

東海大學 101 學年度碩士班招生入學考試試題

考試科目：成本與管理會計

應考系所：會計甲組

本試題共 9 頁：第 1 頁（如有缺損或印刷不清者，應即舉手請監試人員處理）

一、選擇題：（計 22 題，每題兩分，總分 44 分）

本題答案請依照下列「表格範例」自行劃表，填寫在「答案卷」上。

1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	15.
16.	17.	18.	19.	20.
21.	22.			

1. When responsibility centers are treated as profit centers:
 - A. the segment manager has responsibility for pricing and product selection, but not for purchasing and promotion
 - B. the corporate office makes most of the operating and pricing decisions
 - C. the information technology group of a manufacturing firm would typically be treated as a profit center
 - D. there are usually problems associated with assigning jointly earned revenues
 - E. none of the above
2. The MOST likely result of a negotiated transfer price is that it:
 - A. takes away the ultimate responsibility of the resulting transfer price from the two parties
 - B. may reflect the relative negotiating skills of the two parties
 - C. generally results in transferring more than the optimum number of units
 - D. reflects purely economic considerations
3. The performance measurement system for employees' compensation should focus on all facets of performance to:
 - A. ensure that reporting is complete
 - B. encourage gaming of the performance indicator

- C. provide the highest possible level of internal control
D. ensure that employees do not sacrifice performance on unmeasured elements
4. Hope Company manufactures consumer products such as cleansers, air fresheners, and detergents. During a recent quarter, the value of the products made was \$100 million, and the labor costs were \$6 million. The company has decided to use a Scanlon plan with this quarter being used to establish the base ratio for the plan. The formula is to be applied quarterly with differences, positive or negative, added to the bonus pool. The pool is to be distributed on a 35%/65% basis between the employees and the company at the end of the fourth quarter. The following production and cost levels were recorded during the first year of the plan's operation:

QUARTER	PRODUCTION VALUE	PAYROLL COSTS
1	\$ 90,000,000	\$4,950,000
2	\$120,000,000	\$6,960,000
3	\$110,000,000	\$7,150,000
4	\$96,000,000	\$5,664,000

How much would be distributed to the employees at the end of the year?

- A. \$236,000 B. \$82,600 C. \$450,000 D. \$140,000 E. none of the above

Using following information to answer questions 5-6

Rose Belt Manufacturing, Inc. is considering reorganizing its plant into manufacturing cells. The following estimates have been prepared to evaluate the benefits from the reorganization:

	Before the change	After the change
Total annual sales	\$250,000	\$375,000
Costs as percentage of sales:		
Direct materials	20%	17%
Direct labor	8%	7%
Manufacturing support costs	12%	6%
Work-in-process inventory	\$50,000	\$ 40,000

Inventory carrying costs are estimated to be 11% per year.

5. As a result of the layout reorganization, incremental manufacturing costs are projected to:
- A. decrease by \$11,400 annually B. decrease by \$12,500 annually
C. increase by \$12,500 annually D. increase by \$20,000 annually
E. none of the above
6. As a result of switching to a cellular manufacturing operation, total benefits are projected to increase annually by:
- A. \$111,400 B. \$113,600 C. \$136,400 D. \$138,600 E. none of the above
7. Kaizen costing includes:
- A. cost control system concept B. standards set annually or semiannually
C. continuous improvement D. comparing actual costs to standard costs
8. All of the following are true regarding target costing EXCEPT that:
- A. improvements are implemented in small, incremental amounts
B. customer input is collected continually throughout the target costing process
C. input is requested from suppliers and distributors
D. a key goal is to minimize ownership costs over the product's useful life
9. After conducting a market research study, Stewart Manufacturing decided to produce a new interior door to complement its exterior door line. It is estimated that the new interior door can be sold at a target price of \$120. The annual target sales volume for interior doors is 20,000. Stewart has a 20% expected return on sales target.
- What is the target cost for each interior door?
- A. \$96 B. \$116 C. \$120 D. \$90 E. none of the above
10. Cheese Company has the following two customers:

	Woodruff	Ensley
Sales	\$900,000	\$800,000
Cost of Goods Sold	360,000	160,000
MSDA expenses excluding sales commissions	640,000	130,000

If the company pays a 2% sales commission based on revenue, this will encourage a salespersons' efforts to sell to:

- A. Woodruff, an unprofitable customer B. Woodruff, a profitable customer
C. Ensley, an unprofitable customer D. Ensley, a profitable customer
E. none of the above

11. Which of the following is an implicit environmental cost?
- A. direct costs of modifying technology and processes
 - B. costs of cleanup and disposal
 - C. fines levied by government agencies
 - D. costs of legal counsel and administration
 - E. none of the above
12. King Software operates stores within five regions. Regional managers are held accountable for marketing, advertising, and sales decisions, and all costs incurred within their region. In addition, regional managers decide whether new stores will open, where the stores will be located, and whether the stores will lease or purchase the facilities. Store managers, in contrast, are accountable for marketing, advertising, and sales decisions, and costs incurred within their stores. Ideally, on the basis of this information, what type of responsibility center should the software company use to evaluate its regions and stores?

