

Chapter 11

Level II

E11.9 *Time allowed – 60 minutes*

Supportex Ltd has researched a new product codenamed SX4/3, which it would like to introduce in May 2002. Crystal Ball has provided the following six months demand forecast for 2002 at a selling price of £100 per unit.

	Jul	Aug	Sep	Oct	Nov	Dec	Total
Units	100	110	110	120	110	105	655

(sales for May and June are expected to be 110 units for each month)

The production manager, Ben Drools has provided the following unit standard costs for the SX4/3:

Unit standard costs	£	
Direct labour	10	(2 hours at £5 per hour for each SX4/3)
Materials	25	(1 unit for each SX4/3)
Variable overhead	5	(£2.50 per direct labour hour for each SX4/3)

Fixed costs are expected to be £5,300 per month for July and August, £6,600 per month for September and October, and £4,300 per month for November and December.

Finished product stocks are planned as follows:

30 June 2002 50 units

Month-end stocks July to September are planned to be 50% of the previous months sales.

Month-end stocks October to December are planned to be 20% of the previous months sales.

Materials stocks are planned as follows:

30 June 2002 70 units

Month-end stocks July to September are planned to be 40% of the previous months usage.

Month-end stocks October to December are planned to be 100% of the previous months usage.

The purchasing manager, Arthur Daley has agreed 60 days credit terms with suppliers of materials.

Purchases for May and June 2002 are expected to be 80 units each month.

Direct labour, variable and fixed production costs are expected to be paid out in the month incurred.

The managing director has decreed that this project must show a positive cash flow for each of the months July to December 2002. Crystal Ball feels confident that this is achievable if customers are given 30 days credit. To be certain of achieving her sales forecast Crystal would like to offer 60 days credit.

Would both 30 days credit and 60 days credit to customers both achieve the aim of a positive cash flow for each of the six months July to December 2002?

E11.10 *Time allowed – 90 minutes*

Grand Slam Ltd planned to start manufacture and sale of gift models of heads of famous sportsmen on the 1st January 2002. Grand Slam uses materials that are in plentiful supply that cost £3 per kg for each model. The following data has been forecast and estimated for preparation of the 2002 budget.

Sales

Forecast sales:

	Number of models
January	10,000
Februar	15,000
March	20,000
April	15,000
May	10,000

The selling price is £12 per model.

Sales are invoiced twice per month, half of the month's sales in the middle of the month and half on the last day of the month.

Terms are 2% cash discount for settlement within 10 days.

50% of sales are paid within the discount period.

The remaining amounts are paid within 15 days of invoicing except for bad debts which average 1% of gross sales.

Stocks

For calculation purposes stocks of finished goods and materials may be assumed to be zero and 4,400 kg respectively at start of business on 1 January.

Company policy is that stocks of finished goods at the end of each month should represent 20% of its budgeted sales for the following month, and 40% of the following month's production requirements of raw materials should be held in stock.

No work-in-progress is held.

Payments for raw materials are made in the month following purchase.

Production

The standard production cost of the product is:

	Per model
	£
Direct materials (1 kg per model)	3.00
Direct labour	1.80
Overhead	2.40
Total	7.20

Production overheads include £5,000 per month depreciation of manufacturing equipment.

Production wages are paid during the month in which they are incurred.

Production overheads are paid in the month following the month in which they are incurred.

Selling and distribution costs, and administrative expenses

Selling and distribution costs are estimated at 10% of gross sales.

Administrative expenses are £40,000 per month of which £1,000 per month relates to depreciation of office equipment.

Selling and administrative expenses are paid in the month following the month in which they are incurred.

Cash

The bank and cash balance was forecast to be £31,421 on 1st March 2002.

You are required to prepare:

- (i) The budgeted production requirement (in number of models) for each of the months of January, February and March.**
- (ii) The budgeted purchase requirements of raw materials for January, February and March.**
- (iii) The budgeted profit and loss account for January, February and March.**
- (iv) The cash forecast for January, February and March.**