

Chapter 9

Budgetary Control

"It is the deed that matters, not the fame."

Meaning – Definition – Objectives – Steps – Types of Budgets – Solved Problems –
 Questions for Self-Practice.

DEFINITION OF BUDGETARY CONTROL:

The Institute of Cost and Works Accountants, London defines Budgetary Control as, "The establishment of budgets relating to the responsibilities of executives to the requirements of a policy, and the continuous comparison of actual with budgeted results, either to secure by individual action the objective of that policy, or to provide a basis for its revision."

Budgetary control is a system of planning and controlling costs. The purpose of budgetary control is planning, co-ordination and control. Budgetary control is a technique of cost control. Budgetary control helps in developing a basis of measurement to evaluate the efficiency of operations.

The use of a budget to control a firm's activities is known as budgetary control. In case of budgetary control the actual state of affairs is compared with the budget so that appropriate action may be taken with regard to any deviations before it is too late.

MAIN OBJECTIVES:

Main objectives of Budgetary Control:

- (1) To provide a detailed plan of action for a business firm over a definite period of time.
- (2) To co-ordinate all the activities of various departments in such a way that with the minimum use of resources maximum profits can be achieved.
- (3) To determine deviations from the plan (budget) and to supply information on the basis of which necessary corrective action can be taken and thereby costs can be controlled.
- (4) To decentralise responsibility and to centralise control.

STEPS:**Steps involved in Budgetary Control:**

- (1) **Establishment of budgets:** Budgets are prepared for each function (such as sales, cash, production, etc.) relating to the responsibilities of individual executives. Functional budgets should cover the area of responsibility of specified persons which will enable to measure their performance at the end of the budget period.
- (2) **Measurement of actual performance:** Performance of individuals/departments is measured periodically. Necessary reports or tables are prepared to indicate the performance of individuals/departments. These reports may be prepared period wise, section wise, and activity wise.
- (3) **Comparison of actual performance with budgeted performance to develop variances or deviations:** Actual data are compared with budgets. In this case adjusted fixed budgets or flexible budgets is used because comparison with fixed budgets may not serve any useful purpose. Such comparison enables the top management to known the deviations or variances, if any.
- (4) **Analysis of the causes of variations and reporting:** When deviations are noticed between actual performance and budgets the causes of such deviations is found out. The causes of such variations are reported in order to motivate the right people to take the right corrective action at the right time.

Budgetary control follows the principle of 'Management by exceptions'. The subordinates report only exceptional deviations to their superiors, and as such the superiors can concentrate on significant deviations.

DIFFERENT TYPES OF BUDGETS:

The Institute of Cost and Management Accountants (UK) defines a budget as, "a financial and/or quantitative statement, prepared and approved prior to a defined period of time, of the policy to be pursued during that period for the purpose of attaining a given objective. It may include income, expenditure and the employment of capital."

Following are the different types of budget:

(A) Operating and Functional Budgets:

- (1) Sales Budget.
- (2) Production Budget.
- (3) Production Cost Budget.
 - (a) Direct Materials Budget.
 - (b) Direct Labour Budget.
 - (c) Factory Overhead Budget.

- (4) Selling and Distribution Cost Budget.
- (5) Personnel Budget.
- (6) Purchasing Budget.
- (7) Administrative Expense Budget.
- (8) Plant Utilisation Budget.
- (9) Research and Development Cost Budget.

(B) Financial Budgets:

- (1) Capital Expenditure Budget.
- (2) Cash Budget.
- (3) Budgeted Income Statement.
- (4) Budgeted Profit and Loss Appropriation Account.
- (5) Budgeted Balance Sheet.
- (6) Budgeted Statement of Changes in Financial Position.

(A) Cash Budget:

The operating budget is usually prepared in terms of revenues and expenses. For financial planning purposes it must be translated into terms of cash inflows and cash outflows. This translation results in the cash budget. The financial manager uses the cash budget to make plans to ensure that the organisation has enough, but not too much, cash on hand during the year ahead.

The **cash budget** is probably the most important tool in cash management. It is a device to help a firm to plan and control the use of cash. It is a statement showing the estimated cash inflows over the planning horizon. In other words, the net cash position (surplus or deficiency) of a firm as it moves from one budgeting sub-period to another is highlighted by the cash budget.

Cash Budget as a Management Tool:

Cash budget is a device to help a firm to plan and control the use of cash. It is a statement showing the estimated cash inflows over the planning horizon. In other words, the net cash position (surplus or deficiency) of a firm as it moves from one budgeting sub-period to another.

Various Purposes of Cash Budget:

- (1) To co-ordinate the timings of cash needs. It identifies the period when there might either be shortage of cash or an abnormally large cash requirement.
- (2) It pinpoints the period when there is likely to be excess cash.
- (3) It enables a firm which has sufficient cash to take advantage of cash discount on its account payable, to pay obligations when due, to formulate dividend policy, to plan financing of capital expansion

and to help unify the production schedule during the year so that the firm can smooth out costly seasonal fluctuations.

- (4) It helps to arrange needed funds on the most favourable terms and prevents the accumulation of excess funds.

With adequate time to study his needs, the finance manager can select the best alternative. In contrast, a firm which does not budget its cash requirements, may suddenly find itself short of funds.

