and government purchases of goods and services (G) are \$250,000, how much are households and businesses saving?

- (A) \$250,000. (B) \$500,000. (C) \$750,000. (D) \$1,050,000.

3. Which of the following statements regarding the business cycle is correct?

- (A) Fluctuations in aggregate demand and in short-run aggregate supply have no effect on the business cycle.
 (B) The business cycle occurs because aggregate demand and short-run aggregate supply change at different rates.
 (C) The amount by which potential GDP exceeds real GDP when the economy is at a below-full-employment equilibrium is called an inflationary gap.
 (D) Real GDP can never exceed potential GDP.

4. The expenditure multiplier is 3.8 and autonomous expenditure increases by \$10 billion. If potential real GDP is unaffected, in the long run, equilibrium real GDP will

- (A) increase by \$38 billion. (B) increase by less than \$38 billion.
 (C) increase by more than \$50 billion. (D) not change.

5. The WTO is the

- (A) World Trade Organization. (B) World Taxation Organization.
 (C) World Tariffs Organization. (D) World Treasury Organization.

6. International trade permits a country

- (A) to consume at a point beyond its production possibilities frontier
 (B) shift its production possibilities frontier outward.
 (C) to lower the per-unit cost of the good in which it is specializing.
 (D) to produce and consume beyond its production possibilities frontier.

7. The central bank monetary policy goals of maximum employment means

備 考 試 題 隨 卷 繳 交

命 題 委 員 : (簽 章) 年 月 日

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考 試 科 目	經濟學	所 別	財政學系	考 試 時 間	7 月 10 日 星期五	第 2 節
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- (A) a zero percent unemployment rate.
 (B) keeping the unemployment rate close to the natural unemployment rate.
 (C) cyclical unemployment should not necessarily be minimized.
 (D) a zero percent natural unemployment rate.
8. To increase the quantity of money in the economy, the central bank is likely to
 (A) lower tax rates. (B) print more money and give it to the banks.
 (C) buy government bonds in an open market operation. (D) increase discount rates.
9. The unemployment rate equals
 (A) the total number of people without jobs in a given period.
 (B) the percentage of the labor force currently unemployed.
 (C) the percentage of the population not currently employed.
 (D) the percentage of the population not working and not looking for work.
10. According to endogenous growth theory, technological change is driven by
 (A) government policies. (B) diminishing returns to labor.
 (C) firms' attempts to increase their profit. (D) random chance.
11. Because you have health insurance, you are more likely to see the doctor when you have a cold.
 This is an example of
 (A) adverse selection. (B) moral hazard.
 (C) both moral hazard and adverse selection. (D) economies of scale.
12. As a tool that is used to measure inequality in the distribution of income, the Lorenz curve graphs
 (A) the mean income, median income, and mode income against the percentage of households.
 (B) the percentage of total income received by each given percentage of households.
 (C) the cumulative percentage of income against the cumulative percentage of households.
 (D) the average income received by households over time.
13. A perfectly competitive firm facing a competitive labor market will hire more labor whenever
 (A) its marginal revenue product of labor exceeds the wage rate.
 (B) the wage rate exceeds its average revenue product of labor.
 (C) its average revenue product of labor exceeds the wage rate.

備	考 試 題 隨 卷 繳 交
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- (D) its marginal revenue exceeds the wage rate.
14. Pure public goods are those for which consumption is
 (A) rival and excludable. (B) rival and nonexcludable.
 (C) nonrival and excludable. (D) nonrival and nonexcludable.
15. Which of the following is NOT true of firms in monopolistic competition?
 (A) They earn a normal profit in the long run. (B) They practice product differentiation.
 (C) They have excess capacity in the long run. (D) They are price takers.
16. The kinked demand curve model assumes that a firm's rivals will
 (A) follow any price change the firm makes. (B) follow the firm's price decreases but not its price increases.
 (C) follow the firm's price increases but not its price decreases. (D) not follow any of the firm's price changes.
17. A market with a single firm but no barriers to entry is known as
 (A) a natural monopoly. (B) monopolistic competition.
 (C) a contestable market. (D) a perfectly competitive market.
18. The long-run average cost curve is the
 (A) change in total product divided by the change in capital when the quantity of labor is constant.
 (B) relationship between the lowest attainable average total cost and output when both the plant size and labor are fixed.
 (C) change in output resulting from a one-unit increase in the quantity of capital.
 (D) relationship between the lowest attainable average total cost and output when both the plant size and labor are varied.
19. A rent ceiling for housing creates a shortage. As a result, there is a deadweight loss
 (A) from only lost consumer surplus. (B) from only lost producer surplus.
 (C) that exactly offsets the gains in consumer and producer surplus.
 (D) from both lost consumer and producer surplus.
20. If money income increases and the prices of good do not change, a consumer's budget line
 (A) shifts rightward and its slope does not change. (B) shifts leftward and its slope does not change.
 (C) becomes flatter. (D) becomes steeper.

