

考試科目	經濟學	系別	財政系	考試時間	七月 五日上 星期 六 午第二節
------	-----	----	-----	------	---------------------

**第一部份：單一選擇題（每小題 2 分，共 40 分）**

※按照題號順序並且標示題號，將答案寫在答案卷。

- Economic scarcity arises from
  - inefficient production.
  - exploration.
  - limited resources and limitless wants.
  - limited wants and limitless resources.
- At one point along a production possibilities frontier (*PPF*), 500 kilograms of rice and 1000 kilograms of bananas are produced. At another point along the same *PPF*, 300 kilograms of rice and 1400 kilograms of bananas are produced. The opportunity cost of a kilogram of rice between these points is
  - 7/5 of a kilogram of bananas.
  - 1/2 of a kilogram of bananas.
  - 5/7 of a kilogram of bananas.
  - 2 kilograms of bananas.
- The “income effect” in the market for diamonds means that
  - diamonds are usually purchased by people with higher than average incomes.
  - a decrease in the price of a substitute product like gold will make diamond lover feel a little poorer than they were before.
  - an increase in the price of diamond will reduce the total purchasing power of diamond lovers, making them able to afford fewer diamonds.
  - an increase in the price of diamond will raise the relative price of diamond to gold, causing diamond lovers to buy more gold and fewer diamonds.
- The more substitutes available for a product,
  - the larger is its the income elasticity of demand.
  - the smaller is its income elasticity of demand.
  - the smaller is its price elasticity of demand.
  - the larger is its price elasticity of demand.
- The government raises the sales tax on wines. As a result, the \_\_\_\_\_.
  - supply curve of wines shifts leftward.
  - supply curve of wines shifts rightward.
  - demand curve for wines becomes vertical.
  - demand curve for wines becomes horizontal.
- At the utility maximizing equilibrium for two goods, X and Y, which of the following must be true?
  - The marginal utility per dollar spent on X will exceed the marginal utility per dollar spent on Y.
  - The marginal utility per dollar spent will be the same for each good.
  - The marginal utility will be the same for each good.
  - The total expenditure will be the same for each good.
- The change in consumption that results from a change in the relative price of goods while staying on the same indifference curve is the
  - income effect.
  - substitution effect.
  - indifference effect.
  - output effect.

試科目	經濟學	系別	財政系	考試時間	七月五日上 星期六 午第二節
-----	-----	----	-----	------	-------------------

8. Assume all firms in a particular perfectly competitive industry are earning economic profits. This will cause firms to \_\_\_\_\_ the industry, which will continue until \_\_\_\_\_.
- A) exit; economic losses occur.  
B) exit; economic profits are zero.  
C) enter; economic profits are negative.  
D) enter; economic profits are zero.
9. Market power measures the firm's ability to
- A) force consumers to pay higher prices.  
B) resist union wage demands.  
C) raise its price without losing its sales.  
D) influence the price its competitors charge.
10. A dominant strategy occurs when
- A) one player has a strategy that yields the highest payoff independent of the other player's choice.  
B) both players have a strategy that yields the highest payoff independent of the other's choice.  
C) both players make the same choice.  
D) the payoff to a strategy depends on the choice made by the other player.
11. The capital stock at the end of year is equal to
- A) the amount of the capital at the beginning of the period plus net investment.  
B) the amount of the capital at the beginning of the period minus net investment.  
C) the amount of the capital at the beginning of the period plus depreciation.  
D) the ratio of the amount of the capital at the beginning of the period to the amount of net investment.
12. The sum of frictional and structural unemployment is thought of as the
- A) normal rate of unemployment.  
B) natural rate of unemployment.  
C) seasonal rate of unemployment.  
D) cyclical rate of unemployment.
13. If aggregate output is greater than planned spending, then
- A) actual investment equals planned investment.  
B) unplanned inventory investment is zero.  
C) unplanned inventory investment is positive.  
D) unplanned inventory investment is negative.
14. A decrease in lump-sum tax will
- A) make the consumption function steeper.  
B) make the consumption function flatter.  
C) make the consumption function nonlinear.  
D) have no effect on the slope of the consumption function.