Thus, the principal aim of the cash budget as a management tool is to predict cash flows over a given period of time, is to ascertain whether at any point of time there is likely to be an excess or shortage of cash.

Cash Budget may be prepared annually, half-yearly, quarterly, monthly, bi-monthly (fortnightly), weekly or even on a daily basis. But the normal practice is to prepare a monthly cash budget.

Cash budget can be presented in either of the two proformas as discussed below:

Proforma of a Monthly Cash Budget:

Cash Budget for the period _____ to _____ (All Figures in Rs.)

Particulars	Month 1	Month 2	Month 3	Month 4
Receipts:				
(1) Cash Sales	xx	xx	xx	Xx
(2) Collection from Debtors for Credit Sales	xx	xx	xx	Xx
(3) Investment Income	xx	xx	xx	Xx
(4) Any Other Cash Receipts	xx	xx	xx	Xx
Total Receipts [A]	xxxx	xxxx	xxxx	xxxx
Payments:				
(1) Cash Purchases	xx	xx	xx	Xx
(2) Suppliers (Creditors) for Credit Purchases	xx	xx	xx	xx
(3) Other Cash Expenses	xx	xx	xx	xx
Total Payments [B]	xxxx	xxxx	xxxx	xxxx
Net Receipts [A - B]	xxxx	xxxx	xxxx	xxxx
Add: Opening Balance	xx	xx	xx	xx
Closing Balance	xxxx	xxxx	xxxx	xxxx

Cash Budget for the period _____ to _____ (All Figures in Rs.)

Particulars	Month 1	Month 2	Month 3	Month 4
Opening Balance	xxxx	xxxx	xxxx	xxxx
Receipts:				
(1) Cash Sales	xx	xx	xx	xx
(2) Collection from Debtors for Credit Sales	xx	xx	xx	xx
(3) Income from Investments	xx	xx	xx	xx
(4) Any Other Cash Receipts	xx	xx	xx	xx
Total Receipts including Opening Balance [A]	xxxx	xxxx	xxxx	xxxx
Payments:				
(1) Cash Purchases	xx	xx	xx	xx
(2) Suppliers (Creditors) for Earlier Credit Purchases	xx	xx	xx	xx
(3) Other Cash Expenses	xx	xx	xx	xx
Total Payments [B]	xxxx	xxxx	xxxx	xxxx
Closing Balance [A - B]	xxxx	xxxx	xxxx	xxxx

(B) Master Budgets:

Master budget is also known as summary budget or finalised profit plan. It combines all the budgets for a period into one unit and thus, it shows the overall budget plan. As profit planning is the main objective of a budget program, all the subsidiary budgets are coordinated and projected into a master or summary budget showing the final projected results of the plan. The master budget incorporates all the subsidiary functional budgets and the budgeted profit and loss account and balance sheet.

(C) Sales Budget:

The first step in the preparation of the sales budget is to estimate as accurately as possible, the sales anticipated during the budget period. Sales estimates indicate the quantity of anticipated sales of the various products at different estimated price levels. The total profit as well as the profit contribution of individual products, with each of the estimated sales when materialised is likely to yield, are computed.

The expected sales forecasts are converted into the sales budget. The sales estimates are based upon certain assumptions regarding the enterprise objective, level of advertisement, sales promotion and other selling efforts, etc. Sales budget, however carries an imprint of management judgement and strategy and takes into account the planned management objective and strategy and future commitments.

(D) Production Budget:

Production budget is an estimate of the production for the budget period. Production budget is prepared into two parts, viz. production volume budget for the physical units of the products to be manufactured and the cost of production or manufacturing budget detailing the budgeted cost under material, labour, and factory overhead in respect of the products.

In order to prepare a production budget level of expected sales and the desired level of stock of finished goods is required.

$$\text{Production} = \text{Sales} + \text{Closing Stock} - \text{Opening Stock}$$

(E) Flexible Budget/Control Budget/Variable Budget/Sliding Scale Budget:

It is also known as control budget or variable budget or sliding scale budget. It is based on the knowledge of cost behaviour patterns. It is a budget designed to change appropriately with fluctuations in output or turnover and to furnish budgeted costs for any level of activity actually attained. Flexible budget may also be used for adjusting budgets to current conditions arising out of seasonal variations or changes in the length of the working period. A flexible budget is more elastic, useful

and practical. It takes into account the changes in the actual circumstances and is useful for the purpose of performance evaluation and controls since it segregates the activity factor, which is beyond the control of the operating manager and highlights those costs for which he is responsible. Such a budget shows the planned behaviour of costs at various volume levels. The flexible budget is usually expressed in terms of cost-volume relationship i.e. a fixed amount for a specified time period plus a variable amount per unit of volume. Flexible budget is actually a series of budgets fixed for various levels of activity.

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SOLVED PROBLEMS

Illustration 1: (Sales Budget)

(M.U., BMM, April 2005)

A manufacturing company submits the following figures for the first Quarter of 2003.

Sales/Month	Product in Units	
	X	Y
January	25,000	30,000
February	20,000	25,000
March	30,000	35,000

Selling price per unit Product X Rs. 10, Product Y Rs. 20.

Prepare a sales budget based, on the above data for the first Quarter of 2004 assuming,

- (a) Sales quantity increase of X by 20%, Y by 10%.
- (b) Sales price increase of X: nil, Y: 10%.

