# **Management Accountancy**

## Unit 10

# **Master Budget – Financial Statements**

#### Structure

 Master Budget – Financial Statements (Budgeted Balance Sheet, Budgeted Income Statement, Cash Budget)

### After the completion of this unit, you should be able to:

 Prepare Projected Financial Statements (Budgeted Balance Sheet, Budgeted Income Statement, Cash Budget)

### 10.1 Cash Budget

The cash budget is a plan of future cash receipt and payment. The statement showing the estimated cash inflow and cash cash outflow over a projected time period is known as Cash Budget. A very helpful tool in cash management is the cash budget. It helps management in planning to avoid unnecessary idle cash balance. In the same way it also helps to eliminate unneeded expensive borrowing. Thus, the cash budget helps management keep cash balances in reasonable relationship to its needs.

The cash budget consists of following four major sections:

Section 1:	Receipt Section
Section 2:	Disbursement Section
Section 3:	Cash Surplus or Deficit Section
Section 4:	Financing Section

#### **Section 1 : Receipt Section**

All the incomes receivable during the budgeted period are included in it. In this section, priority is given to cash receivable than to the sources of income. For instance, the income confirmed out of the sales of material, is not included in cash budget unless the cash is receivable.

This section begins with the opening balance of cash. For this the cash receipt will be added from different sources. Normally, the sources of cash of a business concern are as follows:

- (i) Beginning cash in hand and at bank.
- (ii) Cash sale.
- (iii) Cash collection from debtors.
- (iv) Cash from selling of fixed assets.
- (v) Interest and dividend received.
- (vi) Issue of shares and debentures.
- (vii) Bank Loan.
- (viii) Loan from financial institution etc.

#### **Section 2: Disbursement Section**

This section includes all the estimated cash payment to be made in budgeted period. Some of the payments that come in this section are given below.

- (i) Cash purchases.
- (ii) Payment to creditors.
- (iii) Wages and salaries payment.

- (iv) Payment of overhead.
- (v) Repayment of borrowed capital.
- (vi) Payment for fixed assets purchases.
- (vii) Interest payment.
- (viii) Dividend payment.
- (ix) Payment of other expenses etc.

#### **Section 3: Cash Surplus or Deficit Section**

This section shows the difference between the cash receipt section and disbursements section, The result shows the surplus if total receipt exceeds to total payment. On the contrary, if total payment exceeds to total receipt, the result shows the deficit balance of cash.

## **Section 4: Financing Section**

This section provides a detailed account of the borrowing and repayments expected during the budgeted period. A cash budget may be prepared in the following form :

Cash Budget
For the Months of .....

For the Months of				
Details/Months	1	2	3	4
Beginning Cash Balance (a)	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Add: Budgeted Cash Receipts				
Cash Sales	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Collection from Debtors	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Cash from Selling of Fixed Assets	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Interest and Dividend Received	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Issue of Shares and Debentures	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Any Other Sources of Cash Inflows	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Total Cash Receipt (b)	×××	×××	×××	×××
Total Cash Available for Payments $(c = a + b)$	×××	×××	×××	×××
Less: Payments				
Cash Purchases	$\times \times \times$	×××	$\langle \times \times \rangle$	×××
Cash Pay to Creditors	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Wages and Salaries Paid	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Cash Paid for Overhead Expenses	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Payment for Fixed Assets Purchases	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Interest and Dividend Paid	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Loan/Debenture Redemption	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Any Other Sources of Cash Outflows	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Total Payments (d)	×××	×××	×××	×××
Ending Cash Balance (Before Financing) (c – d)	×××	×××	×××	×××
Add: Borrowings	×××	×××	×××	×××
Less : Repayment of Loan – Principal	$\times \times \times$	×××	$\times \times \times$	×××
Interest	$\times \times \times$	×××	$\times \times \times$	$\times \times \times$
Ending Cash Balance (After Financing)	×××	×××	×××	×××

#### **10.2 Budgeted Income Statement**

Budgeted net income from operation can be computed after the completion of all of the preceding budgets. The budgeted net income from normal operation is ascertained by budgeted income statement. A budgeted income statement summarises all the budgets i.e. sales budget, production budget, material purchase budget, office and administrative overhead budget, selling and distribution overhead. It includes the various projections of revenue and expenses for the budgeted period.

