

逢甲大學108學年度碩士班考試入學試題

編號：02

科目代碼：301

科目	成本及管理會計	適用 系所	會計學系	時間	90分鐘
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※請務必在答案卷作答區內作答。

共 三 頁 第 一 頁

一、Multiple choice (@4, 40%)

()	1.	<p>Feng Chia Company produces a single product that sells for \$125. Variable costs per unit equal \$50. The company expects total fixed costs to be \$75,000 for the next month at the projected sales level of 1,000 units. What is the current breakeven point in terms of number of units?</p> <p>A) 800 units B) 1,033 units C) 667 units D) 1,000 units</p>												
()	2.	<p>Feng Chia Company manufactures baseball uniforms and uses budgeted machine-hours to allocate variable manufacturing overhead. The following information relates to the company's manufacturing overhead data:</p> <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Budgeted output units</td> <td style="text-align: right;">11,250 units</td> </tr> <tr> <td style="padding-left: 20px;">Budgeted machine-hours</td> <td style="text-align: right;">22,500 hours</td> </tr> <tr> <td style="padding-left: 20px;">Budgeted variable manufacturing overhead costs for 22,500 hours</td> <td style="text-align: right;">\$213,750</td> </tr> <tr> <td style="padding-left: 20px;">Actual output units produced</td> <td style="text-align: right;">11,500 units</td> </tr> <tr> <td style="padding-left: 20px;">Actual machine-hours used</td> <td style="text-align: right;">22,000 hours</td> </tr> <tr> <td style="padding-left: 20px;">Actual variable manufacturing overhead costs</td> <td style="text-align: right;">\$225,000</td> </tr> </table> <p>What is the flexible-budget amount for variable manufacturing overhead?</p> <p>A) \$225,000 B) \$218,500 C) \$213,750 D) \$221,750</p>	Budgeted output units	11,250 units	Budgeted machine-hours	22,500 hours	Budgeted variable manufacturing overhead costs for 22,500 hours	\$213,750	Actual output units produced	11,500 units	Actual machine-hours used	22,000 hours	Actual variable manufacturing overhead costs	\$225,000
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()	3.	<p>Feng Chia Company manufactures part TE456 used in several of its engine models. Monthly production costs for 1,000 units are as follows:</p> <table style="width: 100%; border: none; margin-left: 40px;"> <tr> <td style="padding-left: 20px;">Direct materials</td> <td style="text-align: right;">\$46,000</td> </tr> <tr> <td style="padding-left: 20px;">Direct labor</td> <td style="text-align: right;">11,500</td> </tr> <tr> <td style="padding-left: 20px;">Variable overhead costs</td> <td style="text-align: right;">34,500</td> </tr> <tr> <td style="padding-left: 20px;">Fixed overhead costs</td> <td style="text-align: right;"><u>23,000</u></td> </tr> <tr> <td style="padding-left: 40px;">Total costs</td> <td style="text-align: right;"><u>\$115,000</u></td> </tr> </table> <p>It is estimated that 8% of the fixed overhead costs assigned to TE456 will no longer be incurred if the company purchases TE456 from the outside supplier. Feng Chia Company has the option of purchasing the part from an outside supplier at \$97.75 per unit.</p> <p>If Feng Chia Company accepts the offer from the outside supplier, the monthly avoidable costs (costs that will no longer be incurred) total _____.</p> <p>A) \$93,840 B) \$92,000 C) \$115,000 D) \$116,840</p>	Direct materials	\$46,000	Direct labor	11,500	Variable overhead costs	34,500	Fixed overhead costs	<u>23,000</u>	Total costs	<u>\$115,000</u>		
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()	4.	<p>Feng Chia Manufacturing Corp. provided the following information for last month:</p> <table style="width: 100%; border: none; margin-left: 40px;"> <tr> <td style="padding-left: 20px;">Sales</td> <td style="text-align: right;">\$40,000</td> </tr> <tr> <td style="padding-left: 20px;">Variable costs</td> <td style="text-align: right;">14,000</td> </tr> <tr> <td style="padding-left: 20px;">Fixed costs</td> <td style="text-align: right;"><u>10,000</u></td> </tr> <tr> <td style="padding-left: 20px;">Operating income</td> <td style="text-align: right;"><u>\$16,000</u></td> </tr> </table>	Sales	\$40,000	Variable costs	14,000	Fixed costs	<u>10,000</u>	Operating income	<u>\$16,000</u>				
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	<p>If sales reduce to half of the amount in the next month, what is the projected operating income?</p> <p>A) \$15,000 B) \$6,000 C) \$16,000 D) \$3,000</p>										
()	<p>5. Feng Chia, Inc., estimates the following number of mattress sales for the first four months of 2016:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th><u>Month</u></th> <th><u>Sales(unit)</u></th> </tr> </thead> <tbody> <tr> <td>January</td> <td>22,000</td> </tr> <tr> <td>February</td> <td>30,800</td> </tr> <tr> <td>March</td> <td>28,600</td> </tr> <tr> <td>April</td> <td>35,200</td> </tr> </tbody> </table> <p>Finished goods inventory at the end of December is 6,600 units. Target ending finished goods inventory is 20% of the next month's sales. How many mattresses need to be produced in January 2016?</p> <p>A) 15,400 mattresses B) 21,560 mattresses C) 28,460 mattresses D) 34,160 mattresses</p>	<u>Month</u>	<u>Sales(unit)</u>	January	22,000	February	30,800	March	28,600	April	35,200
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January	22,000										
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()	<p>6. The Easy Field Corporation manufactures Widgets, Gizmos, and Turnbols from a joint process. June production is 5,000 widgets; 8,750 gizmos; and 10,000 turnbols. Respective per unit selling prices at splitoff are \$75, \$50, and \$25. Joint costs up to the splitoff point are \$187,500. If joint costs are allocated based upon the sales value at splitoff, what amount of joint costs will be allocated to the widgets?</p> <p>A) \$30,882 B) \$44,118 C) \$66,176 D) \$77,206</p>										
()	<p>7. Cause-and-effect diagrams are used in quality management systems to _____.</p> <p>A) indicate how frequently each type of failure occurs B) distinguish random from nonrandom variations in an operating process C) identify and respond to potential reasons of failure D) evaluate the tradeoffs among prevention costs, appraisal costs, and failure costs</p>										
()	<p>8. Just-in-time purchasing requires _____.</p> <p>A) smaller and more frequent purchase orders B) larger and less frequent purchase orders C) smaller and less frequent purchase orders D) larger and more frequent purchase orders</p>										
()	<p>9. Which of the following is a responsibility center to measure the revenues and costs of subunits in centralized or decentralized companies?</p> <p>A) environmental center B) investment center C) exchange policy center D) taxation rebate center</p>										
()	<p>10. Economic value added is equal to _____.</p> <p>A) After-tax operating income - [Weighted-average cost of capital + (Total assets - Current liabilities)] B) Pre-tax operating income - [Weighted-average cost of capital + (Total assets - Current liabilities)] C) After-tax operating income - [Weighted-average cost of capital × (Total assets - Current liabilities)] D) Pre-tax operating income - [Weighted-average cost of capital × (Total assets - Current liabilities)]</p>										

