

國立高雄應用科技大學  
101 學年度碩士班招生考試  
會計系

准考證號碼  (考生必須填寫)

## 成本與管理會計

試題 共 7 頁，第 1 頁

- 注意：a. 本試題分為兩大部份：第一部份選擇題 20 題，每題 2 分，共 40 分；第二部份非選擇題 5 題，共 60 分。兩部份合計共 100 分。  
b. 作答時不必抄題，請標示題號將答案寫在答案紙上。  
c. 考生作答前請詳閱答案卷之考生注意事項。

### 第一部份：選擇題（共 20 題，每題 2 分，合計 40 分）

Use the following to answer questions 1-2:

Lund Company applies manufacturing overhead to jobs using a predetermined overhead rate of 80% of direct labor cost. Any under- or overapplied overhead cost is closed out to Cost of Goods Sold at the end of the month. During March, the following transactions were recorded by the company:

Raw materials (all direct materials):

Used in production .....	\$28,000
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Labor:

Direct labor cost incurred .....	\$20,000
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Indirect labor cost incurred .....	\$5,500
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Manufacturing overhead costs incurred (total) .....	\$17,000
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Inventories:

Raw materials (all direct) March 31 .....	\$7,500
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Work in process, March 1 .....	\$10,500
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Work in process, March 31 .....	\$14,000
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1. The Cost of Goods Manufactured for March was:  
(A)\$60,500.    (B)\$61,500.    (C)\$65,000.    (D)\$67,500.
2. The entry to dispose of the under- or overapplied overhead cost for the month

would include:

- (A) a credit of \$1,000 to Cost of Goods Sold.
- (B) a debit of \$3,000 to the Cost of Goods Sold.
- (C) a debit of \$3,000 to the Manufacturing Overhead account.
- (D) a credit of \$1,000 to the Manufacturing Overhead account.

3. Wages paid to the factory supply shop foreman are considered an example of:

*Direct Labor    Period Cost*

- |     |     |     |
|-----|-----|-----|
| (A) | Yes | Yes |
| (B) | Yes | No  |
| (C) | No  | Yes |
| (D) | No  | No  |

4. The information below was obtained from the records of one of the departments of Cushing Company for the month of August. The company uses the FIFO method in its process costing system. All materials are added at the beginning of the process.

	<i>Units</i>	<i>Percent Complete</i>
Work in process, August 1.....	10,000	25%
Units completed and transferred out.....	65,000	
Work in process, August 31.....	20,000	50%

The equivalent units for materials for the month of August are:

- (A)65,000 units.    (B)75,000 units.    (C)77,500 units.    (D)85,000 units.

Use the following to answer questions 5-6:

The Blaine Company is a highly automated manufacturer. At an activity level of 6,000 machine setups, total overhead costs equal \$230,000. Of this amount, depreciation totals \$80,000 (all fixed) and lubrication totals \$72,000 (all variable). The remaining \$78,000 of the total overhead cost consists of utility cost (mixed). At an activity level of 9,000 setups, utility cost totals \$102,000. Assume that the relevant range includes all of the activity levels mentioned in this problem.

- 5. The total fixed overhead costs for Blaine Company are most likely closest to:  
 (A)\$110,000.    (B)\$102,000.    (C)\$ 70,000.    (D)\$ 30,000.
- 6. If 7,500 setups are projected for the next period, total expected overhead cost would be closest to:  
 (A)\$140,000.    (B)\$212,800.    (C)\$220,000.    (D)\$260,000.
- 7. Garth Company sells a single product. If the selling price per unit and the variable

expense per unit both increase by 10% and fixed expenses do not change, then:

	<i>Contribution margin per unit</i>	<i>Contribution margin ratio</i>	<i>Break-even in Units</i>
(A)	Increases	Increases	Decreases
(B)	Increases	No change	Decreases
(C)	No change	Increases	No change
(D)	No change	No change	No change

8. At the end of Killo Co.'s first year of operations, 2,000 units of inventory remained on hand. Variable and fixed manufacturing costs per unit were \$90 and \$20, respectively. If Killo uses absorption costing, its net operating income would be higher than if it used variable costing by:

(A)\$0. (B)\$40,000. (C)\$140,000. (D)\$180,000.