Solution:

Note: U = Units, SP = Selling Price, A = Amount

Sales Budget

Actuals for 2003

	January			February			March			Total		
	U × SP = A			U × SP = A			U × SP = A			U × SP = A		
Product X	25,000	10	2,50,000	20,000	10	2,00,000	30,000	10	3,00,000	75,000	10	7,50,000
Product Y	30,000	20	6,00,000	25,000	20	5,00,000	35,000	20	7,00,000	90,000	20	18,00,000
	-	-	8,50,000	-	-	7,00,000	-	-	10,00,000	-	-	25,50,000

Budgeted for 2004

	January			February			March			Total		
	U × SP = A			U × SP = A			U × SP = A			U × SP = A		
Product X	30,000	10	3,00,000	24,000	10	2,40,000	36,000	10	3,60,000	90,000	10	9,00,000
Product Y	33,000	22	7,26,000	27,500	22	6,05,000	38,500	22	8,47,000	99,000	22	21,78,000
	-	-	10,26,000	-	-	8,45,000	-	-	12,07,000	-	-	30,78,000

Illustration 2: (Flexible Budget)

(M.U., M.Com., May 2005)

Lucky Ltd. is currently operating at 75% of its capacity. In the past two years, the levels of operations were 55% and 65% respectively. Presently, the production is 75,000 units. The company is planning for 85% capacity level during 2005-2006. The cost details are as follows:

Particulars	(Rs.)		
	55%	65%	75%
Direct Materials	11,00,000	13,00,000	15,00,000
Direct Labour	5,50,000	6,50,000	7,50,000

Factory Overheads	3,10,000	3,30,000	3,50,000
Selling Overheads	3,20,000	3,60,000	4,00,000
Administrative Overheads	1,60,000	1,60,000	1,60,000
Total	24,40,000	28,00,000	31,60,000

Profit is estimated @ 20% on Sales.

The following increase, in costs are expected during the year:

(In Percentage)

Direct Materials	8
Direct Labour	5
Variable Factory Overheads	5
Variable Selling Overheads	8
Fixed Factory Overheads	10
Fixed Selling Overheads	15
Administrative Overheads	10

Prepare Flexible Budget for the current year as well as for the period 2005-2006 at 85% of capacity.

Solution:

Flexible Budget

Units	75%		85%	
	Total 75,000	Per Unit	Total 85,000	Per Unit
Variable Cost:				
Direct Materials	15,00,000	20.00	18,36,000	21.60
Direct Labour	7,50,000	10.00	8,92,500	10.50
Variable Factory Overheads	1,50,000	2.00	1,78,500	2.10
Variable Selling Overheads	3,00,000	4.00	3,67,200	4.32
Total Variable Cost	27,00,000	36.00	32,74,200	38.52
Fixed Cost:				
Fixed Factory Overheads	2,00,000	2.67	2,20,000	2.59
Fixed Selling Overheads	1,00,000	1.33	1,15,000	1.35
Administrative Overheads	1,60,000	2.13	1,76,000	2.07
Total Fixed Cost	4,60,000	6.13	5,11,000	6.01
Total Cost [VC + FC]	31,60,000	42.13	37,85,200	44.53
Profit	7,90,000	10.54	9,46,300	11.13
Sales	39,50,000	52.67	47,31,500	55.66

Working Notes:

$$(1) \text{ Direct Material per unit} = \frac{15,00,000}{75,000} = \text{Rs. } 20$$

$$(2) \text{ Direct Labour per unit} = \frac{7,50,000}{75,000} = \text{Rs. } 10$$

(3) Factory Overheads:

$$\text{Variable} = \frac{\text{Difference in Cost}}{\text{Difference in Units}} = \frac{20,000}{10,000} = \text{Rs. } 2$$

$$\therefore \text{Fixed Overheads} = 3,50,000 - [75,000 \times 2] = \text{Rs. } 2,00,000$$

(4) Selling Overheads:

$$\text{Variable} = \frac{\text{Difference in Cost}}{\text{Difference in Units}} = \frac{40,000}{10,000} = \text{Rs. } 4$$

$$\therefore \text{Fixed Overheads} = 4,00,000 - [75,000 \times 4] = \text{Rs. } 1,00,000$$

(5) Administrative Overheads → Fixed = Rs. 1,60,000.

Illustration 3: (Flexible Budget) (M.U., PGDFM, May 2003)

A manufacturing company is operating at 75% of normal capacity. It is proposed to offer a price reduction of 5% to 10% depending upon the sales volume desired. Given below are the relevant data.

Capacity	75%	85%	100%
Output (Units)	75,000	85,000	1,00,000
Selling Price/Unit	Rs. 96	5% off	10% off
Materials Cost/Unit	Rs. 40	10% Less	15% Less
Wages Cost/Unit	Rs. 10	Rs. 10	Rs. 10

Fixed Overheads:

Production	Rs. 14,00,000
Selling and Administration	Rs. 5,00,000

Variable Overhead:

Production	Rs. 14,00,000 @ normal capacity
Selling and Administration	Rs. 4,40,000 @ normal capacity

- (a) Prepare a single statement to show profit/loss at each level of output.
- (b) Compute unit variable cost, unit fixed cost and unit total cost at different levels of output and
- (c) Indicate which of the 3 levels is most profitable.