Regions

Stores

- A. Profit center Profit center
 - B. Profit center Cost center
 - C. Profit center Revenue center
 - D. Investment center Profit center
 - E. Investment center Cost center
13. A division's return on investment may be improved by increasing:
- A. cost of goods sold and expenses
 - B. sales margin and cost of capital
 - C. sales revenue and cost of capital
 - D. capital turnover or sales margin
 - E. capital turnover or cost of capital
 - F. none of the above
14. For the period just ended, Price Corporation's Ohio Division reported profit of \$49 million and invested capital of \$350 million. Assuming an imputed interest rate of 16%, which of the following choices correctly denotes Ohio's return on investment (ROI) and residual income?
- | | <u>Return on Investment</u> | <u>Residual Income</u> |
|--|------------------------------------|-------------------------------|
|--|------------------------------------|-------------------------------|

15. Queen Inc. has two divisions, one located in New York and the other located in Arizona. New York sells a specialized circuit to Arizona and just recently raised the circuit's transfer price. This price hike had no effect on the volume of circuits transferred nor on Arizona's option of acquiring the circuit from either New York or from an external supplier. On the basis of this information, which of the following statements is most correct?
- A. The profit reported by New York will increase and the profit reported by Arizona will decrease.
 - B. The profit reported by New York will increase, the profit reported by Arizona will decrease, and Thurmond's profit will be unaffected.
 - C. The profit reported by New York will decrease, the profit reported by Arizona will increase, and Thurmond's profit will be unaffected.
 - D. The profit reported by New York will increase and the profit reported by Arizona will increase.
 - E. The profit reported by New York and the profit reported by Arizona will be unaffected.
16. Which of the following choices correctly states the rules for project acceptance under the net-present-value method and the internal-rate-of-return method?
- | <u>Net Present Value</u> | <u>Internal Rate of Return</u> |
|-----------------------------|--------------------------------|
| A. Positive total | Greater than hurdle rate |
| B. Positive total | Less than hurdle rate |
| C. Negative total | Greater than hurdle rate |
| D. Negative total | Less than hurdle rate |
| E. Greater than hurdle rate | Positive number |
17. Wright Company is considering a five-year project that requires a typical investment in working capital, in this case, \$100,000. Consider the following statements about this situation:
- I. Wright should include a \$100,000 outflow that occurs at time 0 in a discounted-cash-flow analysis.
 - II. Wright should include separate \$100,000 outflows in each year of the project's five-year life.
 - III. Wright should include a \$100,000 recovery of its working-capital investment in year 5 of a discounted-cash-flow analysis.
- Which of the above statements is (are) correct?

- A. I only B. II only C. III only D. I and II
E. I and III

18. Saunders Company has two service departments (Cafeteria and Human Resources) and two production departments (Machining and Assembly). The number of employees in each department follows:

Cafeteria	20
Human Resources	30
Machining	100
Assembly	150

Saunders uses the step-down method of cost allocation and allocates cost on the basis of employees. Human Resources cost amounts to \$1,200,000, and the department provides more service to the firm than Cafeteria. How much Human Resources cost would be allocated to Machining?

- A. \$0 B. \$428,572 C. \$444,444 D. \$480,000 E. none of the above
19. Nash Corporation allocates administrative costs on the basis of staff hours. Short-run monthly usage and anticipated long-run monthly usage of staff hours for Operating Departments 1 and 2 follow.

	<u>Dept. 1</u>	<u>Dept. 2</u>	<u>Total</u>
Short-run usage (hours)	45,000	55,000	100,000
Long-run usage (hours)	48,000	52,000	100,000

Variable and fixed administrative costs total \$180,000 and \$400,000, respectively. If Nash uses dual-cost accounting procedures, the total amount of administrative cost to allocate to Department 2 would be:

- A. \$301,600 B. \$307,000 C. \$313,600 D. \$319,000
E. none of the above
20. Which of the following choices correctly denotes the data needed to allocate joint costs under the relative-sales-value method?

