一、多選題：45%

作答格式（請務必標示題號，否則不予計分）:

<table>
<thead>
<tr>
<th>1. 答案</th>
<th>2. 答案</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>7.</td>
<td>8.</td>
<td>9.</td>
<td>10.</td>
</tr>
</tbody>
</table>

1. Using residual income as a measure of performance rather than return on investment promotes goal congruence because
   A. residual income places importance on the reduction of underperforming assets.
   B. residual income calculates a percentage return rather than an absolute return.
   C. residual income concentrates on maximizing an absolute amount of dollars.
   D. residual income concentrates on maximizing the return on sales.

2. Which of the following is NOT true of a good balanced scorecard?
   A. It tells the story of a company’s strategy by articulating a sequence of cause-and-effect relationships.
   B. It helps to communicate corporate strategy to all members of the organization.
   C. It identifies all measures, whether significant or small, that help to implement strategy.
   D. It uses nonfinancial measures to serve as leading indicators of future financial performance.

3. More insight into the efficiency variance for direct materials can be gained by subdividing it into the direct materials:
   A. mix and volume variances
   B. market-share and market-size variances
   C. mix and yield variances
   D. price and efficiency variances

4. The effect of spreading fixed manufacturing costs over a shrinking master-budget capacity utilization amount results in:
   A. greater utilization of capacity
   B. increased unit costs
   C. more competitive selling prices
   D. greater demand for the product

5. A major concern that arises with multiple regression is multicollinearity, which exists when:
   A. in multiple regression, when two or more independent variables are correlated with one another
   B. in simple regression, when the R2 statistic is low
   C. in multiple regression, when the R2 statistic is low
   D. in simple regression, when the dependent variable is not normally distributed

6. Which of the following minimize the risks of outsourcing?
   A. the use of short-term contracts that specify price
   B. building close relationships with the supplier
   C. the responsibility for on-time delivery is now the responsibility of the supplier
   D. All of these answers are correct.
7. Predatory pricing is a type of price discrimination that:
   A. allows prices to be cut to the level of variable costs
   B. is required when a company declares bankruptcy so that it can sell its remaining goods quickly
   C. is used in the food industry for perishable goods
   D. deliberately sets prices very low, sometimes even below costs, to minimize competition

8. Graphic analysis of incurred and locked-in costs provides several insights as to how the different concepts influence decisions. Which of the following statements is FALSE?
   A. Costs are generally locked in before they are incurred.
   B. After a product's design has been approved, costs are difficult to influence.
   C. When and how costs are locked in are more important than when and how costs are incurred.
   D. Most costs are locked in during the manufacturing process.

9. Global Giant, a multinational corporation, has a producing subsidiary in a low tax rate country and a marketing subsidiary in a high tax country. If Global Giant wants to minimize its worldwide tax liability, we would expect Global Giant to:
   A. stop producing in the low tax rate country
   B. stop marketing in the high tax rate country
   C. establish a low transfer price when the producing unit sells to the marketing unit
   D. establish a high transfer price when the producing unit sells to the marketing unit

10. The implications of JIT and backflush costing systems for activity-based costing systems include:
    A. more of the costs are direct
    B. overhead cost allocations are reduced
    C. Neither of these answers is correct.
    D. Both of these answers are correct.

11. Does operating income best measure a subunit's financial performance? This question is considered part of which step in designing an accounting-based performance measure?
    A. Choose performance measures that align with top management's financial goals.
    B. Choose the time horizon of each performance measure.
    C. Choose a definition for each performance measure.
    D. Choose a measurement alternative for each performance measure.

12. All of the following are potential financial benefits of just-in-time EXCEPT:
    A. lower investments in inventories
    B. reducing the risk of obsolescence
    C. lower investments in plant space for inventories
    D. reducing manufacturing lead time

13. The reciprocal allocation method:
    A. is the most widely used because of its simplicity
    B. requires the ranking of support departments in the order that the allocation is to proceed
    C. is conceptually the most precise
    D. results in allocating more support costs to operating departments than actually incurred
14. Producing more nonbottleneck output:
   A. creates more inventory, but does not increase throughput contribution
   B. creates more inventory and increases throughput contribution
   C. creates less pressure for the bottleneck workstations
   D. allows for the maximization of overall contribution