Solution:

Units	Current Capacity				Normal Capacity	
	75,000	85,000			1,00,000	
Capacity	75%		85%		100%	
	Rs. P.U.	Total Rs.	Rs. P.U.	Total Rs.	Rs. P.U.	Total Rs.
Sales	96.00	72,00,000	91.20	77,52,000	86.4	86,40,000
(-) Material	40.00	30,00,000	36.00	30,60,000	34.0	34,00,000
Wages	10.00	7,50,000	10.00	8,50,000	10.0	10,00,000
Variable Overhead:						
Production	14.00	10,50,000	14.00	11,90,000	14.0	14,00,000
Selling and Administration	4.40	3,30,000	4.40	3,74,000	4.4	4,40,000
Total Variable Cost	68.40	51,30,000	64.40	54,74,000	62.4	62,40,000
Contribution	27.60	20,70,000	26.80	22,78,000	24.0	24,00,000
Fixed Overhead:						
Production	18.67	14,00,000	16.47	14,00,000	14.0	14,00,000
Selling and Administration	6.67	5,00,000	5.88	5,00,000	5.0	5,00,000
Profit	2.27	1,70,000	4.45	3,78,000	5.0	5,00,000

Recommendation: Operating at 100% i.e. Normal capacity is most profitable.

Illustration 8: (Flexible Budget) (M.U., PGDFM, May 1998, 2000)

A factory engaged in manufacturing plastic bucket is working to 40% capacity and produces 10,000 buckets per annum. The present cost break-up for one bucket is as under:

Materials	Rs. 10
Labour Cost	Rs. 3
Overhead (60% Fixed)	Rs. 5

The selling price is Rs. 20 per bucket. If it is decided to work the factory at 50% capacity, the selling price falls by 3%. At 90% capacity, the selling price falls by 5% accompanied by a similar fall in the prices of material.

You are required to calculate the profit at 50% and 90% capacities and also calculate break-even points for the same capacity of productions.

Solution:

Capacity	100%		90%		50%		40% (Given)	
Units	25,000		22,500		12,500		10,000	
Particulars	Rs.		Rs.		Rs.		Rs.	
Sales	20	5,00,000	19	4,27,500	19.4	2,42,500	20	2,00,000
(-) Variable Costs:								
Material	10	2,50,000	9.5	2,13,750	10	1,25,000	10	1,00,000
Labour	3	75,000	3	67,500	3	37,500	3	30,000
Variable Overheads	2	50,000	2	45,000	2	25,000	2	20,000
Contribution	5	1,25,000	4.5	1,01,250	4.4	55,000	5	50,000
(-) Fixed Costs	1.2	30,000	1.33	30,000	2.4	30,000	3	30,000
Profit	3.8	95,000	3.17	71,250	2	25,000	2	20,000
P/V Ratio = $\frac{C}{S}$		0.25		0.24		0.23		0.25
BEP = $\frac{FC}{P/V}$		30,000		30,000		30,000		30,000
BEP (Rs.)		0.25		0.24		0.23		0.25
BEP (Units)		1,20,000		1,26,667		1,32,273		1,20,000
		6,000		6,667		6,818		6,000

Illustration 12: (Flexible Budget)

(M.U., PGDFM, June 2001)

Calculate the budgeted overhead cost per tonne at production level of 35 tonnes based on following details at 80% capacity (40 tonnes):

	Rs. '000
Depreciation	22
Indirect Labour	24
Insurance	6
Power (80% Variable)	40
Repairs and Maintenance (50% Fixed)	40
Salaries	20
Stores Consumable	8

Solution:

Capacity Production (Tonnes)	(Rs. in '000)		
	100%		80%
	50	40	35
Variable:			
Stores Consumables		10	8
Semi-Variable:			
Power (80% Variable) (20% Fixed)	40	32	28.0
	8	8	8.0
Repair and Maintenance	25	20	17.5
50% Variable			
50% Fixed	20	20	20.0
Fixed:			
Depreciation		22	22
Indirect Labour		24	24
Insurance		6	6
Salaries		20	20
Total Cost		175	160
Cost Per Tonne (Rs.)	Rs. 3,500	Rs. 4,000	Rs. 4,357.14

Illustration 14: (Flexible Budget)

Company ABC Ltd produces 10,000 units. The company's expenses to 1 unit of the product is listed below:

Direct material	-	Rs. 7
Direct labour	-	Rs. 5
Other variable expenses	-	Rs. 4.5
Administrative overhead	-	Rs. 6 (40% variable)
Selling overhead	-	Rs. 3 (75% variable)
Production overhead	-	Rs. 4 (20% variable)
Purchase of equipment	-	Rs. 30,000
Selling price	-	Rs. 120

Prepare budget for 70%, 80% and 100% utilisation of the capacity if the details listed above is for 90% utilisation of installed capacity.

40 + 25% = 50

Illustration 27: (Flexible Budget)

(M.U., BAF, April 2006)

The following information at 50% capacity is given. Prepare a flexible budget and forecast the profit or loss at 60%, 70% and 90% capacity.

	Expenses at 50% Capacity (Rs.)
Fixed expenses	
Salaries	50,000
Rent and Taxes	40,000
Depreciation	60,000
Administration expenses	70,000
Variable expenses	
Materials	2,00,000
Labour	2,50,000
Others	40,000
Semi-variable expenses	
Repairs	1,00,000
Indirect labour	1,50,000
Others	90,000

It is estimated that fixed expenses will remain constant at all capacities. Semi-variable expenses will not change between 45% and 60% capacity, will rise by 10% between 60% and 75% capacity, a further increase of 5% when the capacity crosses by 75%.