The proforma of budgeted income statement is as follows:

#### **Budgeted Income Statement**

	Rs.	Rs.
Budgeted Sales Revenue		×××
Less: Budgeted Cost of Goods Sold:		
<b>Budgeted Manufacturing Overhead</b>	×××	
Add: Opening Stock	×××	·
	×××	
Less: Closing Stock	×××	
<b>Budgeted Cost of Goods Sold</b>		×××
Gross Profit		×××
Less: Non-Manufacturing Cost:		
Office and Administrative Cost	×××	
Selling and Distribution Cost	×××	
Total Non-Manuf.Cost		×××
Budgeted Net Profit Before tax		×××
Less: Tax		×××
Budgeted Net Profit After Tax		×××

### **10.3 Budgeted Balance Sheet**

Preparation of Budgeted Balance Sheet is the final step in budgeting. The budgeted balance sheet is developed by beginning with the balance sheet for the year just ended and adjusting it, using all the activities that are expected to place during the budgeted period.

The format of the budgeted balance sheet is as follows:

**Budgeted Balance Sheet As at ... ...** 

<u> </u>		
Assets and Liabilities	Rs.	Rs.
A. Fixed Assets	×××	
Less: Accumulated Depreciation	$\times \times \times$	
B. Current Assets:		$\times \times \times$
Cash in Hand	$\times \times \times$	
Cash at Bank	$\times \times \times$	
Inventories	$\times \times \times$	
Sundry Debtors	$\times \times \times$	
Bills Receivable	$\times \times \times$	
Prepaid e.t.c	$\times \times \times$	
Total Current Assets		$\times \times \times$

	Total Assets (A+B)		×××
C.	Share Capital	×××	
D.	Retained Earning	$\times \times \times$	
	Total Shareholder's Equity (C+D)		$\times \times \times$
E.	Long Term Liabilities		$\times \times \times$
F.	Current Liabilities and Provisions :		
	Sundry Creditors	$\times \times \times$	
	Bills Payable	$\times \times \times$	
	Bank Overdraft	$\times \times \times$	
	Outstanding Expenses	$\times \times \times$	
	Provision for Taxation	$\times \times \times$	
	Proposed Dividend	$\times \times \times$	
	Total Current Liabilities		$\times \times \times$
	Total Liabilities	_	×××

#### 10.4 Other Budgets

### **Cost of Goods Sold Budget**

Cost of goods production is prepared for planning the production cost which includes direct materials, direct labours and manufacturing overheads. Under variable costing, fixed manufacturing overheads are excluded from production cost. But under absorption costing, fixed manufacturing overhead is included in production cost. It can be prepared after preparation of production budget, direct material consumption budget, direct labour cost budget and manufacturing overhead budget.

The format of cost of goods sold budget is given below:

# Cost of Goods Sold Budget (Under Variable Costing) For Months

For Months	
Beginning Inventory of Direct Materials	×××
Add: Purchase of Direct Materials	×××
Total Direct Materials Available	×××
Less: Ending Inventory of Direct Materials	$\times \times \times$
Total Direct Materials Consumption	×××
Direct Labour	$\times \times \times$
Variable Manufacturing Overhead	$\times \times \times$
Total Production Cost	×××
Add: Beginning Inventory of Finished Goods	×××
Total Finished Goods Available for Sale	×××
Less: Ending Inventory of Finished Goods	×××
Cost of Goods Sold	×××

#### **Account Receivable Budget**

Account receivable budget includes the portion of credit sales and details of amount collection from the customers. It is very much useful to control over the credit sales.

The format of Account receivable budget is given below:

# Account Receivable Budget For Months.....

Particulars/Months	Januar	Februar	March	Total
	$\mathbf{y}$	y		
Beginning Balance	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Add: Credit Sales	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Total Receivable	×××	×××	×××	×××
Less: Collection from Debtors	•			
This Month's Sales	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Last Month's Sales	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Total Collection from Debtors	×××	×××	×××	×××
Ending Balance	×××	×××	×××	×××

#### **Account Payable Budget**

Account payable budget includes the portion of credit purchases and payment of such credit purchases. It is very much useful to strength the credit purchase activities.