15. Quality of design measures how closely the characteristics of products or services match the needs and wants of customers. Conformance quality:
   A. measures the same things
   B. is the performance of a product or service according to design and product specifications
   C. is making the product according to design, engineering, and manufacturing specifications
   D. focuses on fitness of uses from a customer perspective

二、填空題：55%（每一小題5分，作答時請務必標上小題之題號(1)-(11)，否則不予計分）

1. Springfield Corporation, whose tax rate is 40%, has two sources of funds: long-term debt with a market value of $8,000,000 and an interest rate of 8%, and equity capital with a market value of $12,000,000 and a cost of equity of 12%. Springfield has two operating divisions, the Blue division and the Gold division, with the following financial measures for the current year:

<table>
<thead>
<tr>
<th></th>
<th>Total Assets</th>
<th>Current Liabilities</th>
<th>Operating Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue Div.</td>
<td>$9,500,000</td>
<td>$2,800,000</td>
<td>$1,055,000</td>
</tr>
<tr>
<td>Gold Div.</td>
<td>$11,000,000</td>
<td>$2,200,000</td>
<td>$1,200,000</td>
</tr>
</tbody>
</table>

Required: What is Economic Value Added (EVA®) for the Blue Division?  

2. Hill Manufacturing uses departmental cost driver rates to apply manufacturing overhead costs to products. Manufacturing overhead costs are applied on the basis of machine-hours in the Machining Department and on the basis of direct labor-hours in the Assembly Department. At the beginning of 20X5, the following estimates were provided for the coming year:

<table>
<thead>
<tr>
<th></th>
<th>Machining</th>
<th>Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct labor-hours</td>
<td>10,000 dhl</td>
<td>90,000 dhl</td>
</tr>
<tr>
<td>Machine-hours</td>
<td>100,000 mh</td>
<td>5,000 mh</td>
</tr>
<tr>
<td>Direct labor cost</td>
<td>$80,000</td>
<td>$720,000</td>
</tr>
<tr>
<td>Manufacturing overhead costs</td>
<td>$250,000</td>
<td>$560,000</td>
</tr>
</tbody>
</table>

The accounting records of the company show the following data for Job #846:

<table>
<thead>
<tr>
<th></th>
<th>Machining</th>
<th>Assembly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct labor-hours</td>
<td>50 dhl</td>
<td>120 dhl</td>
</tr>
<tr>
<td>Machine-hours</td>
<td>170 mh</td>
<td>10 mh</td>
</tr>
<tr>
<td>Direct material cost</td>
<td>$2,700</td>
<td>$1,600</td>
</tr>
<tr>
<td>Direct labor cost</td>
<td>$400</td>
<td>$900</td>
</tr>
</tbody>
</table>

Required: Compute the total cost of Job #846.  

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3. The Omega Corporation manufactures two types of vacuum cleaners, the ZENITH for commercial building use and the House-Helper for residences. Budgeted and actual operating data for the year 20X5 are as follows:

<table>
<thead>
<tr>
<th></th>
<th>ZENITH</th>
<th>House-Helper</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number sold</strong></td>
<td>15,000</td>
<td>60,000</td>
<td>75,000</td>
</tr>
<tr>
<td><strong>Contribution margin</strong></td>
<td>$3,750,000</td>
<td>$12,000,000</td>
<td>$15,750,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>ZENITH</th>
<th>House-Helper</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number sold</strong></td>
<td>16,500</td>
<td>38,500</td>
<td>55,000</td>
</tr>
<tr>
<td><strong>Contribution margin</strong></td>
<td>$6,200,000</td>
<td>$10,200,000</td>
<td>$16,400,000</td>
</tr>
</tbody>
</table>

Prior to the beginning of the year, a consulting firm estimated the total volume for vacuum cleaners of the Zenith and House-Helper category to be 300,000 units, but actual industry volume was only 275,000 units.

**Required:** Compute the market-share variance in terms of the contribution margin. 

4. The following information pertains to Tiffany Company:

<table>
<thead>
<tr>
<th>Month</th>
<th>Sales</th>
<th>Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$30,000</td>
<td>$16,000</td>
</tr>
<tr>
<td>February</td>
<td>$40,000</td>
<td>$20,000</td>
</tr>
<tr>
<td>March</td>
<td>$50,000</td>
<td>$28,000</td>
</tr>
</tbody>
</table>

- Cash is collected from customers in the following manner:
  - Month of sale: 30%
  - Month following the sale: 70%
- 40% of purchases are paid for in cash in the month of purchase, and the balance is paid the following month.
- Labor costs are 20% of sales. Other operating costs are $15,000 per month (including $4,000 of depreciation). Both of these are paid in the month incurred.
- The cash balance on March 1 is $4,000. A minimum cash balance of $3,000 is required at the end of the month. Money can be borrowed in multiples of $1,000.