Estimated Sales:

(Capacity)	(Rs.)
60%	11,00,000
70%	13,00,000
90%	15,00,000

Solution:

		Flexible Budget			
Particulars Capacity Levels		50% (Given)	60%	70%	90%
		Rs.	Rs.	Rs.	Rs.
(I) Variable Expenses:					
Materials		2,00,000	2,40,000	2,80,000	3,60,000
Labour		2,50,000	3,00,000	3,50,000	4,50,000
Others		40,000	48,000	56,000	72,000
Total Variable Expenses	(A)	4,90,000	5,88,000	6,86,000	8,82,000
(II) Semi-Variable Expenses:					
Repairs		1,00,000	1,00,000	1,10,000	1,15,000
Indirect Labour		1,50,000	1,50,000	1,65,000	1,72,500
Others		90,000	90,000	99,000	1,03,500
Total Semi-Variable Expenses	(B)	3,40,000	3,40,000	3,74,000	3,91,000
(III) Fixed Expenses:					
Salaries		50,000	50,000	50,000	50,000
Rent and Taxes		40,000	40,000	40,000	40,000
Depreciation		60,000	60,000	60,000	60,000
Administration Expenses		70,000	70,000	70,000	70,000
Total Fixed Expenses	(C)	2,20,000	2,20,000	2,20,000	2,20,000
Total Cost	(A + B + C)	10,50,000	11,48,000	12,80,000	14,93,000
Add/(Less): Profit/(Loss) (Balancing Figure)		N.A.	(48,000)	20,000	7,000
Sales		N.A.	11,00,000	13,00,000	15,00,000

Workings:

(1) Semi-Variable Expenses:

- (a) At 60% = Same as at 50% capacity level
- (b) At 70% = 10% increase to given amount at 50% capacity level
 - Repairs = $1,00,000 + 10\% = 1,10,000$
 - Indirect Labour = $1,50,000 + 10\% = 1,65,000$
 - Others = $90,000 + 10\% = 99,000$
- (c) At 90% = 15% [i.e. 10% + 5%] increase to given amount at 50% capacity level
 - Repairs = $1,00,000 + 15\% = 1,15,000$
 - Indirect Labour = $1,50,000 + 15\% = 1,72,500$
 - Others = $90,000 + 15\% = 1,03,500$

(2) Variable Expenses

(a) Materials	At 50%	2,00,000	
	60%	?	= 2,40,000
	70%	?	= 2,80,000
	90%	?	= 3,60,000
(b) Labour	At 50%	2,50,000	
	60%	?	= 3,00,000
	70%	?	= 3,50,000
	90%	?	= 4,50,000

Illustration 28: (Flexible Budget)
(M.U., BAF, October 2006)

AB Ltd. has furnished the following estimation pertaining to Product "A" at 80% of its normal capacity level for the quarter ending March 31, 2005.

Sales	Rs. 6,00,000
Administrative Costs:	
Office Salaries	Rs. 90,000
General Expenses	2% of Sales
Depreciation	Rs. 7,500
Rates and Taxes	Rs. 8,750
Selling Costs:	
Salaries	8% of Sales
Travelling Expenses	2% of Sales
Sales Office Expenses	1% of Sales
General Expenses	1% of Sales
Distribution Costs:	
Wages	Rs. 15,000
Rent	1% of Sales
Other Expenses	4% of Sales

Prepare the budget for the total Administration, Selling and Distribution expenses at 70% & 90% capacity levels.

Solution:

AB Ltd.
Flexible Budget of Product "A"

Particulars Capacity Levels	(A)	70%	80% (Given)	90%
		Rs.	Rs.	Rs.
Sales	(A)	5,25,000	6,00,000	6,75,000
Less: Costs:				
(i) Administrative Costs:				
Office Salaries		90,000	90,000	90,000
General Expenses (2% of Sales)		10,500	12,000	13,500
Depreciation		7,500	7,500	7,500
Rates and Taxes		8,750	8,750	8,750
Total Administrative Costs	(B)	1,16,750	1,18,250	1,19,750
(ii) Selling Costs:				
Salaries (8% of Sales)		42,000	48,000	54,000
Travelling Expenses (2% of Sales)		10,500	12,000	13,500
Sales Office Expenses (1% of Sales)		5,250	6,000	6,750
General Expenses (1% of Sales)		5,250	6,000	6,750
Total Selling Costs	(C)	63,000	72,000	81,000
(iii) Distribution Costs:				
Wages		15,000	15,000	15,000
Rent (1% of Sales)		5,250	6,000	6,750
Other Expenses (4% of Sales)		21,000	24,000	27,000
Total Distribution Costs	(D)	41,250	45,000	48,750
Total Costs (E) = [B + C + D]		2,21,000	2,35,250	2,49,500
Profits (F) = [A - E]		3,04,000	3,64,750	4,25,500

Closing Balance (A - B)	18.234	17.064	22.072	20.664	20.582	10.766	10.766
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Illustration 7: (Cash Budget)

(M.U., PGDFM, June 2001)

ZED Ltd. wishes to arrange for overdraft facilities with its bankers during the period April to June of a particular year when it will be manufacturing mainly for stock. Prepare a Cash budget for the above period from the following data, indicating the extent of bank facilities the company will require at the end of each month.

