LSP Capsules

Variance Analysis and Performance Evaluation*

LSP Capsules are made by a secret process of mixing LPT with sugar in the optimum proportion of 8:2 (i.e., combining 8 units of LPT and 2 units of sugar yields 10 units of mixture). Though there is no expected loss in mixing, the capsule forming process normally results in a loss of 10% of the total input.

The firm is run by four people. Paula is in charge of purchasing; Max does the mixing; Frank forms the capsules out of the mixed material; and Susan handles sales.

In June, Paula bought enough raw materials in the standard proportions to make 270 units of LSP Capsules as agreed upon by the group in advance, but Susan could book orders only for 216 units. Max knew that shelf-life for LSP is very short compared to LPT or sugar and prepared enough mixture for 216 finished units of LSP Capsules. Frank got enough mixture to form 216 finished units. He ended up forming only 207 finished units, without any of the mixture left over.

Total consumption of raw materials for June was as follows:

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\begin{align*}
\text{LPT:} & \quad 200 \text{ units all from units bought in June } @ \$11.00 \text{ per unit.} \\
\text{Sugar:} & \quad 40 \text{ units all from units bought in June } @ \$4.50 \text{ per unit.}
\end{align*}
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Investigations showed that Paula had unnecessarily paid a premium of 10% on the standard price of LPT. Realizing her folly, she tried to make up for it by getting a 10% discount on the standard price of sugar. After Frank learned that Paula had paid a lower price for sugar, he claimed that his capsule making got fouled up because of “lower quality” sugar. After Frank learned that Max had not combined LPT and sugar in the standard proportions, he further claimed that his capsule making got fouled up because of “substandard mix.” Paula, Max, and Susan regard Frank as a chronic whiner.

Investigations further revealed that Susan had lost sales as compared to the budgeted 240 units because she tried to raise the price by 10% on the standard price of $40 per unit of LSP. She did, however, bring in revenue at the higher price per unit.

* Based on a problem prepared by Srikant Datar.
REQUIRED:

(a) Calculate the budgeted and actual operating incomes of LSP Capsules, Inc.

(b) Analyze each partner’s performance for June by (i) calculating the variances you consider important and (ii) assigning those variances to Paula, Max, Frank, and Susan.