備	考 試 題 隨 卷 繳 交
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二、是非題（6題，每題5分，計30分。須答「對」、「錯」或「不確定」，並說明或解釋之。）

- 1.常聽到商家說：「薄利多銷」。在生產成本不變的情況下，產品降價，銷售量增加，利潤一定會增加。
- 2.政府對財貨的提供者課徵從量稅，生產者一定可透過提高售價方式，將稅負轉嫁給消費者。
- 3.工資率愈高，個別勞動供給者的勞動供給量愈多。
- 4.通貨膨脹永遠是、到處都是貨幣現象。
- 5.寬鬆的貨幣政策，一定會帶動投資支出增加。
- 6.政府支出增加，一定有乘數效果。

三、問答題（2題，每題15分，計30分，須列出計算過程並說明或解釋之。）

1.今年初政府發放消費券 857 億給全體國民，請問：

- (1) 該項支出屬於何種性質的政府支出？（5%）
- (2) 經建會說：「發放消費券 857 億，將可提高民間消費，經由乘數作用，初估經濟成長率提升 0.66 個百分點。」請問經濟成長率提升 0.66 個百分點是如何計算得來的？（5%）
- (3) 除了發放消費券之外，試問為振興經濟，政府還常採用哪些政策？（5%）

2.獨占廠商常採用差別定價（price discrimination）的策略，

- (1) 何謂差別定價？（5%）
- (2) 獨占廠商沒有競爭者，為何還要採用差別定價？（5%）
- (3) 採用差別定價有何先決條件？（5%）

備 考 試 題 隨 卷 繳 交

命 題 委 員 ； (簽 章) 年 月 日

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考試科目	初級會計學	所別	財政學系	考試時間	7月10日 星期五	第 4 節
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第一題 (25%)

The financial statement columns of the worksheet for Melton Company as of December 31, 2008 are as follows:

MELTON COMPANY
Worksheet
For the Year Ended December 31, 2008

<u>Accounts</u>	<u>Income Statement</u>		<u>Balance Sheet</u>	
	<u>Debit</u>	<u>Credit</u>	<u>Debit</u>	<u>Credit</u>
Cash			20,000	
Accounts Receivable			6,000	
Supplies			4,500	
Prepaid Insurance			7,000	
Equipment			50,000	
Accumulated Depreciation				4,800
Patents			7,500	
Accounts Payable				23,500
Bonds Payable (due 2012)				18,000
Melton, Capital				46,000
Melton, Drawing			4,200	
Service Revenue		25,400		
Salaries Expense	5,200			
Depreciation Expense	4,800			
Insurance Expense	5,000			
Interest Expense	3,500			
Totals	18,500	25,400	99,200	92,300
Net Income	6,900			6,900
	<u>25,400</u>	<u>25,400</u>	<u>99,200</u>	<u>99,200</u>



Requirements

Prepare a classified balance sheet for Melton Company.

備 考 試 題 隨 卷 繳 交

命 題 委 員 : (簽章) 98 年 6 月 25 日

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考試科目	初級會計學	所別	財政學系	考試時間	7月10日 星期五	第4節
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第二題 (25%)

United Health is considering two alternatives for the financing of some high technology medical equipment. These two alternatives are:

1. Issue 50,000 shares of \$10 par value common stock at \$50 per share.
2. Issue \$2,500,000, 10%, 10-year bonds at par.

It is estimated that the company will earn \$800,000 before interest and taxes as a result of acquiring the medical equipment. The company has an estimated tax rate of 30% and has 100,000 shares of common stock outstanding prior to the new financing.

Requirements

Determine the effect on net income and earnings per share for these two methods of financing.

第三題 (30%)

The stockholders' equity section of Palmer Corporation's balance sheet at December 31, 2007, appears below:

Stockholders' equity

Paid-in capital

Common stock, \$10 par value, 400,000 shares authorized;

250,000 issued and outstanding

\$2,500,000

Paid-in capital in excess of par

1,200,000

Total paid-in capital

3,700,000

Retained earnings

600,000

Total stockholders' equity

\$4,300,000

During 2008, the following stock transactions occurred:

- Jan. 18 Issued 50,000 shares of common stock at \$30 per share.
- Aug. 20 Purchased 25,000 shares of Palmer Corporation's common stock at \$24 per share to be held in the treasury.
- Nov. 5 Reissued 9,000 shares of treasury stock for \$28 per share.

Requirements

- (a) Prepare the journal entries to record the above stock transactions.
- (b) Prepare the stockholders' equity section of the balance sheet for Palmer Corporation at December 31, 2008. Assume that net income for the year was \$100,000 and that no dividends were declared.

