東吳大學 114 學年度碩士班招生考試試題

系級	會計學系碩士班	考試時間	100 分鐘
科目	成本及管理會計學	本科總分	100 分

※一律作答於答案卷上(題上作答不予計分)；並務必標明題號，依序作答。

一、(20%) Multiple Choices:

*Select **the best** answer for each question and **write it in your answer sheet** as the following table:*

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

1. Which of the following is true of CVP analysis?
   (A) Total revenues and total costs are linear in relation to output units.
   (B) Costs may be separated into separate inventoriable and period components with respect to the level of output.
   (C) Unit selling price, unit variable costs, and unit fixed costs are known and remain constant.
   (D) Proportion of different products will vary according to demand and supply when multiple products are sold.

2. If the fixed cost attendant to a product increases while the variable cost and sales price remain constant, the contribution margin and break-even point will:

	Contribution Margin	Break-Even Point
(A)	increase	increase
(B)	not change	increase
(C)	not change	not change
(D)	increase	decrease

3. Which of the following is true of refinement of a costing system?
   (A) While refining a costing system, companies should identify as many indirect costs as is economically feasible.
   (B) A homogeneous cost pool will use multiple cost drivers to allocate costs.
   (C) It reduces the use of broad averages for assigning the cost of resources to cost objects.
   (D) It is likely to yield the most decision-making benefits when direct costs are a high percentage of total costs.

4. Which of the following statements is true of activity-based costing?
   (A) Activity-based costing is more suited to companies with high product diversity than companies with single product line.
   (B) In activity-based costing, direct labor-hours is always the best allocation base to allocate all non-manufacturing indirect costs.
   (C) Activity-based costing broadly averages or spreads the cost of resources uniformly to cost objects such as products or services.
   (D) The main advantage of activity-based costing over peanut-butter costing is the accurate distribution of all direct costs to the products.

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5. A locked-in cost is a(n) ________.
   (A) opportunity cost that is fixed in the short run
   (B) cost that can be changed in the short run
   (C) cost that has not yet been incurred, but based on decisions that have already been made, will be incurred in the future
   (D) cost that has been incurred, but based on decisions that have already been made, will be not incurred in the future

6. For companies in which full allocation is not followed, which of the following is true of corporate sustaining costs?
   (A) allocated to divisions using cause-and-effect relationship
   (B) allocated to customers using cause-and-effect relationship
   (C) added to aggregate operating incomes of the divisions
   (D) subtracted as a lump-sum amount after aggregating operating incomes of the divisions

7. Which of the following is a challenge to using cost-benefit criteria for allocating costs?
   (A) the costs of designing and implementing complex cost allocations are not readily apparent
   (B) the benefits of making better-informed pricing decisions are difficult to measure
   (C) cost systems are being simplified and fewer multiple cost-allocation bases are being used
   (D) the costs of collecting and processing information keep spiraling upward

8. Which of the following statements is true of sell-or-process-further decisions in joint costing?
   (A) Joint costs incurred before the split-off point are relevant in deciding whether to process the product further.
   (B) All separable costs in joint-cost allocations are incremental costs.
   (C) Separable costs incurred before the split-off point are irrelevant in deciding whether to process the product further.
   (D) Costs that differ between the alternatives of selling products or processing further are relevant.

9. An error was made in the computation of the percentage of completion of the current year's ending work in process inventory. The error resulted in assigning a lower percentage of completion to each component of the inventory than actually was the case. What is the effect of this error upon:
   (1) the computation of equivalent units in total
   (2) the computation of costs per equivalent unit
   (3) costs assigned to cost of goods completed for the period

	(1)	(2)	(3)
(A)	understate	overstate	overstate
(B)	understate	understate	overstate
(C)	overstate	understate	understate
(D)	overstate	overstate	understate

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10. All of the following are factors affecting direct versus indirect cost classification except:
(A) materiality of the cost
(B) design of operations
(C) information technology's ability to trace costs in an economically feasible way
(D) cost accuracy

二、(20%)

Solomon Company uses a process cost system with a FIFO cost flow assumption to account for production, which is manufactured in two departments. Units of product are started in the Cracking Department and then transferred to the Refining Department where they are completed. Units are inspected at the end of the production process in the Refining Department. Good units are transferred to finished goods inventory and spoiled units are transferred to a separate inventory account. Spoiled units are inventoried at their salvage value of $8 each, and the unrecoverable cost of spoilage resulting from an internal production failure is charged to the appropriate account. Data related to September operations in the Refining Department follow:

Units in beginning inventory (60% materials, 30% labor, 30% overhead)...............	2,800
Units received from Cracking Department this period	8,400
Units transferred to the finished goods inventory this period	7,600
Units transferred to special inventory account this period	1,100
Units in ending inventory (100% materials, 50% labor, 50% overhead)..................	2,500

Costs charged to the department:	Beginning Inventory	Added This Period
Cost from preceding department	$17,889	$68,040
Materials	2,733	11,900
Labor	7,278	30,063
Factory overhead	12,350	51,016

REQUIRED:

1. Prepare a cost of production report for the Refining Department based on the data presented for September. *(Round the unit cost to the nearest cent.)*
2. Why is the FIFO method better than the weighted-average method to understand the manufacturing cost of each period?