The format of Account payable budget is given below:

# Account Payable Budget For Months.....

Particulars/Months	January	February	March	Total
Beginning Balance	×××	×××	$\times \times \times$	×××
Add: Credit Purchase	$\times \times \times$	$\times \times \times$	$\times \times \times$	$\times \times \times$
Total Payable	×××	×××	×××	×××
Less : Payment to Creditors	×××	×××	×××	×××
<b>Ending Balance</b>	×××	×××	×××	×××

#### **ILLUSTRATION 1**

The Nepal Electronics Co. products and sells a single product. The product requires two types of raw materials – A and B. The standard usage for each product is A: 2 units and B: 4 units. The actual sale for the last month was Rs.150,000. Sales planning for coming three months are as follows:

	January	February	March
Budgeted Sales Units	4,000	5,000	6,000

The company's policy is to have enough inventory to meet 25% of the next month budgeted sales. The beginning and ending inventory for 3 months period estimated are as follows:

	Product	Material A	Material B
Beginning Inventory (Units)	1,000	5,000	8,000
Ending Inventory (Units)	1,500	6,000	10,000

In the case of raw material, the company's policy is to maintain ending inventory equal to 50% of the units required for the next month's production. The purchasing price of the raw material A and B is Rs.5 and Rs. 10 per unit respectively.

The assistant controller is preparing 3 months budgets ending March. In the process, the following information have been accumulated:

**Sales:** Unit sales price Rs. 75. Credit sales typically are 80% of total sales. The credit experience indicates that 50% of the credit sales are collected during the month of sales and the remainders are collected during the following month.

**Purchases:** All purchases are credit purchases and creditors are paid in the following month of purchases. The purchases for Chaitra was Rs.150,000.

Overheads: Other monthly expenses will be as follows:

Salaries and Wages	Rs. 40,000
Rent and Taxes	Rs. 50,000
Depreciation	Rs. 10,000
Others	Rs. 20,000
Total	Rs. 120,000

**Capital Expenditure**: The president of the company has indicated that the firm should acquire a machine at a payment of Rs.50,000 on January.

Balance of cash on 1st January in Rs. 200,000.

Required:(a) Sales budget for 3 months

- (b) Production Budget for 3 months.
- (c) Material Purchase Budget for 3 months.
- (d) Cash Budget for 3 months.

#### **Solution**

(a) Key points: (1) Sales units (2) Selling price Sales budget from 1<sup>st</sup> January to end of March

Months	Budgeted Sales units	Selling price	Sales Revenue
January	4,000	75	3,00,000
February	5,000	75	3,75,000
March	6,000	75	4,50,000
Total	15,000		1,125,000

(b) Key points: (1) budgeted sales units (2) inventory policy

Production budget for 3 months from 1st January to end of March

	Januar	y	Februa	ıry	March	
Budgeted sales units	4,000		5,000		6,000	
Add: Closing stock	1,250	(5000 X 25%)	1,500	(6,000 X 25%)	1,500	(Given)
Total need	5,250		6,500		7,500	
Less: Opening stock	1,000	(Given)	1,250		1,500	
<b>Budgeted Production units</b>	4,250		5,250		6,000	

(c) Key points: (1) Raw material consumption (2) inventory policy (3) Raw material price Raw material purchase budget

	January	February	March
Raw Material "A"			
Budgeted RM Consumption units	8,500	10,500	12,000
Add: Closing stock	5,250	6,000	6,000
Total need	13,750	16,500	18,000
Less: Opening stock	5,000	5,250	6,000

Budgeted Purchase units	8,750	11,250	12,000
Budgeted Purchase amount @ Rs 5	43,750	56,250	60,000
Raw Material "B"			
Budgeted RM Consumption units	17,000	21,000	24,000
Add: Closing stock	10,500	12,000	10,000
Total need	27,500	33,000	34,000
Less: Opening stock	8,000	10,500	12,000
Budgeted Purchase units	19,500	22,500	22,000
Budgeted Purchase amount @ Rs 10	195,000	225,000	220,000
Total Purchase amount [A+B] Rs.	238,750	281,250	280,000