(a)	Month	Sales	Purchases	Wages
		Rs.	Rs.	Rs.
	February	1,80,000	1,24,000	12,000
	March	1,92,000	1,44,000	14,000
	April	1,08,000	2,43,000	11,000
	May	1,74,000	2,46,000	10,000
	June	1,26,000	2,68,000	15,000

- (b) 50 per cent of the credit sales are realised in the month following the sales and the remaining sales in the second month following. Creditors are paid in the month following the purchases.
- (c) Cash in bank on April 1 is estimated at Rs. 25,000.

Solution:

Particulars	Cash Budget			(All Figures in Rupees)
	April	May	June	
Opening Balance	25,000	56,000	(47,000)	
Receipts:				
(1) Collection of Debtors 1 Month 50%	96,000	54,000	87,000	
2 Month 50%	90,000	96,000	54,000	
Total Receipts (including Opening Balance)	2,11,000	2,06,000	94,000	
Payments:				
(1) Payment to Creditors 1 Month	1,44,000	2,43,000	2,46,000	
(2) Wages	11,000	10,000	15,000	
Total Payments	1,55,000	2,53,000	2,61,000	
Closing Balance (TR - TP)	56,000	(47,000)	(1,67,000)	

Note: Bank Facilities required Rs. 1,67,000 out of which Rs. 47,000 required in May and the balance Rs. 1,20,000 in June.

Illustration 15: (Cash Budget)
(M.U., BAF, May 2006)

Prepare Cash Budget of Sunil Gavaskar Ltd. for the months of April, May and June, 2002:

Month	Sale	Purchases	Wages	Expenses
January	1,60,000	90,000	40,000	10,000
February	1,60,000	80,000	36,000	12,000
March	1,50,000	84,000	44,000	12,000
April	1,80,000	1,00,000	48,000	14,000
May	1,70,000	90,000	40,000	12,000
June	1,60,000	70,000	36,000	10,000

You are informed that:

- (1) 50% of the purchases and sales are on cash.
- (2) The average collection period of the company is $\frac{1}{2}$ month and credit purchases are paid off regularly after 1 month.
- (3) Time lag in payment of wages is 1 month.
- (4) Rent of Rs. 1,000 is payable every month.
- (5) Cash and Bank Balance as on 31st March, 2002 was Rs. 3,00,000
- (6) Dividend received in May Rs. 36,000.
- (7) Professional fees to be paid in June Rs. 1,500.
- (8) Expenses are paid in the same month.

Solution:

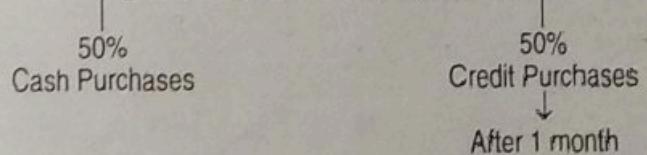
**Sunil Gavaskar Ltd.
Cash Budget for 3 months April to June 2002**

Particulars	April (Rs.)	May (Rs.)	June (Rs.)
Receipts:			
(1) Cash Sales (50%)	90,000	85,000	80,000

(2) Collection from Debtors:			
(a) Same Month [½] (25%)	45,000	42,500	40,000
(b) Next Month [½] (25%)	37,500	45,000	42,500
(3) Dividend Received	-	36,000	-
Total Receipts	(A)	1,72,500	2,08,500
Payments:			
(1) Cash Purchases [50%]	50,000	45,000	35,000
(2) Creditors for Purchases [50%] (After 1 Month)	42,000	50,000	45,000
(3) Wages (After 1 Month)	44,000	48,000	40,000
(4) Rent	1,000	1,000	1,000
(5) Professional Fees	-	-	1,500
(6) Expenses (Same Month)	14,000	12,000	10,000
Total Payments	(B)	1,51,000	1,56,000
Net Receipts	(A - B)	21,500	52,500
Add: Opening Balance		3,00,000	3,21,500
Closing Balance		3,21,500	3,74,000
			4,04,000

Workings Notes:

(1) Total Purchases (100%)



(2) Total Sales (100%)

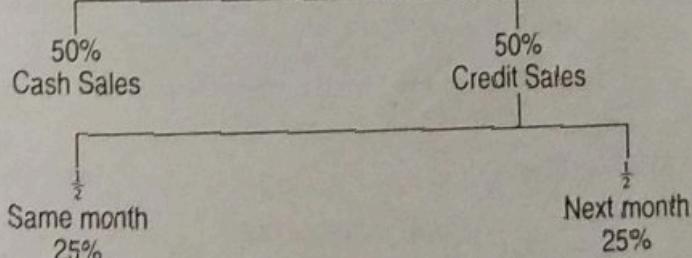


Illustration 16: (Cash Budget)

(M.U., BAF, Oct. 2006)

Prepare Cash Budget of SALMAN Ltd. for 3 months commencing from April with the help of following information.

- (i) Cash sales are 25% of total sales.
- (ii) 60% of credit sales are collected in the same month and balance 40% in the following month.