	Sales Value of Product at Split-Off	Separable Cost	Sales Value of Product After Processing <u>Beyond</u> <u>Split-Off</u>
A.	Yes	Yes	No
B.	Yes	Yes	Yes
C.	Yes	No	No
D.	No	Yes	Yes
E.	No	No	Yes

21. 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 \$60,000. Sales values and costs were as follows:

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

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. \$20,000 B. \$27,000 C. \$33,000 D. \$40,000 E. none of the above
22. When using a balanced scorecard, which of the following is typically classified as an internal-operations performance measure?
- A. Cash flow B. Number of customer complaints
C. Employee training hours D. Number of employee suggestions
E. Number of suppliers used

- 二、Linsanity Manufacturing expects to spend \$800,000 in 2012 in appraisal costs if it does not change its incoming materials inspection method. If it decides to implement a new receiving method, it will save \$80,000 in fixed appraisal costs and variable costs of \$0.40 per unit of finished product. The new method involves \$120,000 in training costs and an additional \$160,000 in annual equipment rental. It takes four units of material for each finished product. Internal failure costs average \$160 per failed unit of finished goods. During 2011, 5% of all completed items had to be reworked. External failure costs average \$400 per failed unit. The company's average external failures are 1% of units sold. The company carries no ending inventories, because all jobs are on a per order basis and a just-in-time inventory ordering method is used.

Required: (6分)

How much will internal failure costs change, assuming 800,000 units of materials are received and that the new receiving method reduces the amount of UNACCEPTABLE product units in the manufacturing process by 10%?

三、Orange Woodcrafting Inc., began in 2007 as a one-person cabinet-making operation. Employees were added as the business expanded. By 2010, sales totaled \$850,000. Sales for the first five months of 2011 totaled \$600,000, and sales were expected to be \$1.6 million for the entire year. Unfortunately, the cabinet business in the region where Orange Woodcrafting is located is highly competitive. More than 200 cabinet shops are all competing for the same business.

Orange currently offers two different quality grades of cabinets: Grade I and Grade II, with Grade I being the higher quality. The average unit selling prices, unit variable costs, and direct fixed costs are as follows:

	<u>Unit Price</u>	<u>Unit Variable Cost</u>	<u>Direct Fixed Cost</u>
Grade I	\$ 3,400	\$ 2,686	\$ 95,000
Grade II	1,600	1,328	95,000

Common fixed costs (fixed costs not traceable to either cabinet) are \$35,000.

Currently, for every three Grade I cabinets sold, seven Grade II cabinets are sold.

Required: (總分 22 分；本題數字計算一律四捨五入取整數)

1. Calculate the Grade I and Grade II cabinets that are expected to be sold during 2011. (4 分)
2. Calculate the number of Grade I and Grade II cabinets that must be sold for the company to break even. (4 分)
3. Orange Woodcrafting can buy computer-controlled machines that will make doors, drawers, and frames. If the machines are purchased, the variable costs for each type of cabinet will decrease by 9%, but common fixed costs will increase by \$44,000. *Compute the effect on operating income in 2011, and also calculate the new break-even point.* Assume the machines are purchased at the beginning of the sixth month. Fixed costs for the company are incurred uniformly throughout the year. (14 分)

四、尼克公司採用加權平均分步成本法，產品經由兩個部門處理。第二部門於 2012 年 1 月份由第一部門轉入 42,300 單位，45,000 單位轉入製成品。相關生產資料如下：

期初在製品：11,700 單位，完工程度 60%。原料 A：\$128,700；加工成本 \$45,630。

期末在製品的 1/2 完工 30%；1/3 完工 75%；1/6 完工 90%。

原料 A 在製程的 50%加入；原料 B 在製程的 80%加入；加工成本於製程中平均發生。

1 月份投入成本：原料 A：\$465,300；原料 B：\$232,500；加工成本 \$456,120。

本試題共 9 頁：第 9 頁

試求：(請列出計算過程，每小題 7 分，總分 28 分)

1. 計算第二部門 1 月份原料 A 之約當產量。
2. 計算第二部門 1 月底轉入製成品成本金額。(單位成本之計算：小數點以下四捨五入取三位)
3. 計算第二部門 1 月底期末在製品金額。
4. 尼克公司欲達成 1 月份目標毛利率 20%，計算製成品之單位售價金額。
(單位售價之計算：小數點以下四捨五入取兩位)