## Working Note 1: Raw material consumption budget

Key points: (1) Production units (2) Raw material consumption rate

	January	February	March
Budgeted Production units	4,250	5,250	6,000
Raw Material "A" consumption @2units/unit	8,500	10,500	12,000
Raw Material "B" consumption @4units/unit	17,000	21,000	24,000

# (d) Cash Budget from 1st Jan. to end of March

	January	February	March	April
Opening Balance	200,000	130,000	126,250	
Add: Receipt				
Cash sales (Working Note 2)	60,000	75,000	90,000	
Collection from debtors (W/N 2)	180,000	270,000	330,000	
Total Receipt	240,000	345,000	420,000	
Amount available for payment	440,000	475,000	546,250	
Less: Payment				
Pay to creditors	150,000	238,750	281,250	280,000
Salaries and wages	40,000	40,000	40,000	
Rent and Taxes	50,000	50,000	50,000	
Others	20,000	20,000	20,000	
Machine purchase	50,000	-	-	
Total Payments	310,000	348,750	391,250	
Closing Balance	130,000	126,250	155,000	

# Working Note 2: Cash sales and amount collection from debtors

	December	January	February	March	April
Budgeted S/R	1,50,000	3,00,000	3,75,000	4,50,000	
Cash sales (20%)	30,000	60,000	75,000	90,000	
Credit sales (80%)	1,20,000	2,40,000	3,00,000	3,60,000	
Collection from debtors					
This month's sales (50%)	60,000	1,20,000	1,50,000	1,80,000	
Last month's sales (50%)		60,000	1,20,000	1,50,000	1,80,000
Total amount collection	·	1,80,000	2,70,000	3,30,000	

#### **ILLUSTRATION 2**

In its process of preparing budget a trading limited company prepared the following budgets.

Schedule: Past Sales and Sales Budget:

Month	December	January	February	March	April
Sales Revenue	500,000	600,000	700,000	600,000	500,000

**Sales**: 20% of sales will be in cash and remaining 80% will be in credit. 80% of credit sales will be collected in the month of sales and remaining in the next month of sales.

**Gross Profit:** The gross profit margin on sales will be 45%.

**Inventory Policy:** The desired ending inventory of merchandise will be equal to meet next month's sales need.

**Desired Cash Balance:** A minimum cash balance of Rs.25,000.

**Operating Expenses**: The operating expenses, selling and distribution expenses will be 20% of sales revenue paid when they due

**Purchases**: the purchases of the month will be paid in the month of purchase.

**Capital Expenditure**: Company intends to purchase a vehicle at a cost of Rs.2,00,000 in the month of Baishak.

**Share Issues:** Company has planned to issue additional share capital for amounting Rs. 2,00,000 on the month of Jetha

Cash Balances and its Provisions: the minimum cash balance Rs. 25,000 each month and excess of Rs. 30,000 is deposited into bank. The company has approached a commercial bank for a line of credit to meet temporary deficiency of cash. The borrowings will be in a multiple of Rs. 5,000 and repayments in Rs.1,000 together with interest of 12% p.a.

**Cash and Inventory Balances:** The cash balance and inventory of merchandise at the end of Chaitra was Rs.26,000 and Rs.3,30,000.

**Required:** (a) Merchandise purchase budget for the three months ending March.

- (b) Operating and selling and distribution budget for the three months.
- (c) Cash collections and distribution budget for the three months.

#### **Solution**

(a) Merchandise purchase budget for the three months ending March

	January	February	March	April
Sales	600,000	700,000	600,000	500,000
Less: Gross Profit @45%	270,000	315,000	270,000	225,000
Cost of Sales	330,000	385,000	330,000	275,000
Add: Ending Inventory	385,000	330,000	275,000	
Total need	715,000	715,000	605,000	
Less: Beginning Inventory	330,000	385,000	330,000	
Purchase Amount	385,000	330,000	275,000	

#### (b) Operating and selling and distribution budget for the three months

	January	February	March
Sales	600,000	700,000	600,000
Operating and selling and	120,000	140,000	120,000
distribution @ 20% on Sales			

#### (c) Cash Budget

	January	February	March
Opening Balance	26,000	25,000	316,600
Add: Receipt			
Cash sales (Working Note 1)	120,000	140,000	120,000

