

大葉大學 九十二 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	4月13日	第 2 節 (0:30 ~ 1:00)	1.可攜帶計算機 2.計算題請列計算步驟，否則不予計分 3.本試題共 3 頁

一. MULTIPLE CHOICE (40%)

1. At the breakeven point, the contribution margin equals total:
 - a. Variable costs.
 - b. Sales revenues.
 - c. Selling and administrative costs
 - d. Fixed costs.
2. At the end of Killo Co.'s first year of operations, 1,000 units of inventory remained on hand. Variable and fixed manufacturing costs per unit were \$90 and \$20, respectively. If Killo uses absorption costing rather than variable (direct) costing, the result would be a higher pretax income of
 - a. \$0
 - b. \$20,000
 - c. \$70,000
 - d. \$90,000
3. The economic order quantity formula assumes that
 - a. Periodic demand for the good is known.
 - b. Carrying costs per unit vary with quantity ordered.
 - c. Costs of placing an order vary with quantity ordered.
 - d. Purchase costs per unit differ due to quantity discounts.
4. The discount rate must be determined in advance for the
 - a. Payback period method
 - b. Time-adjusted rate of return method
 - c. Net present value method.
 - d. Internal rate of return method.
5. Para Co. is reviewing the following data relating to an energy saving investment proposal:

Cost	\$50,000
Residual value at the end of 5 years	10,000
Present value of an annuity of 1 at 12% for 5 years	3.6
Present value of 1 due in 5 years at 12%	0.57

What would be the annual saving needed to make the investment realize a 12% yield ?

 - a. \$8,189
 - b. \$11,111
 - c. \$12,306
 - d. \$13,889
6. In a quality control program, which of the following is(are) categorized as internal failure costs ?

I. Rework. II. Responding to customer complaints. III. Statistical quality control procedures.

 - a. I only
 - b. II only
 - c. III only
 - d. I, II, and III
7. Which of the following is true about activity-based costing ?
 - a. It should not be used with process or job costing
 - b. It can be used only with process costing.
 - c. It can be used only with job costing.
 - d. It can be used with either process or job costing.
8. Nile co.'s cost allocation and product costing procedures follow activity-based costing principles. Activities have been identified and classified as being either value-adding or non-value-adding as to each product. Which of the following activities, used in Nile production process, is non-value-adding ?
 - a. Design engineering activity.
 - b. Heat treatment activity.
 - c. Drill press activity.
 - d. Raw materials storage activity

9. Kern co. is planning to invest in a two-year project that is expected to yield cash flows from operations, net of income taxes, of \$50,000 in the first year and \$80,000 in the second year. Kern requires an internal rate of return of 15%. The present value of \$1 for one period at 15% is 0.870 and for two periods at 15% is 0.756. The future value of \$1 for one period at 15% is 1.150 and for two periods at 15% is 1.323. The Maximum that Kern should invest immediately is
- \$81,670
 - \$103,980
 - \$130,000
 - \$163,340
10. Which tool would most likely be used to determine the best course of action under conditions of uncertainty ?
- Cost-volume-profit analysis.
 - Expected value
 - Program evaluation and review technique
 - Scatter graph method.

二. The Beal Manufacturing Company's Job-costing system has two direct-cost categories: direct materials and direct manufacturing labor. Manufacturing overhead (both variable and fixed) is allocated to products on the basis of standard direct manufacturing labor-hours (DLH). At the beginning of 2004, Beal adopted the following standards for its manufacturing costs:

	<u>Input</u>	<u>Cost per Output Unit</u>
Direct materials	3 pcs. at \$5 per pc	\$15.00
Direct manufacturing labor	5 hrs. at \$15 per hr.	75.00
Manufacturing overhead:		
Variable	\$6 per DLH	30.00
Fixed	\$8 per DLH	<u>40.00</u>
		<u>\$160.00</u>

