

PROBLEMS & SOLUTIONS

✓ Production Budget:

Problem 1: Prepare a production budget for three months ending March 31, 2008 for a factory producing four products, on the basis of the following information:

Type of Product	Estimated Stock on January 1, 2008 Units	Estimated Sales during January-March, 2008 Units	Desired closing Stock March 31, 2008 Units
A	2,000	10,000	5,000
B	3,000	15,000	4,000
C	4,000	13,000	3,000
D	5,000	12,000	2,000

Solution:

(B.Com., Bharathidasan, adapted)

Production Budget for 3 months ending 31-3-2008

Particulars	A (Units)	B (Units)	C (Units)	D (Units)
Estimated Sales	10,000	15,000	13,000	12,000
Add: Desired closing stock	5,000	4,000	3,000	2,000
	15,000	19,000	16,000	14,000
Less: Opening stock	2,000	3,000	4,000	5,000
Estimated production	13,000	16,000	12,000	9,000

Problem 2: Larsen Ltd., plans to sell 1,10,000 units of a certain product line in the first fiscal quarter, 1,20,000 units in the second quarter, 1,30,000 units in the third quarter and 1,50,000 units in the fourth quarter and 1,40,000 units in the first quarter of the following year. At the beginning of the first quarter of the current year, there are 14,000 units of product in stock. At the end of each quarter, the

7.15

company plans to have an inventory equal to one-fifth of the sales for the next fiscal quarter.

How many units must be manufactured in each quarter of the current year?

Solution:

(B.Com., Madras, Bharathidasan)

PRODUCTION BUDGET

	First Quarter Units	Second Quarter Units	Third Quarter Units	Fourth Quarter Units
Sales	1,10,000	1,20,000	1,30,000	1,50,000
Add: Desired closing stock	24,000	26,000	30,000	28,000
	1,34,000	1,46,000	1,60,000	1,78,000
Less: Opening stock	14,000	24,000	26,000	30,000
Estimated production	1,20,000	1,22,000	1,34,000	1,48,000

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Purchase Budget:

Problem 5: The Sales Director of a manufacturing company reports that next year he expects to sell 50,000 units of a particular product. The production Manager consults the Storekeeper and casts his figures as follows:

Two kinds of raw materials A and B, are required for manufacturing the product. Each unit of the product requires 2 units of A and 3 units of B. The estimated opening balances at the commencement of the next year are:

Finished product : 10,000 units
Raw Materials : 12,000 units; B : 15,000 units
The desirable closing balances at the end of the next year are:
Finished product 14,000 units, A : 13,000 units
B : 16,000 units

Prepare Production Budget and Materials Purchase Budget for the next year.

(B.Com., Bharathidasan, Madurai & Madras)

Solution:

Production Budget (Units)

Estimated sales	50,000
Add: Desired closing stock	14,000
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	64,000
Less: Opening stock	10,000
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Estimated Production	54,000

Materials Purchase or Procurement Budget (Units)

	Material A	Material B
Estimated consumption $2 \times 54,000$	1,08,000	
$3 \times 54,000$		1,62,000
Add: Desired closing stock	13,000	16,000
	1,21,000	1,78,000
Less: Opening stock	12,000	15,000
Estimated purchases	1,09,000	1,63,000

Problem 6: Draw a Material Procurement Budget (Quantitative) from the following information:

Estimated Sales of a product 40,000 units. Each unit of the product requires 3 units of material A and 5 units of material B.

Estimated opening balances at the commencement of the next year:

Finished product	5,000 units
Material A	12,000 units
Material B	20,000 units

Materials on Order:

Material A	7,000 units
Material B	11,000 units

The desirable closing balances at the end of the next year :

Finished product	7,000 units
Material A	15,000 units
Material B	25,000 units

Material on Order:

Material A	8,000 units
Material B	10,000 units

(B.Com., Madurai)

Solution:

Production Budget (in Units)

Estimated sales	40,000
Add: Desired closing stock	7,000
	47,000
Less: Opening stock	5,000
Estimated production	42,000

7.21

Material Procurement Budget (in Units)

	Material A	Material B
Estimated consumption		
$42,000 \times 3$	1,26,000	
$42,000 \times 5$		2,10,000
Add: Desired closing stock	15,000	25,000
Material on order (closing)	8,000	10,000
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	1,49,000	2,45,000
Less:		
Opening stock	12,000	20,000
Material on order		
(Opening)	7,000	11,000
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	19,000	31,000
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Estimated purchases	1,30,000	2,14,000