Collection from debtors (Working Note 1)	464,000	544,000	496,000
Issue of share		200,000	
Total Receipt	584,000	884,000	616,000
Amount available for payment	610,000	909,000	932,600
Less: Payment			
Purchase	385,000	330,000	275,000
Operating and selling and distribution	120,000	140,000	120,000
Vehicle purchase	200,000		
Total Payments	705,000	470,000	395,000
Cash Surplus (Deficits)	(95,000)	439,000	537,600
Borrowing from Bank	120,000	0	0
(Repayment of loan – Principal)	0	(120,000)	0
(Repayment of loan – Interest)	0	(2,400)	0
Closing Balance	25,000	316,600	537,600
Cash Balance	25,000	30,000	30,000
Bank balance	0	286,600	507,600

Interest =  $120,000 \times 12\% \times 2/12 = 2,400$ 

Bank balance = Current Account

W/N 1: Cash sales and amount collection from debtors

	December	January	February	March	April
Budgeted Sales Revenue	500,000	600,000	700,000	600,000	
Cash sales (20%)	100,000	120,000	140,000	120,000	
Credit sales (80%)	400,000	480,000	560,000	480,000	
Collection from debtors					
This month's sales (80%)	320,000	384,000	448,000	384,000	
Last month's sales (20%)		80,000	96,000	112,000	96,000
Total amount collection		464,000	544,000	496,000	

#### **ILLUSTRATION 3**

The sales budget for a company for the first quarter of a year is given below:

Baisakh Budgeted sales Rs. 1,10,000

Jestha 1,50,000

Ashadh 1,80,000

Total 4,40,000

In order to have data available for preparing a Cash Budget, the company is anxious to determine budgeted cash collections from sale.

To this end, the following information has been assembled:

60% in month of sales

Collection of sales: 30% in month following scale

8% in second month following sale

2% uncollective

The company gives a 2% cash discount for payments made by customers during the month of sale. The accounts receivable balance to start the year is Rs. 44,000 of which Rs. 8,000 represents uncollected Falgun sales and Rs. 36,000 represents uncollected Chaitra sales.

Required:

What were the total sales for Falgun? For Chaitra?

Prepare a schedules showing the budgeted cash collection from sales, by month and in total, for the three month period.

#### **Solution:**

	November	December	January	February	March	April	
Credit Sales	**80,000	*90,000	110,000	150,000	180,000		
This month 60%	54,000	54,000	66,000	90,000	108,000		
(Discount 2%)			(1,320)	(1,800)	(2,160)		
Last month 30%		24,000	*27000	33,000	45,000	72,000	March Sales 40%
Before last month 8%			**6,400	*7,200	8,800	15,000	Feb. Sales
Total amount collection			98,080	128,400	159,640		
Bad Debt 2%			**1,600	*1,800	2,200	P/LA/C	

Account Receiable	Chaitra Sales = 36000 X 100/40 = 90,000
* Chaitra Sales = 36,000	Falgun Sales = 8,000 X 100/10 = 80,000
** Falgun Sales = 8,000	

# ILLUSTRATION 4 The Balance Sheet as on December 31<sup>st</sup> of year II of an industry is given below:

	Rs.		Rs.
Capital	500,000	Building	200,000
Profit and Loss Account	220,000	Machine	160,000
Amount due for Merchandise	225,000	Investment	40,000
Amount Payable Machine Supplier	50,000	Inventory:	
(due in Baishak)		Merchandise	121,000
Outstanding Wages	124,800	Finished Goods	86,400
		Account Receivable from Customer:	
		Sale of Falgun	184,000
		Sale of Chaitra	320,000
Tax Payable due in Baishakh	16,600	Cash in Hand	25,000
_	1,136,400		1,136,400

The actual sales and forecasted sales of the coming year are given for necessary consideration.

Months	November	December	January	February	March	April	May
Sales in Units	23,000	20,000	24,000	25,000	24,000	25,000	25,000

**Sales:** Sale price per unit will be Rs. 20. Sales are on credit. 20% realizes in the month of sale on which 2% discount will be allowed. Balance will be collected equally in two installments following month of sales on monthly basis.

**Purchases:** One unit of finished goods will require 5 kg of merchandise. The merchandise will cost Rs. 2 per kg. Merchandises are procured on credit, payable after the month of purchase.