Month	Sale	Purchases	Wages
March	16,00,000	5,00,000	-
April	6,00,000	6,40,000	1,60,000
May	8,00,000	6,40,000	1,60,000
June	8,00,000	9,60,000	2,00,000
July	12,00,000	8,00,000	2,00,000

- (iii) Payment for purchases is made 40% in the same month and 60% in the following month.
- (iv) Interest @ 6% on debentures of Rs. 2,00,000 is paid in the month of June.
- (v) Rent of Rs. 8,000 paid per month.

- (vi) Dividend received in May Rs. 22,000.
 (vii) Cash balance as on 31st March is Rs. 2,00,000.

Solution:

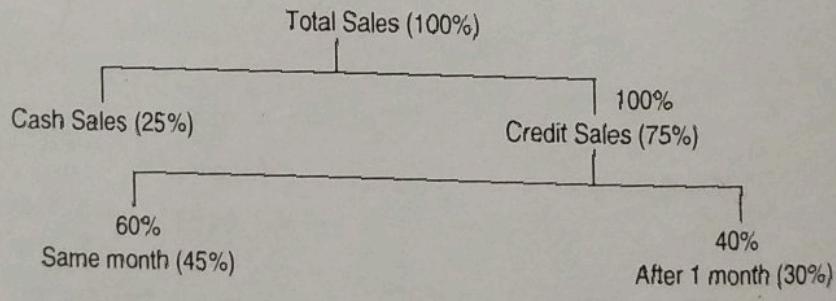
SALMAN Ltd.

Cash Budget for 3 month: April to June

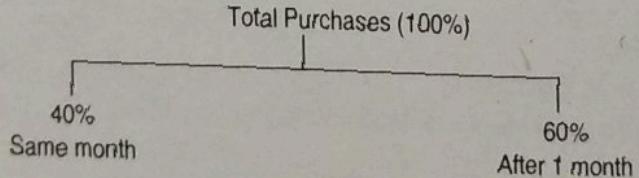
Particulars	April Rs.	May Rs.	June Rs.
Opening balance	2,00,000	3,76,000	3,30,000
Receipts:			
(i) Cash Sales (25%)	1,50,000	2,00,000	2,00,000
(ii) Collection from Debtors:			
(a) Same month (45%)	2,70,000	3,60,000	3,60,000
(b) After 1 month (30%)	4,80,000	1,80,000	2,40,000
(iii) Dividend	—	22,000	—
Total Receipts including Opening balance	(A) 11,00,000	11,38,000	11,30,000
Payments:			
(i) Creditors for purchases:			
(a) Same Month (40%)	2,56,000	2,56,000	3,84,000
(b) After 1 month (60%)	3,00,000	3,84,000	3,84,000
(ii) Interest on Debentures	—	—	12,000
(iii) Rent	8,000	8,000	8,000
(iv) Wages	1,60,000	1,60,000	2,00,000
Total Payment	(B) 7,24,000	8,08,000	9,88,000
Closing Balance	(A - B) 3,76,000	3,30,000	1,42,000

Workings:

(1)



(2)



(3)

Interest on Debentures:
 $2,00,000 \times 6\% = \text{Rs. } 12,000$

Illustration 17: (Cash Budget)

(M.U., BAF, April 2006)

Following details are available from the records of a firm. Prepare a cash budget for the 3 months ending 30.06.2006.

Month	Sales (Rs.)	Materials (Rs.)	Wages (Rs.)	Overheads (Rs.)
February	14,000	9,600	3,000	1,700
March	15,000	9,000	3,000	1,900
April	16,000	9,200	3,200	2,000
May	17,000	10,000	3,600	2,200
June	18,000	10,400	4,000	2,300

Additional Information:

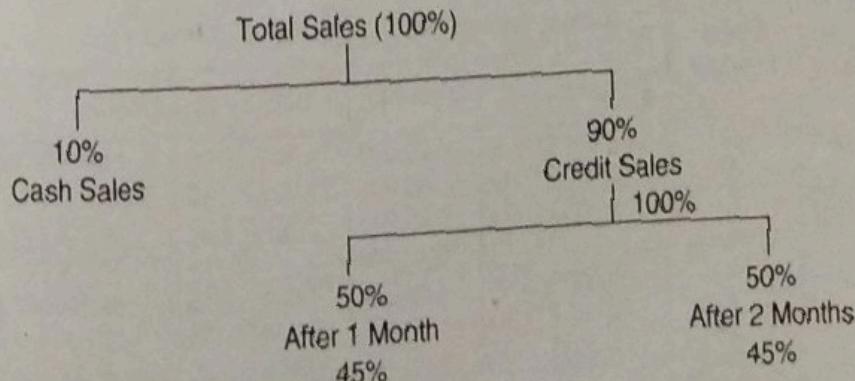
- (a) 10% sales are on cash.
- (b) 50% of the credit sales are collected next month and the balance in the following month.
- (c) Period of credit allowed by suppliers 2 months.
- (d) Delay in payment of wages 1/4th month.
- (e) Delay in payment of overheads 1/2 month.
- (f) Cash and Bank Balance on 1.04.2006 is expected to be 6,000.
- (g) Plant and Machinery will be installed in February 2006 at a cost of Rs. 96,000. The monthly installment of Rs. 2,000 are payable from April 2006 onwards.
- (h) Advance to be received for sale of vehicle Rs. 9,000 in June.
- (i) Dividend from investments Rs. 1,000 is expected to be received in June 2006.
- (j) Advance Income Tax to be paid in June 2006 Rs. 2,000.