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三、(10%)

HIWIN Company has developed the following data to assist in controlling one of its inventory items:

Economic order quantity	1,000	liters
Average daily use	100	liters
Maximum daily use	120	liters
Working days per year	250	days
Safety stock	140	liters
Cost of carrying inventory	$1.00	per liter per year
Lead time	7	working days

REQUIRED: Calculate and answer the following questions:

1. Order point.
2. Average inventory.
3. Maximum inventory assuming normal lead time and usage.
4. Cost of placing one order.
5. What is the purpose of the economic order quantity model?

四、(10%)

Delta Inc. is preparing to bid on the construction of seven additional rocket carrier frames for launching communication satellites. Under a special contract, the company has already built one frame with the following costs:

Materials	$ 800,000
Labor (60,000 hrs.)	750,000
Variable overhead:	
50% of direct labor cost	375,000
On the basis of materials used	150,000
Total	$ 2,075,000

Variable overhead based on materials used represents materials storage cost. For seven frames, this cost would be $1,050,000. The company was informed that the maximum acceptable bid is $2,000,000 per unit. However, Delta will not place a bid unless it can recover its costs plus a $600,000 gross profit per frame. A learning coefficient of 80% learning curve is in effect.

REQUIRED:

1. Determine the total direct labor hours required for all eight frames.
2. Determine the total cost for the seven frames covered by the new bid.
3. Determine the profit (or loss) per unit if a bid of $2,000,000 per frame is offered. (Round all amounts to the nearest whole dollar.)
4. Should Delta accept the contract at a bid price of $2,000,000 per frame?
5. What is the learning coefficient theory limit in the learning curve theory?

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五、(20%)

Asia Optical is considering the purchase of a special-purpose bottling machine for $28,000. It is expected to have a useful life of seven years with a zero terminal disposal price. The plant manager estimates the following savings in cash operating costs:

Year	Amount
1	$10,000
2	8,000
3	6,000
4	5,000
5	4,000
6	3,000
7	3,000
Total	$39,000

Southern Cola uses a required rate of return of 16% in its capital budgeting decisions. Ignore income taxes in your analysis.

REQUIRED: Using the present value TABLE provided below, compute and answer each of the following:

1. Payback period.
2. Net present value.
3. Internal rate of return, rounded to the nearest tenth of a percent.
4. Accrual accounting rate of return based on net initial investment, rounded to the nearest tenth of a percent. (Assume straight-line depreciation. Use the average annual savings in cash operating costs when computing the numerator of the accrual accounting rate of return.)
5. Why would a firm use its weighted-average cost of capital as the hurdle rate (minimum rate) for a project investment decision rather than the specific marginal cost of funds?
6. Financial accounting data are not entirely suitable for use in evaluating capital expenditures. Explain.

TABLE

Present Value of $1.00.

$P = \frac{S}{(1+r)^n}$. In this table $S = \$1.00$.

Periods	Discount rate (r)									
(n)	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162

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六、(20%)

When the Largan Company formed three divisions a year ago, the president told the division managers that an annual bonus would be paid to the most profitable division. However, absolute division operating income as conventionally computed would not be used. Instead, the ranking would be affected by the relative investments in the three divisions. Options available include ROI and residual income. Investment can be measured using gross book value or net book value. Each manager has now written a memorandum claiming entitlement to the bonus. The following data are available:

Division	Gross Book Value of Division Assets	Division Operating Income
M	$400,000	$47,500
B	380,000	46,000
R	250,000	30,800

All the assets are fixed assets that were purchased 10 years ago and have 10 years of useful life remaining. A zero terminal disposal price is predicted. Largan's required rate of return on investment used for computing residual income is 10% of investment.

REQUIRED:

1. Which method for computing profitability did each manager choose? Make your description specific and brief. Show supporting computations. Where applicable, assume straight-line depreciation.
2. Give four definitions of investment used in practice when computing ROI.
3. What is the purpose of using multiple performance measures?