The denominator level for total manufacturing overhead per month in 2004 is 40,000 direct manufacturing labor-hours. Beal's flexible budget for January 2004 was based on this denominator level. The records for January indicated the following:

Direct materials purchased	25,000 pcs. at \$5.20 per pc
Direct materials used	23,100 pcs.
Direct manufacturing labor	40,100 hrs. at \$14.60 per hr
Total actual manufacturing overhead (variable and fixed)	\$600,000
Actual production	7,800 output units

- Required:
- Prepare a schedule of total standard manufacturing costs for the 7,800 output units in January 2004. (3%)
 - For the month of January 2004, compute the following variances, indicating whether each is favorable (F) or unfavorable (U). (21%)
 - Direct materials price variance, based on purchases
 - Direct materials efficiency variance
 - Direct manufacturing labor price variance
 - Direct manufacturing labor efficiency variance
 - Total manufacturing overhead spending variance
 - Variable manufacturing overhead efficiency variance
 - Production-volume variance

三. Della Simpson, Inc., sells two popular brands of cookies, Della's Delight and Cathy's Chocolate Chip. Both cookies go through the Mixing and Baking Departments, but Della's Delight is also dipped in chocolate in the Coating Department. Michael Sesnowitz, vice president for sales, believes that Della Simpson can sell all of its daily production of Cathy's Chocolate Chips and Della's Delights. Both cookies are made in batches of 300 cookies. The batch times (in minutes) for producing each type of cookies and the minutes available per day are as follows:

	Mixing	Baking	Dipping
Della's Delight (in minutes)	30	10	20
Cathy's Chocolate Chip (in minutes)	15	15	0
Minutes available per day	600	300	320

Revenue and cost data for each type of cookies are

	Della's Delight	Cathy's Chocolate Chip
Revenue per batch	\$ 525	\$ 335
Variable cost per batch	175	85
Monthly fixed costs (allocated to each product)	20,350	16,650

- Required:
1. Formulate the decision facing Michael Sesnowitz as an Linear Programming model. Use D to represent the Quantity of Della's Delights made and sold and C to represent the quantity of Cathy's Chocolate Chips made and sold. (6%)
 2. Compute the optimal quantities of Della's Delights and Cathy's Chocolate Chips that Della Simpson should make and sell.(6%)
- 四. Hall Company specializes in packaging bulk drugs. Wyant Memorial Hospital has asked Hall to bid on the packaging of one million doses of medication at full cost plus a return on full cost of no more than 9% after income taxes. Wyant defines cost as including all variable costs of performing the service, a reasonable amount of fixed overhead, and incremental administrative costs. The hospital will supply all packaging materials and ingredients. Wyant has indicated that any bid over \$0.07 per dose will be rejected. Don Greenway, director of cost accounting at the Hall Company, has accumulated the following information prior to the preparation of the bid:
- | | |
|--|---|
| Variable direct manufacturing labor cost | \$16.00/direct manufacturing labor-hour |
| Variable overhead cost | \$9.00/direct manufacturing labor-hour |
| Fixed overhead cost | \$30.00/direct manufacturing labor-hour |
| Incremental administrative costs | \$5,000 for the order |
| Production rate | 1,000 doses/direct manufacturing labor-hour |
- Hall Company is subject to an income tax rate of 40%
- Required:
1. Calculate the minimum price per dose that Hall could bid for the Wyant job without changing Hall's net income. (6%)
 2. Calculate Hall's bid price per dose using the cost-plus criterion and the maximum allowable return specified by Wyant. (6%)
 3. Without considering your answer to requirement 2, assume that the price per dose that Hall calculated using the cost-plus criterion specified by Wyant is greater than the maximum bid of \$0.07 per dose allowed by Wyant. Discuss the factors that Hall should consider before deciding whether to submit a bid at the maximum price of \$0.07 per dose. (6%)

五.採淨現值法(Net present value method)評估某獨立之資本支出方案時，若計得該方案之淨現值(NPV)恰好為 0，請問該方案是可行或不可行？請說明理由。(6%)