**Wage:** Wage payment for one unit of finished goods will be Rs. 6 & which will be paid in the following month.

**Overhead:** Payment will be made in the same month. Variable manufacturing will be Rs.2 per unit. Fixed manufacturing cost for one year will be Rs. 120,000.

**Inventory Policy:** Merchandise – 50% of the subsequent month's requirement.

Finished Goods – 20% of the subsequent month's sales.

Minimum Cash Balance Expected will be Rs. 25,000.

The industry paid Rs. 50,000 in Baishak to machine supplier. A commercial bank has given approval to avail loan to the industry in the multiple of Rs. 5,000 @ 12% p.a. The loan provides provision to reimburse in the multiple of Rs. 1,000.

Required: 1. Production Budget for three months ending March

- 2. Merchandise Purchase Budget for three months ending March
- 3. Cash Budget for three months ending March
- 4. Income Statement (consolidated) for three months ending March

#### **Solution**

#### 1 Production Budget

	January	February	March	April	May
Sales units	24,000	25,000	24,000	25,000	25,000
Add: Ending Inventory	5,000	4,800	5,000	5,000	
Total need	29,000	29,800	29,000	30,000	
Less: Beginning Inventory	*4,800	5,000	4,800	5,000	
Production units	24,200	24,800	24,200	25,000	

<sup>\*</sup> Finished Goods 86,400 (= 4,800 units X Rs. 18)

Working Note 1: Calculation of production cost per unit (using variable costing)

DM (5 kg X Rs 2) = 10Wages = 6VMOH = 2Cost per unit = 18

#### 2 Raw materials purchase budget

	January	February	March	April
Production units	24,200	24,800	24,200	25,000
RM Consumption [@5 kg/unit]	121,000	124,000	121,000	125,000
Add: Ending Inventory	62,000	60,500	62,500	
Total need	183,000	184,500	183,500	
Less: Beginning Inventory	*60,500	62,000	60,500	
RM Purhcase (Kg)	122,500	122,500	123,000	
RM Purchase @ Rs. 2/kg	245,000	245,000	246,000	

<sup>\*</sup> RM 121,000 (= 60,500 kg X Rs 2)

## 3. Cash Budget for 3 months from 1<sup>st</sup> Jan. to 31<sup>st</sup> March

	January	February	March	April
Opening Balance	*25,000	28,280	25,420	
Add: Receipt				

Collection from Debtors	438,080	450,000	486,080	
(W/N 2)				
Amount available for payment	463,080	478,280	511,500	
Less: Payment				
Pay to creditors	*225,000	245,000	245,000	246,000 B/S
Wages (Working Note 3)	*124,800	145,200	148,800	145,200 B/S
VMOH (Working Note 4)	48,400	49,600	48,400	
Fixed Manufacturing	10,000	10,000	10,000	
Overhead				
Pay to machine supplier	50,000			
Tax	16,600			
Total Payment	474,800	449,800	452,200	
Surplus (Deficits)	(11,720)	28,480	59,300	
Borrowings	40,000	-	-	
(Bank loan repayment)	-	(3,000)	(33,000)	4,000 B/S
(Interest payment)	-	(60)	(990)	4000X12%X3/12
				= 120  B/S
Closing Balance	28,280	25,420	25,310	B/S

# • Opening Balance

11,720+25,000 = 36,720

28,480 - 25,000 = 3,480

Interest =  $3,000 \times 12\% \times 2/12 = 60$ 

59,300 - 25,000 = 34,300

Interest =  $33,000 \times 12\% \times 3/12 = 990$ 

34,000 X 12% X 3/12 = 1,020 (Not possible)

# 4. Income Statement for 3 months from 1<sup>st</sup> Jan. to 31<sup>st</sup> March

Sales units	(24,000+25,000+24,000)	73,000 units
Budgeted Sales Revenue	(73,000 units X Rs. 20)	1,460,000
Less: COGS	(73,000 units X Rs.18)	1,314,000
	W/N 1	
Gross Profit		146,000
Less: Other Expenses		
FMOH	30,000	
Discount	5,840	
Interest	(60+990+120=) 1,170	37,010
Profit transfer to B/S		108,990