題老師： (簽章) 年 月 日

-28-

試題隨卷繳交

試科目	經濟學	系別	財政系	考試時間	七月五日上 星期六 下午第二節
-----	-----	----	-----	------	--------------------

15. Which of the following instruments is not used by the Central Bank to change the money supply
- the discount rate.
  - income tax rate.
  - open market operations.
  - the required reserve ratio.
16. Which of the following is NOT a part of the monetary base?
- First Commercial Bank's deposits at the Central Bank.
  - Taipei Commercial Bank's required reserves held at the Central Bank.
  - The New Taiwan dollars in circulation.
  - Central government's bonds owned by the Central Bank.
17. Which of the following describes inflation correctly?
- A one-time jump in the price level.
  - An increase in real wages.
  - A persistent increase in the price level.
  - The fall in the price level from one year to another year.
18. According to the monetarist theory of the business cycle, what leads to change in real GDP?
- A change in profit expectations.
  - A change in the growth rate in tax revenue.
  - A change in the growth rate of the quantity of money.
  - An anticipated change in aggregate demand.
19. A country has a comparative advantage in producing a good if in comparison to any other country, it can produce that good
- at a lower opportunity cost.
  - with a smaller weighted average of inputs.
  - with less labor.
  - at lower average cost.
20. Suppose the current account of a country is in balance and the official settlements account equals 0. A new transaction occurs so that the current account is now in surplus, but the official settlements account does not change. From this we know that
- the capital account is now in deficit.
  - the government is running a budget deficit.
  - the balance of trade is now in surplus.
  - the government must make official reserve transactions.

題老師：

(簽章)

年

月

日

試題隨卷繳交

考試科目	經濟學	系別	財政系	考試時間	七月 五日上 星期 六 午 第 二 節
------	-----	----	-----	------	------------------------

**第二部份：計算題（60分）**

※標示題號，列出計算過程，將答案寫在答案卷。

1. Suppose Peter's utility function is  $U(X, Y) = 2X^{\frac{1}{2}}Y$ , the price of good X is \$2 and the price of good Y is \$16, Peter's income is \$96. He spends his income and maximizes his utility.

- (A) Write down Peter's budget constraint.  
 (B) Find Peter's optimal consumption combination of good X and good Y.  
 (C) What is Peter's maximum utility. (15%)

Two competitive firms are each planning to introduce a new production method. Each firm will decide whether to use method A, method B or method C. They will make their choices at the same time. The payoffs are shown as following (the first value in parenthesis is firm 1's payoff; the second value in parenthesis is firm 2's payoff):

		Firm 2		
		A	B	C
Firm 1	A	(-100, -100)	(0, 100)	(100, 200)
	B	(100, 0)	(-200, -200)	(-50, 150)
	C	(200, 100)	(150, -50)	(-300, -300)

- (A) Find the Nash equilibrium.  
 (B) If both firms use maximin strategies, what outcome will they adopt?  
 (C) If firm 1 uses a maximin strategy, and firm 2 knows, what will firm 2 do? (15%)

Assume the price level is fixed.

Let  $C = 80 + 0.8Y_d$ ,  $I = 220$ ,  $G = 200$ ,  $X = 200$ ,  $M = 100 + 0.1Y$ ,  $T = 25 + 0.25Y$ ,  $R = 150$ .

Where C is consumption expenditure; I is investment expenditure;

G is government purchasing expenditure; X is export; M is import; T is income tax revenue;

R is government transfer expenditure;  $Y_d$  is disposal income; Y is real GDP.