Solution:**Cash Budget for 3 Months ending 30.06.2006**

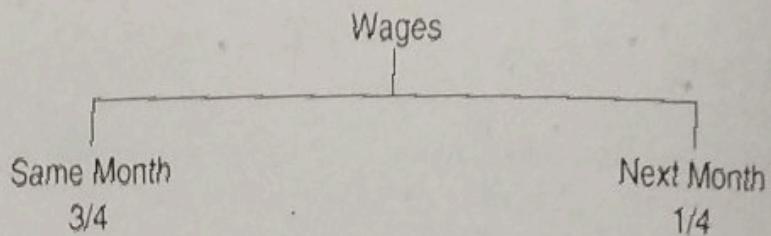
Particulars	April (Rs.)	May (Rs.)	June (Rs.)
Opening Balance	6,000	3,950	3,000
Receipts:			
(i) Cash Sales [10%]	1,600	1,700	1,800
(ii) Collection from Debtors:			
(a) After 1 Month [45%]	6,750	7,200	7,650
(b) After 2 Months [45%]	6,300	6,750	7,200
(iii) Advance for Sale of Vehicle	-	-	9,000
(iv) Dividend from Investments	-	-	1,000
Total Receipts including Opening Balance	(A) 20,650	19,600	29,650
Payments:			
(i) Creditors for Materials [After 2 months]	9,600	9,000	9,200
(ii) Wages:			
(a) Same Month [3/4]	2,400	2,700	3,000
(b) Next Month [1/4]	750	800	900
(iii) Overheads:			
(a) Same Month [1/2]	1,000	1,100	1,150
(b) Next Month [1/2]	950	1,000	1,100
(iv) Instalments for Plant and Machinery	2,000	2,000	2,000
(v) Advance Income Tax	-	-	2,000
Total Payments	(B) 16,700	16,600	19,350
Closing Balance	(A - B)	3,950	3,000
			10,300

Workings:

(1)



(2)



(3)

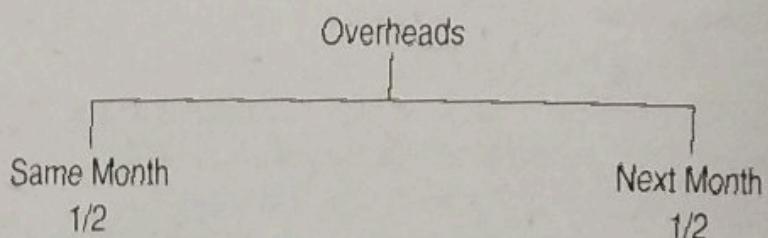


Illustration 18: (Sales Budget)

(5) The following data are available in a manufacturing company for a yearly period.

	Rs. Lakhs
Fixed Expenses	
Wages and Salaries	9.50
Rent, Rates and Taxes	6.60
Depreciation	7.40
Sundry Administrative Expenses	6.50
Semi Variable Expenses (at 50% Capacity)	
Maintenance and Repairs	3.50
Indirect Labour	7.90
Sales Department Salaries	3.80
Sundry Administrative Expenses	2.80
Variable Expenses (at 50% Capacity)	
Materials	21.70
Labour	20.40
Other Expenses	7.90
	98.00

Semi variable expenses remain constant between 45% and 65% of capacity increasing by 10% between 65% and 80% capacity and by 20% between 80% and 100% capacity.

Sales at various levels are given below:

- at 50% Capacity – Rs. 100 lakhs
- at 60% Capacity – Rs. 120 lakhs
- at 75% Capacity – Rs. 150 lakhs
- at 90% Capacity – Rs. 180 lakhs
- at 100% Capacity – Rs. 200 lakhs

Prepare a flexible budget for the year and forecast the profit at the above levels.

(M.U., PGDFM, May 2004)

Illustration 21: (Cash Budget)

(M.U., M.Com., Oct. 1987)

From the following prepare Cash Budget for the period from 1st March to 31st August when the opening Cash Balance was Rs. 40,000.

Month	Sales	Selling Expenses	Purchases	Wages	Factory Expenses	Administration Expenses
January	3,40,000	14,000	1,60,000	30,000	20,000	10,000
February	3,20,000	15,000	1,68,000	32,000	22,000	11,000
March	5,64,000	13,000	1,66,000	3,36,000	16,000	9,000
April	3,10,000	13,600	1,66,000	24,000	21,000	9,400
May	3,30,000	14,800	1,52,000	36,000	24,000	10,800
June	4,00,000	14,000	1,36,000	32,000	19,200	11,400
July	3,60,000	12,000	34,000	34,000	16,000	10,000
August	4,40,000	11,000	1,16,000	33,000	19,200	10,000

- (a) Period of credit allowed by suppliers and to customers 1 month.
- (b) Lag in Payment of:
 - (i) Wages : 1 month
 - (ii) Factory Expenses : 1 month
 - (iii) Administration Expenses : 1 month
 - (iv) Selling Expenses : 1 month
- (c) Machinery purchased for Rs. 1,00,000 in March payable on delivery in April.
- (d) Building purchased in April Rs. 3,00,000 payable in two equal instalments in May and July.
- (e) Commission of 3% on sales payable two months after sales.