成本與管理會計學 試題 （限用答案本作答）

※可使用計算機※

I、單選題（共 15 題，一題 3 分，答錯不倒扣，請掌握時間作答。）

請在答案本上依下列格式作答（題號務必標示清楚）：

1.	2.	3.	4.	5.
6.	7.	8.	9.	10.
11.	12.	13.	14.	15.

1. A company has two divisions, A and B, each operated as a profit center. A charges B $35 per unit for each unit transferred to B. Other data follow:

A's variable cost per unit	$ 30
A's fixed costs	$10,000
A's annual sales to B	5,000 units
A's sales to outsiders	50,000 units

A is planning to raise its transfer price to $50 per unit. Division B can purchase units at $40 each from outsiders, but doing so would idle A's facilities now committed to producing units for B. Division A cannot increase its sales to outsiders. From the perspective of the company as a whole, from whom should Division B acquire the units, assuming B's market is unaffected?
(A) Division A, in spite of the increased transfer price
(B) outside vendors
(C) Division A, but only at the variable cost per unit
(D) Division A, but only until fixed costs are covered; then should purchase from outside vendors
(E) none of the above

2. A company is considering the purchase of a new conveyor belt system for carrying parts and subassemblies from building to building within its plant complex. It is expected that the system will have a useful life of at least ten years and that it will substantially reduce labor and waiting-time costs. If the company's average cost of capital is about 15% and if some evaluation must be made of cost/benefit relationships (including the effects of interest) to determine the desirability of the purchase, the most relevant quantitative technique for evaluating the investment is:
(A) present value (or internal rate of return) analysis
(B) Program Evaluation and Review Technique (PERT)
(C) accounting rate of return analysis
(D) cost-volume-profit analysis
(E) payback analysis

3. A company has the following cost data:

Fixed manufacturing costs	$2,000
Fixed selling, general, and administrative costs	1,000
Variable selling costs per unit sold	1
Variable manufacturing costs per unit	2
Beginning inventory	0 units
Production	100 units
Sales	90units at $40 per unit

Variable and absorption-cost net incomes are:
(A) $320 variable, $520 absorption
(B) $330 variable, $530 absorption
(C) $520 variable, $320 absorption
(D) $530 variable, $330 absorption
(E) none of the above

4. A formal diagram of the interrelationships of complex time series of activities is:
(A) linear programming
(B) Poisson distribution models
(C) Monte Carlo models
(D) PERT
(E) the method of least squares

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5. All of the following are distinctions that usually exist between traditional and ABC costing systems, *except* that:
   (A) the number of overhead cost pools tends to be higher in ABC systems
   (B) the number of allocation bases tend to be higher in ABC systems
   (C) costs within an ABC cost pool tend to be more homogeneous than the costs within a traditional system's cost pool
   (D) all ABC systems are one-stage costing systems, while traditional systems may be one- or two-stage
   (E) all of the above are distinctions

6. The Cappalari Company wishes to determine the amount of safety stock that it should maintain for Product D to result in the lowest cost. The following information is available:

Stockout cost	$ 80 per occurrence
Carrying cost of safety stock	$ 2 per unit
Number of purchase orders	5 per year

The options available to Cappalari are as follows:

Units of Safety Stock	Probability of Running out of Safety Stock
10	50%
30	30%
50	10%
55	5%

The number of units of safety stock that will result in the lowest cost is:
   (A) 30
   (B) 50
   (C) 55
   (D) 10
   (E) none of the above

7. The Hovart Corporation manufactures two products out of a joint process—Compod and Ultrasene. The joint (common) costs incurred are $250,000 for a standard production run that generates 120,000 gallons of Compod and 80,000 gallons of Ultrasene. Compod sells for $2.00 per gallon, while Ultrasene sells for $3.25 per gallon. If there are no additional processing costs incurred after the split-off point, the amount of joint cost of each production run allocated to Compod by the quantitative unit method is:
   (A) $100,000
   (B) $120,000
   (C) $130,000
   (D) $150,000
   (E) some amount other than those given above

8. Willis, Inc. instituted a new process in October. During October, 10,000 units were started in Department A. Of the units started, 1,000 were lost in the process due to normal production shrinkage, 7,000 were transferred to Department B, and 2,000 remained in work in process at October 31. The work in process at October 31 was 100% complete as to materials costs and 50% complete as to conversion costs. Materials costs of $27,000 and conversion costs of $40,000 were charged to Department A in October. What were the total costs transferred to Department B?
   (A) $46,900
   (B) $53,600
   (C) $56,000
   (D) $57,120
   (E) none of the above

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9. The fifo method of process costing differs from the average cost method of process costing in that fifo:
   (A) allocates costs based on whole units, but the average cost method uses equivalent units
   (B) does not consider the stage of completion of beginning work in process in computing equivalent units of production, but the average cost method does
   (C) considers the stage of completion of beginning work in process in computing equivalent units of production, but the average cost method does not
   (D) is applicable only to those companies using the fifo inventory pricing method, but the average cost method may be used with any inventory pricing method
   (E) none of the above

10. The Glass Shop, a manufacturer of large windows, is experiencing a bottleneck in its plant. Setup time at one of its workstations has been identified as the culprit. A manager has proposed a plan to reduce setup time at a cost of $72,000. The change will result in 8,000 additional windows. The selling price per window is $18, direct labor costs are $3 per window, and the cost of direct materials is $5 per window. Assume all units produced can be sold. The change will result in an increase in the throughput contribution of
   (A) $104,000.
   (B) $80,000.
   (C) $32,000.
   (D) $8,000.
   (E) $5,000.

