## Problem 9-14 (45 minutes)

1. Schedule of expected cash collections:

|                           |                  | Month            |                  |                    |
|---------------------------|------------------|------------------|------------------|--------------------|
|                           | July             | August           | September        | Quarter            |
| From accounts receivable: |                  | -                | -                | -                  |
| May sales                 |                  |                  |                  |                    |
| \$250,000 × 3%            | \$ 7,500         |                  |                  | \$ 7,500           |
| June sales                |                  |                  |                  |                    |
| \$300,000 × 70%           | 210,000          |                  |                  | 210,000            |
| \$300,000 × 3%            |                  | \$ 9,000         |                  | 9,000              |
| From budgeted sales:      |                  |                  |                  |                    |
| July sales                |                  |                  |                  |                    |
| \$400,000 × 25%           | 100,000          |                  |                  | 100,000            |
| \$400,000 × 70%           |                  | 280,000          |                  | 280,000            |
| \$400,000 × 3%            |                  | ·                | \$ 12,000        | 12,000             |
| August sales              |                  |                  | . ,              |                    |
| \$600,000 × 25%           |                  | 150,000          |                  | 150,000            |
| \$600,000 × 70%           |                  | -                | 420,000          | 420,000            |
| September sales           |                  |                  |                  |                    |
| \$320,000 × 25%           |                  |                  | 80,000           | 80,000             |
| Total cash collections    | <u>\$317,500</u> | <u>\$439,000</u> | <u>\$512,000</u> | <u>\$1,268,500</u> |

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## Problem 9-14 (continued)

## 2. Cash budget:

|   |                  | Month            |                  |                  |
|---|------------------|------------------|------------------|------------------|
| -   |                  |                  | Septem-          |                  |
|   | July             | August           | ber              | Quarter          |
| Cash balance, beginning                             | \$ 44,500        | \$ 28,000        | \$ 23,000        | \$ 44,500        |
| Add receipts:                                       |                  |                  |                  |                  |
| Collections from cus-                               |                  |                  |                  |                  |
| tomers  | <u>317,500</u>   | 439,000          | <u>512,000</u>   | <u>1,268,500</u> |
| Total cash available                                | <u>362,000</u>   | <u>467,000</u>   | <u>535,000</u>   | <u>1,313,000</u> |
| Less disbursements:                                 |                  |                  |                  |                  |
| Merchandise purchases                               | 180,000          | 240,000          | 350,000          | 770,000          |
| Salaries and wages                                  | 45,000           | 50,000           | 40,000           | 135,000          |
| Advertising   | 130,000          | 145,000          | 80,000           | 355,000          |
| Rent payments                                       | 9,000            | 9,000            | 9,000            | 27,000           |
| Equipment purchases                                 | 10,000           |                  |                  | 10,000           |
| Total disbursements                                 | <u>374,000</u>   | <u>444,000</u>   | <u>479,000</u>   | <u>1,297,000</u> |
| Excess (deficiency) of re-<br>ceipts over disburse- |                  |                  |                  |                  |
| ments   | (12,000)         | 23,000           | 56,000           | 16,000           |
| Financing:  |                  |                  |                  |                  |
| Borrowings  | 40,000           | —                | —                | 40,000           |
| Repayments  | —                | —                | (40,000)         | (40,000)         |
| Interest  |                  |                  | <u>(1,200</u> )  | (1,200)          |
| Total financing                                     | 40,000           |                  | <u>(41,200</u> ) | (1,200)          |
| Cash balance, ending                                | <u>\$ 28,000</u> | <u>\$ 23,000</u> | <u>\$ 14,800</u> | <u>\$ 14,800</u> |

3. If the company needs a \$20,000 minimum cash balance to start each month, then the loan cannot be repaid in full by September 30. If the loan is repaid in full, the cash balance will drop to only \$14,800 on September 30, as shown above. Some portion of the loan balance will have to be carried over to October, at which time the cash inflow should be sufficient to complete repayment.