

The following information will be helpful to answer questions 5 and 6:

- A. There are 2 products: Car Batteries and Boat Batteries
- B. There are 2 sales regions: Southeast and Southwest
- C. There are 2 manufacturing divisions: Production and Assembly
- D. Sales Prices: Car Batteries-\$30.00; Boat Batteries-\$35.00
- E. There are 2 raw materials for each battery: Plastic and Electrodes
- F. Raw materials prices: Plastic-\$1.00; Electrodes-\$2.00
- G. Average Direct Labor Rates (per hour): Production-\$4.00; Assembly-\$3.00
- H. The Manufacturing overhead rates (based on Direct Labor) are
Production \$2.00; Assembly \$1.00
- I. The order cost is \$15.00
- J. The annual carrying cost per unit of inventory is \$1.50
- K. Product Specification:

<i>Batteries</i>	<u>Units of RM/Unit</u>		<u>Direct Labor Hours/Unit</u>	
	<i>Plastic</i>	<i>Electrodes</i>	<i>Production</i>	<i>Assembly</i>
Auto	6	1	1.5	1
Boat	7	1.5	1.5	1

- L. Planned Sales (units). Planned Sales (units) (Sales are 95 % cash. The balance of the sales is received in the following quarter. There is no bad debt).

<i>Batteries</i>	<i>Southwest</i>	<i>Southeast</i>
Auto	20,000	19,500
Boat	4,200	5,000

- M. Inventory Levels (units) - Assume no work in process:

<i>Item</i>	<i>Beginning</i>	<i>Ending</i>	<i>Estimated Costs (for Inventory Purposes)</i>
Auto	3,000	3,500	\$15.00
Boat	1,200	1,000	\$20.00
Plastic	2,100	1,100	\$ 1.00
Electrodes	1,500	2,000	\$ 2.00

N. Distribution and Administrative Expenses (Excluding Raw Materials and Direct Labor)

<u>Cost</u>	<u>Distribution Administration</u>	
Salaries (Supervision)	\$62,415	\$16,510
Indirect Labor	\$ 7,350	\$ 4,900
Electricity	\$ 4,410	\$ 2,940
Insurance	\$ 900	\$ 600
Depreciation*	\$15,000	\$ 3,000
Property Taxes	\$ 1,200	\$ 900
Fixed Maintenance	\$30,000	\$ 3,000
<u>Variable Maintenance</u>	<u>\$ 3,675</u>	<u>\$ 2,450</u>
Total	\$124,950	\$34,300

*Non-Cash Items

O. Additional Overheads:

Marketing	\$33,450
Research and Development	\$ 3,300

P. Miscellaneous incomes \$ 2,100

Q. Beginning Cash \$ 33,000. Accounts receivable - \$60,000

R. Cash will be spent on Capital additions - \$50,000, Dividends- \$20,000

Notes payable- \$75,000

S. The income tax rate is 50%.

Good Luck