國立雲林科技大學 109 學年度 碩士班招生考試試題

系所：會計系

科目：成本與管理會計

1. (6% * 3= 18%)

Ted Manufacturers Inc. is approached by an Asia customer to fulfill a one-time-only special order for a product similar to one offered to domestic customers. The company has excess capacity. The following per unit data apply for sales to regular customers:

Variable costs:	
Direct materials	$120
Direct labor	60
Manufacturing support	105
Marketing costs	45
Fixed costs:	
Manufacturing support	135
Marketing costs	45
Total costs	510
Markup (50%)	255
Targeted selling price	$765

Answer the following questions and show your calculation:

(1) What is the contribution margin per unit?

(2) For Ted Manufacturers Inc., what is the minimum acceptable price of this special order?

(3) What is the change in operating profits if the one-time-only special order for 2,000 units is accepted for $540 a unit by Ted?

2. (6% * 2= 12%)

Fly Manufacturing Inc., incurred total indirect manufacturing labor costs of $500,000. The company is labor intensive. Total labor hours during the period were 6,000. Using qualitative analysis, the manager and the management accountant determine that over the period the indirect manufacturing labor costs are mixed costs with only one cost driver–labor-hours. They separated the total indirect manufacturing labor costs into costs that are fixed ($110,000 based on 8,000 hours of labor) and costs that are variable ($390,000) based on the number of labor-hours used. The company has estimated 7,000 labor hours during the next period.

Answer the following questions and show your calculation:

(1) Show the linear cost function.

(2) What will be the total cost for the estimated 7,000 hours?

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3. (5% * 4= 20%)

Miller Corporation incurred fixed manufacturing costs of $26,000 during 2019. Other information for 2019 includes:

The budgeted denominator level is 2,000 units.
Units produced total 1,500 units.
Units sold total 1,200 units.
Beginning inventory was zero.

The company uses absorption costing and the fixed manufacturing cost rate is based on the budgeted denominator level. Manufacturing variances are closed to cost of goods sold.
Answer the following questions and show your calculation:

(1) What is the total amount of the fixed manufacturing costs expensed on the income statement? (excluding adjustments for variances)
(2) What is the total amount of the fixed manufacturing costs included in ending inventory?
(3) What is the total amount of the production-volume variance?
(4) " Operating income using absorption costing will be lower than operating income if using variable costing in 2019." Do you agree? (2%) Give reasons for your answer. (3%)

4. (15%)

Yuntech is considering the purchase of a special-purpose bottling machine for $23,000. It is expected to have a useful life of four years with no terminal disposal value. 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
Total	29,000

Yuntech uses a required rate of return of 16% in its capital budgeting decisions. Ignore income taxes in your analysis. Assume all cash flows occur at year-end except for initial investment amounts. Calculate the following for the special-purpose bottling machine:

(1) Net present value (3%)
(2) Payback period (3%)
(3) Discounted payback period (3%)
(4) Internal rate of return (using the interpolation method) (3%)
(5) Accrual accounting rate of return based on net initial investment (Assume straight-line

depreciation. Use the average annual savings in cash operating costs when computing the numerator of the accrual accounting rate of return.) (3%)

TABLE Present Value of 1

	6%	8%	10%	12%	14%	16%
1	0.943	0.926	0.909	0.893	0.877	0.862
2	0.890	0.857	0.826	0.797	0.769	0.743
3	0.840	0.794	0.751	0.712	0.675	0.641
4	0.792	0.735	0.683	0.636	0.592	0.552
5	0.747	0.681	0.621	0.567	0.519	0.476

5. (20%)

Douliu Company makes wooden toys in its forming department, and it uses the weighted-average method of process costing. All direct materials are added at the beginning of the process, and conversion costs are added evenly during the process. Spoiled units are detected upon inspection at the end of the process and are disposed of at zero net disposal value. Summary data for August 2012 are as follows:

	Physical Units	Direct Materials	Conversion Costs
Work in process, beginning inventory (August 1)	4,000	$35,400	$21,900
Degree of completion of beginning work in process		100%	50%
Started during August	20,000		
Good units completed and transferred out during August	18,000		
Work in process, ending inventory (August 31)	3,600		
Degree of completion of ending work in process		100%	75%
Total costs added during August		$162,600	$186,000
Normal spoilage as a percentage of good units	10%		
Degree of completion of normal spoilage		100%	100%
Degree of completion of abnormal spoilage		100%	100%

Answer the following questions and show your calculation:

(1) For each cost category, calculate equivalent units. (6%)

(2) Summarize total costs to account for; calculate cost per equivalent unit for each cost category; and assign total costs to units completed and transferred out (including normal spoilage), to abnormal spoilage, and to units in ending work in process. (14%)

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6. (15%)

Iowa Soy Products (ISP) buys soy beans and processes them into other soy products. Each ton of soy beans that ISP purchases for $300 can be converted for an additional $200 into 500 pounds of soy meal and 100 gallons of soy oil. A pound of soy meal can be sold at splitoff for $1 and soy oil can be sold in bulk for $4 per gallon. ISP can process the 500 pounds of soy meal into 600 pounds of soy cookies at an additional cost of $300. Each pound of soy cookies can be sold for $2 per pound. The 100 gallons of soy oil can be packaged at a cost of $200 and made into 400 quarts of Soyola. Each quart of Soyola can be sold for $1.25.

Answer the following questions and show your calculation:

(1) Allocate the joint cost to the cookies and the Soyola using the following: (8%)

i. Sales value at splitoff method

ii. NRV method

(2) Should ISP have processed each of the products further? What effect does the allocation method have on this decision? (7%)