Find :

- (A) equilibrium real GDP.  
 (B) If the full employment GDP is 1600, what kind of fiscal policies can the government do to restore the economy to full employment GDP?  
 (C) If the autonomous consumption expenditure increase to 130, find equilibrium real GDP. (15%)

題老師：

(簽章)

年

月

日

考試科目	經濟學	系別	財政系	考試時間	七月 五 日 上 星 期 六、 午 第 二 節
------	-----	----	-----	------	----------------------------

4. Using the following data and set year 1999 as the base year.

Year	1999		2000		2001		2002	
ITEM	Price	Quantity	Price	Quantity	Price	Quantity	Price	Quantity
A	\$25	16	\$30	18	\$31	20	\$32	15
B	10	40	9	50	9.5	60	10	65
C	10	20	13	30	14	25	16	30

Compute (count to the second decimal place in each step):

- (A) Laspeyres price index for 2000.  
 (B) Paasche price index for 2001.  
 (C) Fisher's ideal price index for 2002. (15%)



命題老師：

(簽章)

年

月

日



### 一. 選擇題 (30%)

( ) 1. 會計資訊品質的一致性係指

- (1) 當會計人員更換時, 接任的人員才能採用不同的原則。
- (2) 當物價發生波動時, 可以改採新原則。
- (3) 會計原則一經採用, 除非企業結束, 否則永不得改變。
- (4) 當企業所處環境改變時, 可改採新的會計原則。

( ) 2. 甲公司存貨之成本為 \$1200, 售價為 \$1240, 估計銷售費用為 5%, 正常毛利為 \$60, 重置成本為 \$1120, 按成本市價孰低法計算, 該公司的存貨價值為:

- (1) \$1225
- (2) \$1120
- (3) \$1200
- (4) \$1065

( ) 3. 會計學上的重要性原則, 係指:

- (1) 凡是超過總資產總額的 5%, 均屬重要項目。
- (2) 若為重要項目才正式入帳, 小額不重要項目則捨去不管。
- (3) 凡屬不重要項目, 可以不必嚴格遵守會計原則的處理。
- (4) 重要與否, 全由會計人員或業主決定。

( ) 4. 當試算表平衡時, 係表示:

- (1) 會計處理無錯誤。
- (2) 過帳時漏掉三筆分錄。
- (3) 會計處理可能無誤, 亦可能有誤。
- (4) 以上皆非。

( ) 5. 當甲公司銷售一批貨物至美國, 交貨條件為目的地交貨, 由陽明海運負責運送, 而委託了報關行辦理出口程序, 惟至年底時 (甲公司採曆年制會計年度), 該艘貨輪

駛過關島,尚在太平洋途中,請問此批屬於何者之存貨:

- (1) 陽明海運公司
- (2) 甲公司
- (3) 丁報關行
- (4) 買方

( ) 6. 折舊提到的主要目的在於:

- (1) 對於資產重新估價。
- (2) 將資產成本在使用年限中有系統地予以分攤,作為各期費用。
- (3) 累積重置資產的資金。
- (4) 減輕租稅的負擔。

( ) 7. 乙公司於九十年開始進行新產品研究,至九十二年底研究成功,三年間共花費研究經費 \$600,000,九十三年初申請專利並獲得證書給與十年法定年限,計付登記費、律師公費等合計 \$60,000,惟經預估經濟效益年限為六年,至九十六年底調整後「專利權」帳戶餘額為:

- (1) \$198,000
- (2) \$36,000
- (3) \$180,000
- (4) \$20,000

( ) 8. 丙公司向某建設公司購買一辦公室,總價 \$2,000,000,當時該辦公室擁有的土地公允現值為 \$10,000,000,而房屋評定現值為 \$5,000,000,另付仲介費 \$600,000,代書費 \$30,000,契稅 \$30,000,印花稅 \$15,000,請問帳列房屋成本為:

- (1) \$7,245,000
- (2) \$7,225,000
- (3) \$7,200,000
- (4) \$7,000,000

( ) 9. 丁公司原採淨額法處理應付帳款，於九十二年擬改採總額法處理，而九十二年底尚未轉成總額法前之相關資料有：①進貨 \$ 172,800，應付帳款 \$ 19,800，進貨折扣損失 \$ 2,200，九十二年底所有進貨如全部享受進貨折扣為 \$ 3,600，則九十二年底轉為總額法時，該年度之進貨金額為：