備 考試 題 隨 卷 繳 交

命 題 委 員 :

(簽章) 98 年 6 月 25 日

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考 試 科 目	初級會計學	所 別	財政學系	考 試 時 間	7 月 10 日 星期五	第 4 節
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第四題 (20%)

Moran Insurance Agency prepares monthly financial statements. Presented below is an income statement for the month of June that is correct on the basis of information considered.

MORAN INSURANCE AGENCY
Income Statement
For the Month Ended June 30

Revenues

Premium Commission Revenue.....	\$35,000
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Expenses

Salary expense.....	\$6,000
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Advertising expense.....	800
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Rent expense.....	4,200
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Depreciation expense.....	2,800
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Total expenses.....	13,800
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Net income.....	\$21,200
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Additional Data: When the income statement was prepared, the company accountant neglected to take into consideration the following information:

1. A utility bill for \$2,000 was received on the last day of the month for electric and gas service for the month of June.
2. A company insurance salesman sold a life insurance policy to a client for a premium of \$35,000. The agency billed the client for the policy and is entitled to a commission of 20%.
3. Supplies on hand at the beginning of the month were \$3,000. The agency purchased additional supplies during the month for \$3,500 in cash and \$2,200 of supplies were on hand at June 30.
4. The agency purchased a new car at the beginning of the month for \$19,200 cash. The car will depreciate \$4,800 per year.
5. Salaries owed to employees at the end of the month total \$5,300. The salaries will be paid on July 5.

Requirements

Prepare a correct income statement.

備 考 試 題 隨 卷 繳 交

命 題 委 員 : (簽章) 98 年 6 月 25 日

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考試科目	微積分	所別	財政學系	考試時間	7月10日 星期五	第 四 節
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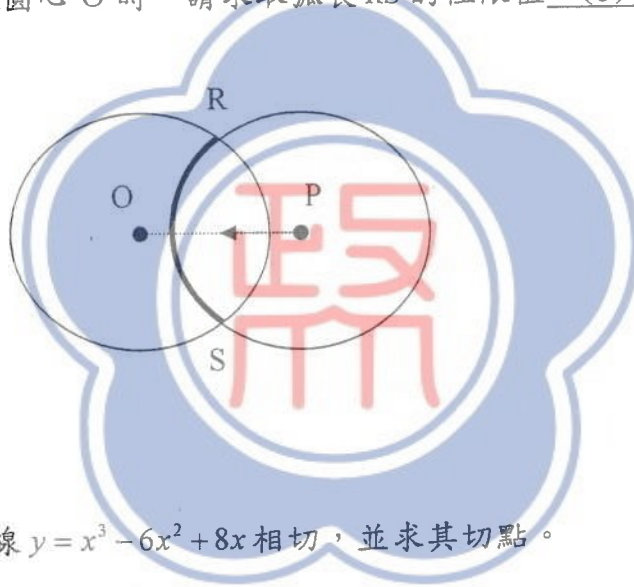
一、填充題 (每小格 8%)

1. 如果 $\lim_{n \rightarrow \infty} n^a \frac{1^p + 2^p + \dots + n^p}{1^q + 2^q + \dots + n^q}$ 有不為 0 (或 ∞) 的極限值，則 a 為 (1)，極限值為 (2)。

2. 設 $F(t) = \int_a^t f(x) dx$ ，求 $F'(t) =$ (3)。

3. 已知 $x^y = y^x$ ，求 $\frac{dy}{dx} =$ (4)。

4. 如下圖，兩個半徑為 r 的圓，其圓心分別為點 O 與點 P ，相交於點 R 與點 S ，請問當圓心 P 沿兩圓心的連線漸漸逼近圓心 O 時，請求取弧長 \widehat{RS} 的極限值 (5)。



二、計算題 (每題 12%)

1. 試證明直線 $y = -x$ 與曲線 $y = x^3 - 6x^2 + 8x$ 相切，並求其切點。

2. 求 $\lim_{p \rightarrow \infty} (ax^p + (1-a)y^p)^{1/p} = ?$

3. 已知 $\int_{-\infty}^{\infty} \frac{1}{\sqrt{2\pi}} e^{-\frac{1}{2}x^2} dx = 1$ ，求算 $\int_0^{\infty} e^{-x^2} dx = ?$

4. 試求取 $f(x, y) = x^2 + 2y^2 - x$ 在 $x^2 + y^2 \leq 1$ 的條件下之最大值與最小值。

5. 已知 $z = e^{\frac{y}{x}} \cdot \sin\left(\frac{x^3 + y^3}{x^2 y}\right)$ 求 $x \frac{\partial z}{\partial x} + y \frac{\partial z}{\partial y} = ?$

備 考 試 題 隨 卷 繳 交

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(簽章) 98 年 6 月 25 日

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