11. The purpose of the balanced scorecard is BEST described as helping an organization
   (A) develop customer relations.
   (B) mobilize employee skills for continuous improvements in processing capabilities, quality, and response times.
   (C) introduce innovative products and services desired by target customers.
   (D) translate an organization's mission and strategy into a set of performance measures that help to implement the strategy.

12. An operating income analysis of Sara McCullough Incorporated revealed the following:

Operating income for 2003	$500,000
Add growth component	25,000
Deduct price-recovery component	(15,000)
Add productivity component	60,000
Operating income for 2004	$570,000

   McCullough's operating income gain is consistent with the
   (A) product differentiation strategy.
   (B) downsizing strategy.
   (C) reengineering strategy.
   (D) cost leadership strategy.

13. The __________ approach adjusts individual job-cost records to account for underallocated or overallocated overhead.
   (A) adjusted allocation-rate
   (B) proration

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15. Ratzlaff Company has a current production level of 20,000 units per month. Unit costs at this level are:

Direct materials	$0.25
Direct labor	0.40
Variable overhead	0.15
Fixed overhead	0.20
Marketing - fixed	0.20
Marketing/distribution - variable	0.40

Current monthly sales are 18,000 units. Jim Company has contacted Ratzlaff Company about purchasing 1,500 units at $2.00 each. Current sales would not be affected by the one-time-only special order, and variable marketing/distribution costs would not be incurred on the special order. What is Ratzlaff Company's change in operating profits if the special order is accepted?

(A) $400 increase in operating profits
(B) $400 decrease in operating profits
(C) $1,800 increase in operating profits
(D) $1,800 decrease in operating profits

II、計算題：(55%)

請在答案本上依下列格式作答（題號務必標示清楚）：

(1)	
(2)	
(3)	
(4)(a)	(b)
(5)(a)	(b)
(6)(a)	(b)
(7)(a)	(b)

(1)(5%) The management of Seoul Industries is trying to decide whether to build a large, medium, or small plant at a new location. Demand for the company's product in the new area is uncertain, but the marketing manager has assigned probabilities to three levels of demand. These probabilities, as well as the contribution margins (conditional values, in millions of dollars) for each plant size and demand level, are as follows:

	Demand Level		
Plant Size	High	Moderate	Low
Large	$7	$2	$-1
Medium	$6	$4	$ 0
Small	$5	$3	$ 1
Probability	0.3	0.5	0.2

Required: Choose the most profitable of the expected alternatives.

(2) **(5%)**The Coffee Division of American Products is planning the 2003 operating budget. Average operating assets of $1,500,000 will be used during the year and unit selling prices are expected to average $100 each. Variable costs of the division are budgeted at $400,000, while fixed costs are set at $250,000. The company's required rate of return is 18%.

Required:
The division manager receives a bonus of 50% of residual income. What is his anticipated bonus for 2003, assuming he achieves the 20% ROI?

(3) **(5%)**Combs, Inc. reports the following information for September sales:

Sales	$15,000
Variable costs	3,000
Fixed costs	4,000
Operating income	$ 8,000

Required: If sales double in October, what is the projected operating income?

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(4) (10%)Micro Corp. uses 1,000 units of Chip annually in its production. Order costs consist of $10 for placing a long-distance call to make the order and $40 for delivering the order by truck to the company warehouse. Each Chip costs $100, and the carrying costs are estimated at 15.625% of the inventory cost.

Required:

(a) Compute the economic order quantity for Chip.

(b) Determine the best order quantity if Chip is purchased only in multiples of 25 units. (Round answers to the nearest whole dollar.)

(5) (10%)Bob's Textile Company sells shirts for men and boys. The average selling price and variable cost for each product are as follows:

<u>Men's</u>		<u>Boys</u>	
Selling Price	$28.80	Selling Price	$24.00
Variable Cost	$20.40	Variable Cost	$16.80

Fixed costs are $38,400.

Required:

(a) What is the breakeven point in units for men's shirts, assuming the sales mix is 2:1 in favor of men's shirts?

(b) What is the operating income, assuming the sales mix is 2:1 in favor of men's shirts, and sales total 9,000 shirts?

(6) (10%)Casey Corporation produces a special line of basketball hoops. Casey Corporation produces the hoops in batches. To manufacture a batch of the basketball hoops, Casey Corporation must set up the machines and molds. Setup costs are batch-level costs because they are associated with batches rather than individual units of products. A separate Setup Department is responsible for setting up machines and molds for different styles of basketball hoops. Setup overhead costs consist of some costs that are variable and some costs that are fixed with respect to the number of setup-hours. The following information pertains to January 2004.

	Static-budget Amounts	Actual Amounts
Basketball hoops produced and sold	30,000	28,000
Batch size (number of units per batch)	200	250
Setup-hours per batch	5	4
Variable overhead cost per setup hour	$10	$9
Total fixed setup overhead costs	$22,500	$21,000

Required:

(a) Calculate the efficiency variance for variable setup overhead costs.

(b) Calculate the production-volume variance for fixed setup overhead costs.

(7) (10%) Bugos Company makes a household appliance with model number XX300. The goal for 2004 is to reduce direct materials usage per unit. No defective units are currently produced. Manufacturing conversion costs depend on production capacity defined in terms of XX300 units that can be produced. The industry market size for appliances increased 5% from 2003 to 2004. The following additional data are available for 2003 and 2004:

	2003	2004
Units of XX300 produced and sold	10,000	10,500
Selling price	$100	$95