(1) \$ 178,600

(2) \$ 176,400

(3) \$ 175,000

(4) \$ 172,800

( ) 10. 應分配股票股利，係列於何項財務報表：

(1) 列於損益表中，為一項費用。

(2) 列於資產負債表中負債類項下。

(3) 列於資產負債表中之股東權益項下。

(4) 列於資產負債表中作為資產類減項。

( ) 11. 庫藏股票的交易，下列的敘述何者不正確：

(1) 可能會使未分配盈餘減少，但絕對不會增加未分配盈餘。

(2) 期末尚未出售的庫藏股票，應作為股本減項且限制盈餘分配。

(3) 庫藏股票視同股票註銷。

(4) 可能會增加資本公積，也可能會減少資本公積。

( ) 12. 當採間接法編製現金流量表時，固定資產折舊係合於下列何項的敘述：

(1) 在投資活動項下增加現金流入。

(2) 增加營業活動的現金流入。

(3) 使投資活動發生淨現金流出。

(4) 不須在現金流量表中表達。

( ) 13. 下列何項比率，可以幫助瞭解企業的短期償債能力，

(1) 流動比率

(2) 純益率



(3) 負債比率

(4) 股利報酬率

( ) 14. 寄銷(或承銷)會計, 下列敘述何項不正確:

(1) 寄銷品屬於寄銷人之存貨

(2) 承銷品屬於寄銷人之存貨

(3) 寄銷品運送時, 屬於銷貨行為

(4) 依我國稅法規定, 寄銷品運送時, 應開立統發票

( ) 15. 戊公司某些產品的成本包括直接材料 \$100, 直接人工 \$80,

變動製造費用 \$50, 固定製造費用 \$30, 則該項產品的加工成本為:

(1) \$110

(2) \$180

(3) \$130

(4) \$160

二. 問答題: (20%)

1. 何謂統制(駁)帳戶? 何謂明細分類帳? 二者關係為何?
2. 何謂轉回分錄? 那些項目可作轉回分錄? 轉回分錄的目的為何?
3. 會計期間終了時, 須正確計算存貨金額, 惟先確定存貨數量, 會計上對此有數量的決定有那幾種方法? 在會計處理上有何差異?
4. 無形資產通常分為那兩大類? 並請各舉一例, 它們會計處理上有何差異?
5. 若投資於權益證券, 續後評價採用成本與市價孰低法時, 出現「未實現跌價損失」, 於財務報表之表達應如何?

三. 計算題或分錄: (計算題必須有計算式, 否則不予計分)

1. 天一公司於七月一日撥付 \$10,000 設置零用金。半個月內保管人員陸續支付右列支出:  $\frac{1}{2}$  購買郵票 \$2,000;  $\frac{1}{3}$  購買一斤茶葉 \$800;  $\frac{2}{5}$  添購一批文具用品 \$2,000;  $\frac{1}{6}$  支付員工計程車費 \$1,200;  $\frac{1}{10}$  員工加班誤餐費 \$800;  $\frac{1}{2}$  支付書報費 \$500。七月十五日保管人員乃檢附單據請求歸整, 並將零用金額降為 \$8,000, 請作成前相調分錄。(8%)

2. 地二公司倉庫於九十二年五月十六日發生火災, 存貨完全燒燬, 惟就有關帳載資料得知: 九十二年一月一日存貨為 \$300,000, 截至火災日止之銷貨收入 \$950,000, 銷貨退回 \$150,000, 銷貨折讓 \$150,000, 另進貨 \$700,000, 進貨運費 \$60,000, 進貨折讓 \$20,000, 進貨退出 \$10,000, 該公司近年來平均毛利率為 30%, 請根據前述資料, 估算存貨損失之金額。(必須有計算過程或依據, 僅有答案金額則不予計分) (8%)

3. 志三公司於九十二年七月一日購進機器一部成本為 \$7,500,000, 估計殘值 \$300,000, 估計耐用年限為 8 年, 工作總時間為 450,000 小時。另九十二年及九十三年度分別工作時間為 36,000 小時及 60,000 小時。請根據前述資料, 並依下列方法計算九十二年及九十三年提列折舊的金額。

