

大葉大學 九十三 學年度 研究所碩士班 招生考試試題紙

系 所 別	組 別	考 試 科 目 (中文名稱)	考 試 日 期	節 次	備 註
會計資訊系	甲	成本及管理會計	3月28日	第 2 節	艾四頁

註:1.可使用不可程式計算機 2.計算題請列計算步驟,否則不予計分 3.本試題共 4 頁

1030~1200

一、MULTIPLE CHOICE (40%)

1. The following information pertains to Roe Co.'s 2004 manufacturing operations :

Standard direct manufacturing labor hours per unit	2
Actual direct manufacturing labor hours	10,500
Number of units produced	5,000
Standard variable overhead per standard direct manufacturing labor hour	\$3
Actual variable overhead	\$28,000

Roe Co.'s 2004 unfavorable variable overhead efficiency variance was

- a. \$0
- b. \$1,500
- c. \$2,000
- d. \$3,500

2. A 2004 cash budget is being prepared for the purchase of Toyi, a merchandise item.

Budgeted data are

Cost of goods sold for 2004	\$300,000
Accounts payable 1/1/04	20,000
Inventory--1/1/04	30,000
12/31/04	42,000

Purchases will be made in twelve equal monthly amounts and paid for in the following Month. What is the 2004 budgeted cash payment for purchases of Toyi ?

- a. \$295,000
- b. \$300,000
- c. \$306,000
- d. \$312,000

3. Mig Co., which began operations in 2004, produces gasoline and a gasoline by-product. The following information is available pertaining to 2004 sales and production:

Total production costs to split-off point	\$120,000
Gasoline sales	270,000
By-product sales	30,000
Gasoline inventory, 12/31/04	15,000
Additional by-product costs:	
Marketing	10,000
Production	15,000

Mig accounts for the by-product at the time of production. What are Mig's 2004 cost of sales for gasoline and the by-product?

	<u>Gasoline</u>	<u>By-product</u>
a.	\$105,000	\$25,000
b.	\$115,000	\$0
c.	\$108,000	\$37,000
d.	\$100,000	\$0

4. Which of the following statements regarding transfer pricing is false ?

- a. When idle capacity exists, there is no opportunity cost to producing intermediate products for another division.
- b. Market-based transfer prices should be reduced by any costs avoided by selling internally rather than externally.
- c. No contribution margin is generated by the transferring division when variable cost-based transfer prices are used.
- d. The goal of transfer pricing is to provide segment managers with incentive to maximize the profits of their divisions.

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5. A job order cost system uses a predetermined factory overhead rate based on expected volume and expected fixed cost. At the end of the year, underapplied overhead might be explained by which of the following situations?

	<u>Actual volume</u>	<u>Actual fixed costs</u>
a.	Greater than expected	Greater than expected
b.	Greater than expected	Less than expected
c.	Less than expected	Greater than expected
d.	Less than expected	Less than expected

6. In Belk Co.'s just-in-time production system, costs per set-up were reduced from \$28 to \$2. In the process of reducing inventory levels, Belk found that there were fixed facility and administrative costs that previously had not been included in the carrying cost calculation. The result was an increase from \$8 to \$32 per unit per year. What were the effect of these changes on Belk's economic lot size and relevant costs?

	<u>Lot size</u>	<u>Relevant costs</u>
a.	Decrease	Increase
b.	Increase	Decrease
c.	Increase	Increase
d.	Decrease	Decrease

7. Division A is considering a project that will earn a rate of return which is greater than the imputed interest charge for invested capital, but less than the division's historical return on invested capital. Division B is considering a project that will earn a rate of return that is greater than the division's historical return on invested capital, but less than the imputed interest charge for invested capital. If the objective is to maximize residual income, should these divisions accept or reject their projects?

	<u>A</u>	<u>B</u>
a.	Accept	Accept
b.	Reject	Accept
c.	Reject	Reject
d.	Accept	Reject

8. Costs are accumulated by responsibility center for control purposes when using

	<u>Job order costing</u>	<u>Process costing</u>
a.	Yes	Yes
b.	Yes	No
c.	No	No
d.	No	Yes

9. Briar Co. signed a government construction contract providing for a formula price of actual cost plus 10%. In addition, Briar was to receive one-half of any savings resulting from the formula price being less than the target price of \$2,200,000. Briar's actual costs incurred were \$1,920,000. How much should Briar receive from the contract?

- a. \$2,060,000
- b. \$2,112,000
- c. \$2,156,000
- d. \$2,200,000

10. A Department adds material at the beginning of a process and identifies defective units when the process is 40% complete. At the beginning of the period, there was no work in process. At the end of the period, the number of work in process units equaled the number of units transferred to finished goods. If all units in ending work in process were 80% complete, then ending work in process should be allocated

- a. 50% of all normal defective unit costs.
- b. 40% of all normal defective unit costs.
- c. 50% of the material costs and 40% of the conversion costs of all normal defective unit costs.
- d. None of the normal defective unit costs.

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二. Morrisey & Brown, Ltd., of Sydney is a merchandising firm that is the sole distributor of a product that is increasing in popularity among Australian consumers. The company's income statements for the three most recent months follow :

MORRISEY & BROWN, LTD.

