系所:<u>會計學系碩士班</u> 科目:<u>管理會計(含成本會計學)</u>

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作答說明:題號請標明清楚(請在答案卷上註明第一部份與第二部份)。 所有計算題皆須列示過程,否則不予計分。

Part I (50%)

I. Multiple choice (20 %; 2% for each question)

1. Dela Travel Agency specializes in flights between Los Angeles and Prague. It books passengers on United Airlines at \$1,000 per round-trip ticket. Until last month, United paid Dela a commission of 8% of the ticket price paid by each passenger. This commission was Dela's only source of revenues. Dela's fixed costs are \$14,000 per month, and its variable costs are \$20 per ticket purchased for a passenger. United Airlines has just announced a revised payment schedule for travel agents. It will now pay travel agents a 8% commission per ticket up to a maximum of \$60. Any ticket costing more than \$750 generates only a \$60 commission, regardless of the ticket price. Under the new revised payment schedule, how many round-trip tickets must Dela sell each month to earn an operating income of \$7,000?

A. 700 round-trip tickets

B. 200 round-trip tickets

C. 600 round-trip tickets

D. None of these answers are correct

2. Schuppener Company sells only two products, Product X and Product Y.

	Product X	Product Y	Total
Selling Price	\$40	\$50	
Variable cost per unit	\$24	\$40	
Total fixed costs			\$840,000

Schuppener sells two units of product X for each unit it sells of Product Y. Schuppener faces a tax rate of 30%. Schuppener desires a net after-tax income of \$73,500. The breakeven point in units would be:

- A. 21,750 units of Product X and 43,500 units of Product Y.
- B. 22,500 units of Product X and 45,000 units of Product Y.
- C. 43,500 units of Product X and 21,750 units of Product Y.
- D. 45,000 units of Product X and 22,500 units of Product Y.
- 3. Each month, Happy Company has \$275,000 total manufacturing costs (20% fixed) and \$125,000 distribution and marketing costs (36% fixed). Happy's monthly sales are \$500,000. The markup percentage on full cost to arrive at the target (existing) selling price is
 - A. 2.5%

B. 20%

C. 25%

D. 75%

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4. Haddon Corporation's master budget calls for the production of 6,000 units of product monthly. The master budget includes indirect labor costs of \$396,000 annually; Haddon considers indirect labor to be a variable cost. During the month of April, 5,600 units of product were produced, and indirect labor costs of \$30,630 were incurred. A performance report utilizing flexible budgeting would report a flexible budget variance for indirect labor of

A. \$170 favorable B. \$2,030 favorable C. \$170 unfavorable D. \$2,030 unfavorable

5. Information for Mki Company's direct-labor costs for the month of January 2008 is as follows:

Actual direct-labor hours 34,500 hours
Standard direct-labor hours 35,000 hours
Total direct-labor payroll \$241,500

Direct-labor efficiency variance- favorable \$3,200

What is Mki's direct-labor price (or rate) variance?

A. \$21,000 unfavorable B. \$20,700 unfavorable C. \$21,000 favorable D. \$20,700 favorable

6. Roc Box Company calculated an indirect-cost rate of \$12.50 per labor hour for fringe benefits for use in their normal costing system. At the end of the year, the actual costs of fringe benefits were \$105,000 more than the budgeted amount used to compute the indirect-cost rate. The total of labor hours worked for the year was the same amount as budgeted, 70,000 hours. If Job #260 required the use of 14 labor hours and the company used the adjusted allocation rate approach, by what amount would the cost of Job #260 change?