- (1) 直線法
- (2) 工作時間法 (9%)
- (3) 年數合計法 (Sum-of-year's digit method)

4. 黃四公司九十二年度普通股及特別股, 經益相關資料如下:

- (1) 九十二年一月一日普通股流通在外 19,000 股。
- (2) 九十二年四月一日現金增資發行普通股 4,000 股
- (3) 九十二年之月一日發放 20% 股票股利普通股 4,600 股

(4) 九十二年十二月一日買回庫藏普通股 2000股

(5) 九十二年度純益 \$700,000

(6) 九十二年度宣告特別股股利 \$175,340 (9%)

請根據上述資料計算該公司的基本每股盈餘 (EPS)

5. 宇五公司九十二年六月三十日銀行存款往來資料如下：

(1) 九十二年六月三十日帳上銀行存款餘額為 \$13200

(2) 銀行對帳單九十二年六月三十日公司存款餘額為 \$29800

(3) 九十二年六月三十日在途存款計 \$3500

(4) 銀行自公司存款中代扣電話費 \$500

(5) 銀行收訖該公司託收票據款 \$230，並扣收手續費 \$10

(6) 九十二年六月三十日未兌現支票計 \$13600，其中 \$1000

係保付支票

(7) 公司向銀行借款 \$9000，銀行已進行撥入該公司戶頭

(8) 公司簽發支票 2 紙計 \$1890，公司帳上誤登為 \$1980

(9) 銀行將宇五公司簽發的支票 \$1200，誤記在該公司帳上

(10) 九十二年六月二十八日存入支票 \$710，六月三十日因

存款不足導致退票

請根據上述資料：

(1) 編製宇五公司九十二年六月三十日正確餘額之銀行存款調節表

(2) 試為宇五公司列出補正分錄 (16%)

試科目	微積分	系別	財政系	考試時間	七月五日 星期六	下午第
-----	-----	----	-----	------	-------------	-----

Question 6 and 9 are 15 points each. Other questions account for 10 points each.

1. Evaluate the limits that exist.

(a)  $\lim_{x \rightarrow \pi} (x - \pi) \cos^2 \left( \frac{1}{x - \pi} \right)$ .

(b)  $\lim_{x \rightarrow 0} \frac{x \sin(2x^2)}{\tan(x^3)}$ .

2. Find  $a, b$ , so that  $\lim_{x \rightarrow -\infty} (\sqrt{x^2 - x + 1} - ax - b) = 0$ .

3. Find the derivative of the following:

(a)  $f(x) = (3x^2 + 2x - 4) \left( \frac{1}{x} + x \right)^2$

(b)  $y = \sqrt[3]{1 - \sqrt{1 - 2x}}$

4. Find the tangent line to the graph given by  $x^2(x^2 + y^2) = y^2$  at the point  $(\sqrt{2}/2, \sqrt{2}/2)$ .

5. Find all extrema on the interval  $[0, 2\pi]$  for  $y = x - \cos x$ .

6. Evaluate the following:

(a)  $\int x^2 \ln x \, dx$

(b)  $\int_2^3 x^2 \sqrt{x^2 - 3} \, dx$

(c)  $\int \frac{8}{(x^2 + 1)(x^2 + 9)} \, dx$ .

7. Find the arc length of the curve  $y = \ln(\cos x)$  for  $0 \leq x \leq \pi/4$ .

8. Consider the region bounded by  $y = 4x - x^2$  and  $y = 0$ . Find the volume of the solid obtained by revolving the region about (a)  $y$ -axis, (b)  $x = 5$ .

9. In a forest, a predator feeds on prey, and the predator population at any time is a function of the number of prey in the forest at that time. Suppose that when there are  $x$  prey in the forest, and the predator population is  $y$ , then  $y = \frac{1}{6}x^2 + 90$ . Furthermore, if  $t$  weeks have elapsed since the end of the hunting season,  $x = 7t + 85$ . At what rate is the population of the predator growing 8 weeks after the close of the hunting season?