9. The Waters Company has a standard costing system. Variable manufacturing overhead is assigned to production on the basis of machine hours. The following data are available for July:

- Actual variable manufacturing overhead cost incurred: \$49,875
- Actual machine hours worked: 3,500
- Variable overhead spending variance: \$7,875 unfavorable
- Total variable overhead variance: \$9,075 unfavorable

The standard number of machine hours allowed for July production is:

(A)3,200 hours. (B)3,000 hours. (C)3,400 hours. (D)4,540 hours.

10. A static budget:

- (A) should be compared to actual costs to assess how well costs were controlled.
- (B) should be compared to a flexible budget to assess how well costs were controlled.
- (C) is valid for only one level of activity.
- (D) represents the best way to set spending targets for managers.

11. Payne Company makes two products, M and N, in a joint process. Product M can be sold at the split-off point for \$4.20 per unit. Product N can either be sold at the split-off point for \$3.20 per unit or it can be processed further and sold for \$6.30 per unit. If N is processed further, additional processing costs of \$2.50 per unit will be incurred.

What would the selling price per unit of product N need to be after further processing in order for Payne Company to be economically indifferent between selling N at the split-off point or processing N further?

- (A)\$8.70. (B)\$7.20. (C)\$6.70. (D)\$5.70.

12. If a company has computed the profitability index of an investment project as 1.2, then:

- (A) the project's internal rate of return is less than the discount rate.  
 (B) the project's internal rate of return is greater than the discount rate.  
 (C) the project's internal rate of return is equal to the discount rate.  
 (D) the relationship of the rate of return and the discount rate is impossible to determine from the data given.

13. The step method of allocating service department costs:

- (A) is a less accurate method of allocation than the direct method.  
 (B) can't be used when a company has more than two service departments.  
 (C) is a simpler allocation method than the direct method.  
 (D) ignores some interdepartmental services.

Use the following to answer questions 14-16:

Rocky Mountain Company produces two products (X and Y) from a joint process. Each product may be sold at the split-off point or processed further. Additional processing requires no special facilities, and production costs of further processing are entirely variable and traceable to the products involved. Joint manufacturing costs for the year were \$90,000. Sales values and costs were as follows:

<u>Product</u>	<u>Units Made</u>	<u>Sales Value at Split-off</u>	<u>If Processed Further</u>	
			<u>Sales Value</u>	<u>Separable Costs</u>
X	9,000	\$40,000	\$78,000	\$10,500
Y	6,000	80,000	90,000	7,500

14. If the joint production costs are allocated based on the physical-units method, the amount of joint cost assigned to product X would be:

- (A) \$30,000. (B) \$36,000. (C) \$45,000. (D) \$54,000.

15. If the joint production costs are allocated based on the relative-sales-value method, the amount of joint cost assigned to product X would be:

- (A) \$30,000. (B) \$40,500. (C) \$49,500. (D) \$60,000.

16. If the joint production costs are allocated based on the net-realizable-value method, the amount of joint cost assigned to product Y would be:

- (A) \$30,000. (B) \$40,500. (C) \$49,500. (D) \$60,000.

17. The City of Miami is about to replace an old fire truck with a new vehicle in an effort to save maintenance and other operating costs. Which of the following items,

all related to the transaction, would not be considered in the decision?

- (A) Purchase price of the new vehicle.
- (B) Purchase price of the old vehicle.
- (C) Savings in operating costs as a result of the new vehicle.
- (D) Proceeds from disposal of the old vehicle.

18. Crossland Company is studying a capital project that will produce \$600,000 of added sales revenue, \$400,000 of additional cash operating expenses, and \$50,000 of depreciation. Assuming a 20% income tax rate, the company's after-tax cash inflow (outflow) is:

- (A) \$120,000. (B) \$140,000. (C) \$170,000. (D) \$190,000.

Use the following to answer questions 19-20:

Cartwright Graphics uses a special purpose paper on its jobs. The paper is purchased in 100-sheet packages at a cost of \$200 per package. Management estimates that the cost of placing and receiving a typical order is \$15, and the annual cost of carrying a package in inventory is \$1.50. Cartwright uses 5,200 packages each year. Production is constant, and the lead time to receive an order is 1.5 weeks.

19. The economic order quantity is approximately:

- (A) 203 packages. (B) 228 packages. (C) 322 packages. (D) 472 packages.

20. The reorder point is:

- (A) 100 packages. (B) 150 packages. (C) 228 packages. (D) 322 packages.