- 二、Feng Chia Company currently sells hot dogs. During a typical month, the stand reports a profit of \$9,000 with sales of \$50,000, fixed costs of \$21,000, and variable costs of \$0.64 per hot dog.

Next year, the company plans to start selling nachos for \$3 per unit. Nachos will have a variable cost of \$0.72 and new equipment and personnel to produce nachos will increase monthly fixed costs by \$8,808.

Required: 15%

- Determine the monthly breakeven sales in dollars before adding nachos. (5%)
- Determine the monthly breakeven sales during the first year of nachos sales, assuming a constant sales mix of 1 hotdog and 2 units of nachos. (10%)

- 三、Feng Chia Company manufactures pipes and applies manufacturing costs to production at a budgeted indirect-cost rate of \$12 per direct labor-hour. The following data are obtained from the accounting records for June 2014:

Direct materials	\$350,000
Direct labor (16,000 hours @ \$11/hour)	176,000
Indirect labor	20,000
Plant facility rent	100,000
Depreciation on plant machinery and equipment	40,000
Sales commissions	50,000
Administrative expenses	60,000

Required: 15%

- What actual amount of manufacturing overhead costs was incurred during June 2014? (5%)
- What amount of manufacturing overhead was allocated to all jobs during June 2014? (5%)
- For June 2014, was manufacturing overhead underallocated or overallocated? Explain. (5%)

- 四、ADAM elements manufactures universal power adapters at its Desert Sands plant. The company provides you with the following information regarding operations for April 2018:

Total power adapters manufactured	10,000
Adapters rejected as spoiled units	375
Total manufacturing cost	\$400,000

Assume the spoiled units have no disposal value.

Required: 15%

- What is the unit cost of making the 10,000 universal power adapters? (5%)
- What is the total cost of the 375 spoiled units? (5%)
- If the spoilage is considered normal, what is the increase in the unit cost of good adapters manufactured as a result of the spoilage? (5%)

- 五、Jayco Corp. produces J-Pods, music players that can download thousands of songs. Jayco forecasts that demand in 2018 will be 48,000 J-Pods. The variable production cost of each J-Pod is \$54. In its MRP system, due to the large \$10,000 cost per setup, Jayco plans to produce J-Pods once a month in batches of 4,000 each. The carrying cost of a unit in inventory is \$17 per year.

Required: 15%

- Using the MRP system, what is the annual cost of producing and carrying J-Pods in inventory? (Assume that, on average, half of the units produced in a month are in inventory.) (3%)
- A new manager at Jayco has suggested that the company use the EOQ model to determine the optimal batch size to produce. (To use the EOQ model, Jayco needs to treat the setup cost in the same way it would treat ordering cost in a traditional EOQ model.) Determine the optimal batch size and number of batches. Round up the number of batches to the nearest whole number. What would be the annual cost of producing and carrying J-Pods in inventory if it uses the optimal batch size? (12%)