Income statements

For the Three Months Ending September 30

	July	August	September
Sales in units.....	<u>4,000</u>	<u>4,500</u>	<u>5,000</u>
Sales revenue.....	\$400,000	\$450,000	\$500,000
Less cost of good sold.....	<u>240,000</u>	<u>270,000</u>	<u>300,000</u>
Gross margin.....	<u>160,000</u>	<u>180,000</u>	<u>200,000</u>
Less operating expenses :			
Advertising expense.....	21,000	21,000	21,000
Shipping expense.....	34,000	36,000	38,000
Salaries and commissions.....	78,000	84,000	90,000
Insurance expense.....	6,000	6,000	6,000
Depreciation expense.....	<u>15,000</u>	<u>15,000</u>	<u>15,000</u>
Total operating expense.....	<u>154,000</u>	<u>162,000</u>	<u>170,000</u>
Net income.....	<u>\$ 6,000</u>	<u>\$ 18,000</u>	<u>\$ 30,000</u>

Required

1. Identify each of the company's expenses(including cost of goods sold) as being either variable, fixed, or mixed.(6%)
2. By use of the least-squares regression method, separate each mixed expense into variable and fixed elements. State the cost formula for each mixed expense.(4%)
3. Redo the company's income statement at the 5,000-unit level of activity using the contribution format.(4%)
4. Compute the break-even point in units.(3%)
5. Compute the degree of operating leverage as of September 30.(3%)

三. Plymouth Test Laboratories does heat testing (HT) and stress testing (ST) on materials. Under its current costing system, Plymouth aggregates all operating costs of \$1,200,000 into a single overhead cost pool. Plymouth calculates a rate per test-hour of \$15(\$1,200,000÷80,000 total test-hours). HT uses 50,000 test-hours, and ST uses 30,000 test-hours. Gary Celeste, Plymouth's controller, believes that there is enough variation in test procedures and cost structures to establish separate costing and billing rates for HT and ST. The market for test services is becoming competitive. Without this information, any miscosting and mispricing of its services could cause Plymouth to lose business. Celeste divides Plymouth's costs into four activity-cost categories.

- a. Direct-labor costs, \$240,000. These costs can be directly traced to HT, \$180,000, and ST, \$60,000.
- b. Equipment-related costs (maintenance, energy, and so on), \$400,000. These costs are allocated to HT and ST on the basis of test-hours.
- c. Setup costs, \$350,000. These costs are allocated to HT and ST on the basis of the number of setup-hours required. HT requires 13,500 setup-hours, and ST requires 4,000 setup-hours.
- d. Costs of designing tests, \$210,000. These costs are allocated to HT and ST on the basis of the time required to design the tests. HT requires 2,800 hours, and ST requires 1,400 hours.

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(0530) (12500)

Required

- Classify each activity cost as output unit-level, batch-level, product(or service)-sustaining, or facility-sustaining. Explain each answer.(8%)
 - Calculate the cost per test-hour for HT and ST. Explain briefly the reasons why these numbers differ from the \$15 per test-hour that Plymouth calculated using its existing costing system.(9%)
 - Explain the accuracy of the product costs calculated using the existing costing system and ABC system. How might Plymouth's management use the cost hierarchy and ABC information to manage its business better?(3%)
- 四. Gregg Industries manufactures plastic molded chairs. The three models of molded chairs, all variations of the same design, are Standard, Deluxe, and Executive. The company uses an operation-costing system. Gregg has extrusion, form, trim, and finish operations. Plastic sheets are produced by the extrusion operation. During the forming operation, the plastic sheets are molded into chair seats and the legs are added. The Standard model is sold after this operation. During the trim operation, the arms are added to the Deluxe and Executive models and the chair edges are smoothed. Only the Executive model enters the finish operation, in which padding is added. All of the units produced receive the same steps within each operation.

The May units of production and direct materials costs incurred are as follows:

	Units Produced	Extrusion Materials	Form Materials	Trim Materials	Finish Materials
Standard model	6,000	\$72,000	\$24,000	\$ 0	\$ 0
Deluxe model	3,000	36,000	12,000	9,000	0
Executive model	<u>2,000</u>	<u>24,000</u>	<u>8,000</u>	<u>6,000</u>	<u>12,000</u>
	<u>11,000</u>	<u>\$132,000</u>	<u>\$44,000</u>	<u>\$15,000</u>	<u>\$12,000</u>

The total conversion costs for the month of May are

	Extrusion Operation	Form Operation	Trim Operation	Finish Operation
Total conversion costs	\$269,500	\$132,000	\$69,000	\$42,000

Required

- For each product produced by Gregg Industries during May, determine (1) the unit cost and (2) the total cost. Support your answer with appropriate calculations.(8%)
 - Now consider the following information for June. All unit costs in June are identical to the May unit costs calculated in 1(1). At the end of June, 1,000 units of the Deluxe model remained in work in process. These units were 100% complete as to materials costs and 60% complete in the trim operation. Determine the cost of the Deluxe model work-in-process inventory at the end of June.(4%)
- 五. 當企業考慮於互斥之投資案中決定方案執行之優先順序時,若採淨現值法(Net Present Value Method)與採內部報酬率法(Internal Rate of Return Method)評估之結果不一致時,試問應如何選擇?試說明理由(否則不予計分)。(8%)