A. \$225B. \$21C. \$22.5D. \$175

7. Alove Inc. planned and actually manufactured 200,000 units of its single product in 2006, its first year of operations. Variable manufacturing costs were \$30 per unit of product. Planned and actual fixed manufacturing costs were \$600,000, and marketing and administrative costs totaled \$400,000 in 2006. Alove sold 120,000 units of product in 2006 at a selling price of \$40 per unit. Alove's 2006 operating income using absorption costing is

A. \$800,000 B. \$840,000 C. \$200,000 D. \$440,000

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8. At December 31, 2007, White Co. had a machine with an original cost of \$90,000, accumulated depreciation of \$75,000, and an estimated salvage value of zero. On December 31, 2007, White was considering the purchase of a new machine having a five-year life, costing \$150,000, and having an estimated salvage value of \$30,000 at the end of five years. In its decision concerning the possible purchase of the machine, how much should White consider as sunk cost at December 31, 2007?

A. \$15,000 B. \$90,000

C. \$75,000 D. \$150,000

9. The Precision Star Company had the following balances in their accounts at the end of the accounting period:

Work in Process \$ 5,000 Finished Goods 20,000 Cost of Goods Sold 200,000

If their manufacturing overhead was underallocated by \$8,000 and Precision Star adjusts their accounts using a proration based on total ending balances, the revised ending balance for Cost of Goods Sold would be

A. \$207,111 B. \$200,000

C. \$192,880 D. None of these answers are correct

10. Ter Times, Inc., produces and sells the finest quality golf clubs in all of Clay County. The company expects the following revenues and costs in 2006 for its Elite Quality golf club sets:

 Revenues (400 sets sold @ \$600 per set)
 \$240,000

 Variable costs
 160,000

 Fixed costs
 40,000

What amount of sales must Ter Times, Inc., have to earn a target net income of \$72,000 if they have a tax rate of 20%?

A. \$ 489,000 B. \$ 420,000

C. \$ 390,000 D. None of these answers are correct

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II. Problem (30%)

1. Mary, the financial manager at the Hilton hotel, is examining if there is any relationship between network advertising and sales revenues at the hotel. She obtains the following data:

Month	Revenues	Advertising Costs
January	\$ 50,000	\$ 1,000
February	70,000	3,000
March	55,000	1,500
April	65,000	3,500
May	50,000	2,000
June	65,000	2,000
July	45,000	1,500
August	60,000	2,500
September	80,000	4,000
October	55,000	2,500

Required:

- (1) Use the high-low method to compute the cost function. (8%)
- (2) What is the increase in revenues for each \$1,500 spent on advertising within the relevant range when Mary decides to adopt regression analysis method? (8%)
- 2. Mike Products manufactures coffee tables. Mike Products has a policy of adding a 20% markup to full costs and currently has excess capacity. The following information pertains to the company's normal operations per month:

Output units	30,000 tables
Machine-hours	8,000 hours
Direct manufacturing labor-hours	10,000 hours
Direct materials per unit	\$50
Direct manufacturing labor per hour	\$6
Variable manufacturing overhead costs	\$161,250
Fixed manufacturing overhead costs	\$600,000
Product and process design costs	\$450,000
Marketing and distribution costs	\$562,500

Required:

- (1) Mike Products is approached by an overseas customer to fulfill a one-time-only special order for 2,000 units. All cost relationships remain the same except for a one-time setup charge of \$20,000. No additional design, marketing, or distribution costs will be incurred. What is the minimum acceptable bid per unit on this one-time-only special order? (7%)
- (2) For long-run pricing of the coffee tables, what price will likely be used by Mike? (7%)

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Part II (50%)