**Required:** What is the ending cash balance for March?
5. Picture Pretty manufactures picture frames. Sales for August are expected to be 10,000 units of various sizes. Historically, the average frame requires four feet of framing, one square foot of glass, and two square feet of backing. Beginning inventory includes 1,500 feet of framing, 500 square feet of glass, and 500 square feet of backing. Current prices are $0.30 per foot of framing, $6.00 per square foot of glass, and $2.25 per square foot of backing. Ending inventory should be 150% of beginning inventory. Purchases are paid for in the month acquired.

**Required:** Determine the total costs of direct materials for August purchases. (5)

6. The coefficient of determination is important in explaining variances in estimating equations. For a certain estimating equation, the unexplained variation was given as 26,505. The total variation was given as 46,500. What is the coefficient of determination for the equation? (6)

7. Soft Cushion Company is highly decentralized. Each division is empowered to make its own sales decisions. The Assembly Division can purchase stuffing, a key component, from the Production Division or from external suppliers. The Production Division has been the major supplier of stuffing in recent years. The Assembly Division has announced that two external suppliers will be used to purchase the stuffing at $20 per pound for the next year. The Production Division recently increased its unit price to $40. The manager of the Production Division presented the following information — variable cost $32 and fixed cost $8 — to top management in order to attempt to force the Assembly Division to purchase the stuffing internally. The Assembly Division purchases 20,000 pounds of stuffing per month.

What would be the monthly operating advantage (disadvantage) of purchasing the goods internally, assuming the external supplier increased its price to $50 per pound and the Production Division is able to utilize the facilities for other operations, resulting in a monthly cash-operating savings of $30 per pound? (7)

8. Ballard's Glass Company has a variable demand. Historically, its demand has ranged from 10 to 20 windows per day with an average of 15. John Ballard works eight hours a day, five days a week. Each order is one window and each window takes 26 minutes. What is the cycle time for an order, in minutes? (8)

9. The Wood Furniture company produces a specialty wood furniture product, and has the following information available concerning its inventory items:

<table>
<thead>
<tr>
<th>Item</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant ordering costs per purchase order</td>
<td>$150</td>
</tr>
<tr>
<td>Relevant carrying costs per year:</td>
<td></td>
</tr>
<tr>
<td>Required annual return on investment</td>
<td>10%</td>
</tr>
<tr>
<td>Required other costs per year</td>
<td>$1.40</td>
</tr>
</tbody>
</table>

**Required:** Annual demand is 10,000 packages per year. The purchase price per package is $16. What is the economic order quantity? (9)
10. Crush Company makes internal transfers at 160% of full cost. The Soda Refining Division purchases 40,000 containers of carbonated water per day, on average, from a local supplier, who delivers the water for $40 per container via an external shipper. To reduce costs, the company located an independent supplier in Illinois who is willing to sell 40,000 containers at $30 each, delivered to Crush Company's Shipping Division in Missouri. The company's Shipping Division in Missouri has excess capacity and can ship the 40,000 containers at a variable cost of $4.50 per container. What is the total cost of purchasing the water from the Illinois supplier and shipping it to the Soda Division? (10)

11. Yakima Manufacturing purchases trees from Cascade Lumber and processes them up to the splitoff point where two products (paper and pencil casings) are obtained. The products are then sold to an independent company that markets and distributes them to retail outlets. The following information was collected for the month of November:

* Trees processed: 50 trees (yield is 30,000 sheets of paper and 30,000 pencil casings and no scrap)

* Production:
  - paper: 30,000 sheets
  - pencil casings: 30,000

* Sales:
  - paper: 29,000 at $0.10 per page
  - pencil casings: 30,000 at $0.10 per casing

The cost of purchasing 50 trees and processing them up to the splitoff point to yield 30,000 sheets of paper and 30,000 pencil casings is $1,500. Yakima's accounting department reported no beginning inventories and an ending inventory of 1,000 sheets of paper. If the sales value at splitoff method is used, what are the approximate joint costs assigned to ending inventory for paper? (11)