# 5. Budgeted Balance Sheet as on end 31st March

Capital + Liability	Rs.	Asset	Rs.
Capital	500,000	Building	200,000
Profit and Loss Account	328,990	Machine	160,000

220,000 + 1,08,990			
A/C Payable	246,000	Investment	40,000
		Inventory:	
		R/M (62,500 kg X Rs 2)	125,000
Outstanding Wages	145,200	Finished Goods	90,000
		(5,000 units X Rs 18)	
Bank loan	4,000	Account Receivable	584,000
Interest Payable	120	Cash in Hand	25,310
	1.224.310		1.224.310

## Wrking Note 2 Cash collection from debtors

	November	December	January	February	March	April
Credit Sales amount	460,000	400,000	480,000	500,000	480,000	
(sales units X SP)						
This month 20%	92,000	80,000	96,000	100,000	96,000	
(Discount 2%)			(1,920)	(2,000)	(1,920)	
Last month 40%		184,000	*160,000	192,000	200,000	384,000
Before last month 40%			**184,000	*160,000	192,000	200,000
Total collection			438,080	450,000	486,080	B/S

<sup>\*</sup> Chiatra sales 320,000

Discount = 1,920+2,000+1,920 = 5,840 (P/L account)

# Working Note 3: Wage payment budget

	January	February	March
Production units	24,200	24,800	24,200
Wages @ Rs 6 per unit	145,200	148,800	145,200

## Working Note 4: VMOH budget

	January	February	March
Production units	24,200	24,800	24,200
VMOH @ Rs. 2 per unit	48,400	49,600	48,400

## **Cost of Goods Sold Budget**

Opening Stock of Raw Materials	(60,500 kg X Rs 2)	121,000 (Opening Balance)
Add: Raw Material Purchased	(368,000 kg X Rs 2)	736,000 (RM Purchased budget)
RM avaiable for consumption	428,500 kg X Rs 2)	857,000
Less: Closing Stock of RM	(62,500 kg X Rs 2)	125,000
RM Consumption	(366,000 kg X Rs 2)	732,000
Wages	(73,200 units X Rs 6)	439,200
Variable Manufacturing Overhead	(73,200 units X Rs 2)	146,400
Production cost	(73,200 units X Rs 18)	1,317,600
Add: Openning Stock of Finished Goods		86,400 (Opening Balance)
Goods avaiable for sales		1,404,000
Less: Closing Stock of Finished Goods	(5,000 units X Rs. 18)	90,000
Cost of goods sold		1,314,000

<sup>\*\*</sup> Falgun sales 184,000

#### **ILLUSTRATION 5**

A Company wants a master budget for the next three months beginning January 19x2. It desires an ending minimum cash balance of Rs. 4,000 each month. Sales are forecasted at an average selling price of Rs. 4 per unit. Inventories are supposed to equal 125% of the next month sales in units except for the month end of March. The March 31 inventory in units should be 75% of the next month sales. Merchandise costs are Rs. 2 per unit. Purchases during any given month are paid in full during the following month. All sales are in credit, payable within thirty days but experience has shown that 40% of current sales is collected in the current month, 40% in the next month, and 20% in the next month after. Bad debts are negligible.

Monthly Operating Expenses are as follows:

Wages and Salaries	Rs.10,000	
Insurance Expired	Rs. 200	
Depreciation	Rs. 150	
Miscellaneous	Rs. 2,000	
<b>T</b>	D 100	

Rent Rs. 100+ 10% of Sales

Cash dividend of Rs. 1,000 are to be paid quarterly beginning January 15, and are declared on the fifteen of the previous month. All operating expenses are paid as incurred except insurance, depreciation and rent. Rent of Rs. 100 is paid at the beginning of each month and additional 10% of sales is paid quarterly of the month following the quarter. The next settlement is due on January 10. The Company plans to buy some new furniture and fixtures for Rs. 2,000 cash in March.

Money can be borrowed and repaid in multiples of Rs. 500; at an interest is 18% per annum. Management wants to minimize borrowing and repay rapidly. Interest is computed and paid when the principal is repaid. Assume that borrowing takes place at the beginning and repayments at the end of the months in question. Money is never borrowed at the beginning and repaid at the end of the same month. Compute interest to the nearest Rupees.

