

淡江大學九十三年學年度碩士班招生考試試題

系別：會計學系

科目：成本與管理會計

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本試題雙面印製

一、選擇題 20%：

請畫出下表，並將選擇題答案填入表中

題號	1	2	3	4	5
答案					

1. During 2003, Banff. Co. experienced the following power outages (停止供應):

<u>Number of outages per month</u>	<u>Number of months</u>
zero	3
one	2
two	4
Three	<u>3</u>
	12

Each power outage results in out-of-pocket costs of \$400. For \$500 per month, Banff can lease an auxiliary generator to provide power during outages. If Banff leases an auxiliary generator in 2004, the estimated savings (or additional expenditures) for 2004 would be

a. (\$3,600) b. (\$1,200) c. \$1,600 d. \$1,900

2. Lanc Co. produces main products Kul and Wu. The process also yields by-product Zef. Net realizable value of by-product Zef is subtracted from joint production cost of Kul and Wu. The following information pertains to production in July 2003 at a joint cost of \$54,000:

<u>Product</u>	<u>Units produced</u>	<u>Market value</u>	<u>Additional cost after split-off</u>
Kul	1,000	\$40,000	\$ 0
Wu	1,500	35,000	0
Zef	500	7,000	3,000

If Lane uses the net realizable value method for allocating joint cost, how much of the joint cost should be allocated to product Kul?

a. \$18,800 b. \$20,000 c. \$26,667 d. \$27,342

3. A job order 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

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4、Hoger corporation accumulated the following cost information for its two products, A and B:

	A	B	Total
Production volume	2,000	1,000	
Total direct manufacturing labor hours	5,000	20,000	25,000
Set-up cost per batch	\$ 1,000	\$ 2,000	
Batch size	100	50	
Total set-up costs incurred	\$20,000	\$40,000	\$60,000
Direct manufacturing labor			
hour per unit	2	1	

A traditional costing system would allocate set-up costs on the basis of direct manufacturing labor hour. An ABC system would trace costs by spreading the costs per batch over the units in a batch. What is the set-up cost per unit of product A under each costing system?

	Traditional	ABC
a.	\$4.80	\$10.00
b.	\$2.40	\$10.00
c.	\$40.00	\$200.00
d.	\$4.80	\$20.00

5、The most likely strategy to reduce the breakeven point, would be to

- a. Increase both fixed costs and the contribution margin.
- b. Decrease both the fixed costs and the contribution margin.
- c. Decrease the fixed costs and increase the contribution margin.
- d. Increase the fixed costs and decrease the contribution margin.

二、21%

Toymaster, Inc., produces a toy car, TGC, in batches. After each batch of TGC is run, the molds are cleaned. The labor costs of cleaning the molds can be traced to TGC because TGC can only be produced from a specific mold. The following information pertains to June 2004:

	Static-Budget Amounts	Actual Amounts
Units of TGC produced and sold	30,000	22,500
Batch size (units per batch)	250	225
Cleaning labor-hours per batch	3	3.5
Cleaning labor cost per hour	\$14	\$12.50

Required:

- 1、Calculate the flexible-budget variance for total cleaning labor costs in June 2004.
- 2、Calculate the price and efficiency variances for total cleaning labor costs in June 2004.

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三、20%

The Burlingame Transport Company operates two divisions: a Truck Rental Division that rents to individuals, and a Transportation Division that transports goods from one city to another. Results reported for the past year are as follows:

	Truck Rental Division	Transportation Division
Total assets	\$650,000	\$950,000
Current liabilities	120,000	200,000
Operating income	75,000	160,000

Required:

1. Calculate the RI for each division using operating income and investment equal to total assets minus current liabilities. The required rate of return on investment is 12%.
2. The company has two sources of funds: long term debt with a market value of \$900,000 at an interest rate of 10% and equity capital with a market value of \$600,000 at a cost of equity of 15%. Burlingame's income tax rate is 40%. Burlingame applies the same weighted-average cost of capital to both divisions, because each division faces similar risks. Calculate the EVA for each division.
3. Using answers to requirement 1 and 2, what would you conclude about the performance of each division? Explain briefly.

四、20%

NW Airlines has leased a single jet aircraft that it operates between Taipei and Osaka. Only tourist-class seats are available on its planes. An analyst has collected the following information:

Seating capacity per plane	360 passengers
Average number of passenger per flight	200 passengers
Average one-way fare	\$500
Variable fuel costs	\$14,000 per flight
Food and beverage service costs (no charge to passenger)	\$20 per passenger
Commission to travel agents paid by NW Airlines (all tickets are booked by travel agents)	8% of fare
Fixed annual lease costs allocated to each flight	\$53,000 per flight
Fixed ground-service (maintenance, check in, baggage handling) costs allocated to each flight	\$7,000 per flight
Fixed flight-crew salaries allocated to each flight	\$4,000 per flight

For simplicity, assume the fuel costs are unaffected by the actual number of passengers on a flight.

Required:

1. Calculate the total contribution margin from passengers that NW Airlines earns on each one-way flight between Taipei and Osaka.

◀ 注意背面尚有試題 ▶

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- The Market Research Department of NW Airlines indicates that lowering the average one-way fare to \$480 will increase the average number of passengers per flight to 212. On the basis of financial considerations alone, should NW Airlines lower its fare? Show your calculations.
- Travel International, a tour operator, approaches NW Airlines on the possibility of chartering its aircraft. The terms of charter are as follows: (a) For each one way flight, Travel International will pay NW Airlines \$74,500 to charter the plane and to use its flight crew and ground-service staff; (b) Travel International will pay for fuel costs; and (c) Travel International will pay for all food costs. On the basis of financial considerations alone, should NW Airlines accept Travel International's offer? Show your calculations. What other factors should NW Airlines consider in deciding whether to charter its plane to Travel International?

五、19%

Pierce Enterprises produces two types of fertilizers(肥料): Quikrichen and Longrichen. Pierce recently has received significant criticism from environmental groups, local residents, and the federal government concerning its environmental performance. Henry Hyde, president of Pierce, wants to know how the company's environmental activities affect the cost of each product. He believes that the main source of the environmental problems lies with Quikrichen but would like some evidence to support (or refute) this belief. The controller has assembled the following data to help answer this question:

	Quikrichen	Longrichen
Pounds of fertilizer produced	1,000,000	2,000,000
Engineering hours (process design)	1,500	4,500
Pounds of solid residues treated	30,000	10,000
Inspection hours (environmental)	10,000	5,000
Cleanup hours (local lake)	8,000	2,000

Additionally, the following environmental activity costs were reported:

Designing process	\$150,000
Treating residues	600,000
Inspecting process	120,000
Cleaning up lake	200,000

Required:

- Calculate the environmental cost per pound of fertilizer for each product.
- Based on the calculations in Requirement 1, which product appears to be the most environmentally harmful?
- Would life-cycle cost assessment provide stronger evidence for the environmental suitability of each product? Explain.
- Explain how a strategic-based responsibility accounting system can be used to help improve Pierce's performance.