- I · Multiple Choice (20%; 2% for each question)
- 1 Stay Company uses the weighted-average method in its process costing system. The company's ending work in process inventory consists of 8,000 units, 60% complete with respect to materials and 80% complete with respect to labor and overhead. If the total cost in this inventory is \$200,000 and if the cost for materials is \$16 per equivalent unit for the period, the cost of labor and overhead per equivalent unit of the production for the period must be:
 - A) \$19.25.
- B) \$16.00.
- C) \$25.67.
- D) \$31.25.
- 2 Cannon Company operates two stores, Store C and Store H. Last year, Cannon Company reported a contribution margin of \$60,000 for Store C. Store H had sales of \$300,000 and a contribution margin ratio of 40%. Net operating income for the company was \$40,000 and traceable fixed expenses for the two stores totaled \$80,000. Cannon Company's common fixed expenses were:
 - A) \$80,000.
- B) \$100,000.
- C) \$60,000.
- D) \$140,000.
- 3 · Balanced scorecard objectives are in balance when:
 - A) debits equal credits.
 - B) financial performance measurements are less than the majority of measurements.
 - C) the measurements are fair.
 - D) the measurements reflect an improvement over the previous year.
- 4 \ The sales-mix variance will be unfavorable when:
 - A) the composite unit for the actual mix is greater than for the budgeted mix.
 - B) actual unit sales are less than budgeted unit sales.
 - C) the actual contribution margin is greater than the static-budget contribution margin.
 - D) the actual sales mix shifts toward the less profitable units.
- 5 When a single manufacturing process yields two products, one of which has a relatively high sales value compared to the other, the two products are respectively known as:
 - A) joints and byproducts.
 - B) joint products and scrap.
 - C) main products and byproducts.
 - D) main products and joint products.

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- 6 · Spoilage is an example of:
 - A) appraisal costs.
 - B) prevention costs.
 - C) internal failure cost.
 - D) external failure costs.
- 7 · Which of the following is an assumption of the economic-order-quantity (EOQ) decision model?
 - A) No stockouts occur.
 - B) The quantity ordered can vary at each reorder point.
 - C) Demand ordering costs and carrying costs fluctuate.
 - D) There will be timely labor costs.
- 8 · All of the following are potential financial benefits of just-in-time (JIT) EXCEPT:
 - A) reducing manufacturing lead time.
 - B) lower investments in inventories.
 - C) lower investments in plant space for inventories.
 - D) reducing the risk of obsolescence.
- 9 · A portion of the total fixed manufacturing overhead cost incurred during a period may:
 - A) be excluded from cost of goods sold under absorption costing.
 - B) be charged as a period cost with the remainder deferred under variable costing.
 - C) never be excluded from cost of goods sold under absorption costing.
 - D) never be excluded from cost of goods sold under variable costing.
- 10 The situation in which an employee prefers to exert less effort compared with the effort desired by the owner because the employee's effort cannot accurately be monitored and enforced is known as a(n):
 - A) imputed cost B) incentive C) moral hazard D) objective

II. Problems (30%)

1. The management of an amusement park is considering purchasing a new ride for \$80,000 that would have a useful life of 10 years and a salvage value of \$10,000. The ride would require annual operating costs of \$32,000 throughout its useful life. The company's discount rate is 9%.

Management is unsure about how much additional ticket revenue the new ride would generate-particularly since customers pay a flat fee when they enter the park that entitles them to unlimited rides. Hopefully, the presence of the ride would attract new customers.

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PVF-OA $_{10, 9\%}$ = 6.418 (PVF=present value factor, OA= ordinary annuity) PVF $_{10, 9\%}$ = 0.422 (PVF = present value factor)

Required: (15%) (Show your work for any credits!!)

How much additional revenue would the ride have to generate per year to make it an attractive investment? (Ignore income taxes in this problem.)

2. The Assembly Division of Amchief Car Company has offered to purchase 90,000 batteries from the Electrical Division for \$104 per unit. At a normal volume of 250,000 batteries per year, production costs per battery are as follows:

Direct materials	\$ 40
Direct manufacturing labor	20
Variable factory overhead	12
Fixed factory overhead	40
Total	112

The Electrical Division has been selling 250,000 batteries per year to outside buyers at \$136 each; capacity is 350,000 batteries per year. The Assembly Division has been buying batteries from outside sources for \$130 each.

Required: (Show your work for any credits!!)

- a. Should the Electrical Division manager accept the offer? Explain. (8%)
- b. From the company's perspective, will the internal sales be of any benefit? (7%)