#### **Balance Sheet (December 31, 19X1)**

Cash	4,000	Account Payable	28,750
Account Receivable	16,000	Dividend Payable	1,000
Inventory	31,250	Rent Payable	7,000
Un-expired Insurance	1,200		
Fixed Assets (Net)	10,000	<b>Equity Share</b>	25,700
	62,450		62,450

Recent and Forecasted Sales are:

October	Rs. 30,000
November	20,000
December	20,000
January	50,000
February	60,000
March	30,000
April	36,000

Required: Master Budget for first three month of 19x2.

#### **Solution**

#### 1. Goods Purchase Budget

Jan	Feb	March	April

Budgeted Sales revenue	50,000	60,000	30,000	36,000
Less: Gross Profit (50% on sales)	25,000	30,000	15,000	18,000
Cost of sales	25,000	30,000	15,000	18,000
Add: Desired Closing Stock	37,500	18,750	13,500	
Total Need	62,500	48,750	28,500	
Less: Opening Stock	*31,250	37,500	18,750	
Purchase Amount	31,250	11,250	9,750	

# 2. Operating Expenses Budget

	January	February	March	Total
Wages and Salaries	10,000	10,000	10,000	30,000
Insurance expired	200	200	200	600
Depreciation	150	150	150	450
Miscellaneous	2,000	2,000	2,000	6,000
Rent (Fixed)	100	100	100	300
Rent (Variable) 10% of Sales	5,000	6,000	3,000	14,000
Total	17,450	18,450	15,450	51,350 P/L A/C

## 3. Cash Budget

	Jannuary	February	March	April
Opening Balance	*4,000	4,150	4,165	
Add: Receipt				
Collection from debtors $(W/N - 1)$	32,000	48,000	46,000	
Amount available for payment	36,000	52,150	50,165	
Less: Payments				
Pay to creditors	*28,750	31,250	11,250	9,750 A/C Payable
Wages and Salaries	10,000	10,000	10,000	
Miscellaneous	2,000	2,000	2,000	
Rent (Fixed)	100	100	100	
Rent (Variable)	*7,000	-	-	14,000 Rent payble
Dividend payment	*1,000	-	-	
Purchase Furniture	ı	-	2,000	
Total Payment	48,850	43,350	25,350	
Surplus (Deficits)	(12,850)	8,800	24,815	
Borrowings	17,000	-	-	
(Repayment – Principal)	-	(4,500)	(12,500)	
(Repayment – Interest)	-	(135)	(563)	
Closing Balance	4,150	4,165	11,752	

\*From Opening Balance Sheet Interest Expenses = 4500\*18%\*2/12 = 135; 12500\*18%\*3/12 = 563

# 4. Income Statement from 1<sup>st</sup> Jan to 31<sup>st</sup> March

Sales Revenue	1,40,000
Less: Cost of Goods sold @50% of Sales	70,000
Gross Margin	70,000
Less: Other Expenses	

Operating Expenses	51,350	
Intereset (135+563)	698	52,048
Net profit before tax		17,952
Less: Provision for dividend		1,000
Net Profit transfer to Balance Sheet		16,952

## 5. Balance Sheet (as on March 31, 19X2)

Account Payable	9,750	Cash	11,752
Dividend Payable	1,000	Account Receivable	30,000
Rent Payable	14,000	Inventory	13,500
P/L Account	16,952	Un-expired Insurance	600
<b>Equity Share</b>	25,700	Fixed Assets (Net)	11,550
	67,402		67,402

Insurance = 1,200 - 600 = 6000

Fixed Assets = 10,000 + 2,000 - 450 = 11,550

Working Note 1: Calculation of Cash collection

	Nov	Dec	Jan	Feb	March	April
Credit Sales	20,000	20,000	50,000	60,000	30,000	
This month's Sales 40%	8,000	8,000	20,000	24,000	12,000	
Last month's Sales 40%		8,000	*8,000	20,000	24,000	18,000
Before Last month's sales 20%			**4,000	*4,000	10,000	12,000
Total collection			32,000	48,000	46,000	

<sup>\*</sup> December sales

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<sup>\*\*</sup>November Sales