## 第二部份：非選擇題（共 5 題，合計 60 分）

一、建工體育用品公司產銷網球拍，每支球拍之售價為\$800，生產球拍的固定成本總額與單位變動成本隨著產銷量的改變而異動，有關資料如下：

產銷範圍	固定成本	單位變動成本
0~1,000	\$480,000	\$400
1,001~2,000	\$756,000	\$380
2,001~3,000	\$891,000	\$350

該公司去年共銷售 2,300 支球拍，稅率為 25%。

試作：

- (1) 計算損益兩平點銷售量。(6 分)
- (2) 若公司提高本年度廣告支出\$133,000，預期能使銷售量增加 500 支球拍，且欲達到售後淨利較去年增加\$90,000 的目標，則本年度單位售價至少應訂為若干？(6 分)

二、高雄公司生產的水果茶需要經過二個部門之製造，第二部門將第一生產部轉入之水果泥，加入等量茶品予以混合加工後，再裝入 1 公升容器中出售。第二部門採用加權平均分步成本制計算產品單位成本，該部門之原料（茶品）於生產一開始即完全投入，加工成本則於製程中平均發生。品質檢查係於完工後才檢驗，瑕疵品視為正常製造過程的損耗。高雄公司第二部門三月份之生產及成本資料如下：

(1) 期初在製品 1,000 公升，加工已完成 1/2，成本包含：

前部轉入成本	\$9,800
茶品成本	5,760
加工成本	2,100

(2) 由第一生產部轉入之數量 10,000 公升

(3) 第二部門三月份加入茶品數量 10,000 公升

(4) 完工數量

完成品	19,000 公升
在製品—3 月 31 日，加工成本完工 2/3	1,800 公升
瑕疵品(正常)	200 公升

(5) 三月份第二生產部成本記錄

由第一生產部轉入成本	\$200,200
茶 品	116,040
加工成本	<u>79,500</u>
合 計	<u>\$395,740</u>

試求：

(1) 完成品之成本。(6 分)

(2) 3 月 31 日在製品存貨之成本。(6 分)

三、世華公司生產一種產品，每一單位產品需要 60 個零件以及 3 機器小時，且需經過三項作業。該公司使用作業基礎成本法分攤間接成本，有關資料如下：

作業別	分攤基礎		
機器	機器小時	每機器小時	350.00
裝配	零件數目	每個	18.00
檢驗	完成品數目	每單位	200.00

假設已完工 20 單位，每單位完成品的直接原料成本為 \$5,000。其他所有的製造成本均被歸入加工成本。

試作：

(1) 說明作業基礎成本法相較於傳統成本法的優點。(6 分)

(2) 計算出這 20 單位產品的總製造成本。(5 分)

四、 Grace, Inc. makes 2,000 units per year of a part called DS for use in one of its products. Data concerning the unit production costs of the DS follow:

Direct materials.....	\$342
Direct labor.....	80
Variable manufacturing overhead.....	48
Fixed manufacturing overhead .....	<u>500</u>
Total manufacturing cost per unit.....	<u>\$970</u>

An outside supplier has offered to sell Grace, Inc. all of the DSs it requires. If Grace, Inc. decided to discontinue making the DSs, 20% of the above fixed manufacturing overhead costs could be avoided.

**Required:**

- (1) Assume Grace, Inc. has no alternative use for the facilities presently devoted to production of the DSs. If the outside supplier offers to sell the DSs for \$820 each, should Grace, Inc. accept the offer? Fully support your answer with appropriate calculations. (6%)
- (2) Assume that Grace, Inc. could use the facilities presently devoted to production of the DSs to expand production of another product that would yield an additional contribution margin of \$90,000 annually. What is the maximum price Grace, Inc. should be willing to pay the outside supplier for DSs? (6%)

五、 The CEO of Hills Company compared the Division A, Division B, and Division C, using the relevant data below:

	<u>Division A</u>	<u>Division B</u>	<u>Division C</u>
Sales.....	\$ 4,000,000	\$4,000,000	\$4,000,000
Division expenses.....	3,200,000	3,200,000	3,920,000
Capital employed .....	16,000,000	1,600,000	1,600,000

**Required:**

- (1) Compute the percentage of profit to sales, the capital-employed turnover rate, and the rate of return on capital employed for the three divisions. (9%)
- (2) Do Division A and Division C have the same low rate of return on capital employed for the same reasons? Offer any suggestions for improving the various divisions' rates of return on capital employed. (4%)