

Budget and Budgetary Control

CMA-2 (COST AND MANAGEMENT ACCOUNTING)

PRODUCTION AND CASH BUDGET

4th Semester

Budget

CIMA defines budget as “ A financial 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, expenditure and employment of capital”. Budget can be defined as the overall statement in financial terms of a comprehensive plans of operations and actions.

Budgetary Control

CIMA defined budgetary control as “The establishment of department budget 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 firm basis for its revision.

Advantages of Budget

1. It provides an advance estimate of revenue and expenses
2. It helps to develop at all levels of management the habit of timely careful and adequate consideration of all factors before reaching important decisions
3. It compels all members of management to participate in the establishment of goals of the organization.
4. It pinpoints the extent and lack of efficiency in the organization
5. Periodical review of a budget will help to check the progress of the target to be achieved
6. It provides a platform for evaluating subsequent performance
7. It can help managers to identify the current and other potential bottlenecks in operatins.

Limitation of Budget

1. Lack of coordination between different departments may create problems in achieving the desired results.
2. A budget is based on estimate Wrong estimate may create more problems than solutions

Distinction between Budgetary Control and Standard Costing

<u>Budgetary control system</u>	<u>Standard Costing</u>
It is very board in nature	Is technically more sound system of cost control
Budgetary control system can be operated in parts	Standard costing system can be operated for material, labour overhead
It covers all aspects of business like manufacturing, trading operations, marketing operations	Standard costing covers all aspects of the business

Budget Mannual

It is the document prepared by the budget department under the supervision of budget committee.

A budget manual contains the following:

1. A statement of the objectives of the business
2. A statement of duties and responsibilities of various personnel's
3. Time schedule for budget preparation

PRODUCTION BUDGET

A production budget is prepared after sales budget and it is the plan for the production of different items based on sales budget

A production budget is as follows:

ABC Ltd

Production Budget for the Year.....

Product	A	B	Total
Budgeted sales in unit	*	*	*
Add: Desired closing stock in units	*	*	*
Total requirement	*	*	*
Less: Opening Stock	*	*	*
Budgeted production in units	*	*	*

Before the finalization of the production budget the production manager should assess the feasibility of the budgeted production after taking into consideration the avability of man and machines

Principal budget factor: the factor which will limit the activities of an under taking

Examples:

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1. Plant capacity
2. Availability of raw materials
3. Availability of raw materials

Ques 1. Following is the sales budget for the first six months of the year 2019 in respect of PQR Ltd

Month	JAN	FEB	MARCH	APRIL	MAY	JUNE
SALES(U)	10,000	12,000	14,000	15,000	15,000	16,000

Finished goods inventory at the end of each month is expected to be 20% of the budgeted sales quantity for the following month. Finished goods inventory was 2700 units on January 1 2019. There would be no WIP for the end of the month.

Each unit of finished product requires two types of materials as detailed below:

Material X: 4 kgs@10 /kg; Material Y: 6Kg@ 15/kg

Material on hand on jan 1 2019 was 19,000 kgs of materials X and 29,000 Kg of Materials Y. Monthly closing stock of materials is budgeted to be equal to half of the requirement of the next months productions

Prepare:

1. Monthly production quantity for the quarter one
2. Monthly raw material consumption quantity budget from January 2019 to March 2019
3. Material purchase quantity budget for the quarter one

Solutions:

PQR LTD

Production Budget for the month of a jan, feb march 2019 (Units)

Month	Jan	Feb	March
Budgeted sales in units	10,000	12,000	14,000
Add : desired closing stock	2400	2800	3000
Total requirements	12,400	14,800	17,000
Less: opening stock	2,700	2400	2800
Budgeted production in units	9700	12,400	14,200

Raw material consumption budget for the month of January, feb, march 2019 (KG)

	Budgeted production	Material X@4 kg	Material Y @ 6 kg

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	(units)		
January	9700	38,800	58,200
February	12,400	49,600	74,400
March	14,200	56,800	85,200
	36,300	1,45,200	2,17,800

Raw material purchase budget for the month Jan, Feb, March 2019

Product	Material X (KG)	Material Y (KG)
Raw material required for production	1,45,200	2,17,800
Add: desired closing stock	30,000	45,000
	1,75,200	2,62,800
Less: opening stock	19,000	29,000
Materials to be purchased	1,56,200	2,33,800

WORKING NOTES:

- Closing of January should be equal to 20% of the budgeted sales of February. Budgeted sales of February is 12,000 units. Closing stock of January will be 20% of 12,000 units = 2,400 units.*
- Budgeted production of April 2019*

Budgeted sales	15,000
Add: desired closing stock (20% of 15,000)(may)	3,000
	18,000
Less: opening stock	3,000
Budgeted production	15,000

Raw materials required for production of 15,000 units:

Material X: 15,000 *4 KG= 60,000 KG; Material Y: 15,000 *6 kg=90,000 kg

Closing stock of raw materials at the end of March:

X= 60,000 kg*1/2=30,000kg Y= 90,000*1/2= 45,000 kg

Ques 2: from the following particulars prepare a purchase budget for the year 2016 when the estimated price per material is A: Rs 1 , B: Rs 2, C: Rs 3 (CU B.COM 2002)

Materials	Estimated consumption of materials(KG)
A	2,00,000
B	3,00,000
C	4,00,000

	Estimated stock on 1.1. 2016	Estimated stock on 31.12.2016
A	20,000	25,000
B	40,000	30,000
C	50,000	40,000

SOLUTIONS:

Purchase budget for the year ended 31.12.2016

	A	B	C
Estimated consumption	2,00,000	3,00,000	4,00,000
Add: closing stock of materials	25,000	30,000	40,000
	2,25,000	3,30,000	4,40,000
Less: opening stock of materials	20,000	40,000	50,000
Purchase of materials	2,05,000	2,90,000	3,90,000
Estimated price	1	2	3
Budgeted purchases (budgeted qty* price per kg)	2,05,000	5,80,000	11,70,000

Ques 3: N ltd has prepared the following sales budget for the month of 2011 [CU BCOM HONS]

Month	Budgeted units
Jan	10,800
Feb	15,600
March	12,200
April	10,400
May	9,800

Inventory of finished goods at the end of march is to be equal to 25% of sales estimates for the next month. On Jan 1,2011 there was 2,700 units of products on hand. There was no WIP at the end of every month. Every unit of product requires two types of materials in the following quantities: Material A: 4kg and Material B: 5 Kg

Materials equal to one half of the requirement of the next month production are to be in hand at the end of each month. This requirement was met on 1.1.2011

Prepare

1. Production budget

2. Material purchase budget

Solutions

NLTD

Production budget for the quarter 31.03.2011

Particulars	January	February	March
Units of budgeted sales	10,800	15,600	12,200
Add: closing stock (25% of sales estimated for the next month)	3900 14,700	3050 18,650	2600 14,800
Less: opening stock (closing stock of last month)	2700	3900	3050
	12,000	14,750	11,750

Purchase budget for material A for the quarter ending 31.03.2011

PARTICULARS	JANUARY		FEBRUARY		MARCH	
	Basis	Qty (kg)	Basis	Qty (kg)	Basis	Qty (kg)
Material required for production	12,000*4kg	48000	14750*4	59,000	11,750*4	47,000
Add closing stock	½*14,750*4	29,500	½*11,750*4	23,500	½*10,250*4	20,500
		77500		82500		67500
Less: opening stock	50%of 48,000	24,000	50%of 59,000	29,500	50%of 47,000	23,500
		53,500		53,000		44,000

PARTICULARS	JANUARY		FEBRUARY		MARCH	
	Basis	Qty (kg)	Basis	Qty (kg)	Basis	Qty (kg)
Material required for production	12,000*5kg	60000	14750*5	73,750	11,750*4	58,750
Add closing stock	½*14,750*5	36,875	½*11,750*5	29,375	½*10,250*5	25,625
		96875		103125		84375
Less: opening stock	50%of 60,000	30,000	50%of 73,700	36875	50%of 58750	29,375
		66875		66250		55,000

CASH BUDGET

Cash budget is composed of four sections:

1. Receipts section
2. Disbursement sections

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3. Cash excess or deficiency section
4. The financing section

FORMAT OF CASH BUDGET

<u>PARTICULARS</u>	<u>JAN</u>	<u>FEB</u>	<u>MARCH</u>
Opening cash balance	*		
Receipts			
1. Cash sales			
2. Collection from debtors			
3. Sales of assets			
4. Income from investment			
Total cash available before current financing (A)			
Disbursements			
1. Cash purchase			
2. Payment to suppliers			
3. Payment of rent, rates and taxes			
4. Purchase of assets			
5. Payment of dividend			
6. Payment of loan			
Total of disbursements (B)			
Excess (Deficiencies) (A-B)			
Financing : Borrowing/Investments			
Closing cash balance			

Ques 4.

From the following compute collection from debtors for the month of june, july, august:
(CU BCOM 2008)

	APRIL	MAY	JUNE	JULY	AUGUST
Sales(Rs)	1,00,000	1,20,000	90,000	1,05,000	1,25,000

20% of sales are made in cash. Debtors are allowed 2 months credit. Debtors will receive 5% discount on sale if they pay off their dues within one month from the date of sales. 4/5th of the debtors normally clear their dues to avail the cash discount remaining debtors pay on the due date.

Solutions

Calculation of cash sales and credit sales

	APRIL	MAY	JUNE	JULY	AUGUST
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Sales(Rs)	1,00,000	1,20,000	90,000	1,05,000	1,25,000
Less: Cash sales (20%)	20,00	24,000	18,000	21,000	25,000
Credit sales	80,000	96,00	72,000	84,000	1,00,000

Though the debtors are allowed two months credit 4/5th of the debtors are paying within one month to avail 5% discount. The collection from debtors have been made as follows:

April sales of Rs 80,000	
4/5 th of 80,000*95%	60,800 has been collected in May
1/5 th of 80,000 *100%	16,000 has been collected in June
May sales of Rs 96,000	
4/5 th of 96,000*95%	72960 has been collected in june
1/5 th of 96000*100%	19200 has been collected in July
June sales of Rs 72,000	
4/5 th of 72,000*95%	54720 has been collected in july
1/5 th of 72000*100%	14400 has been collected in august
July sales of Rs 84,000	
4/5 th of 84,000*95%	63840 has been collected in july
1/5 th of 84000*100%	16800 has been collected in august

Summary of collection from debtors

	June	July	August
	16,000		
	72960	19200	
		54720	14,400
			63840
	88960	73920	78240

Ques5:

From the following informations prepare cash budget for the quarter ending 30.06.2005

(cu bcom hons)

Month	Sales	Purchases	Wages	Other expenses
February	240000	168000	20000	14000
March	260000	200000	24000	16000
April	160000	208000	16000	12000
May	232000	212000	20,000	24,000
June	176000	160000	16000	12000

Additional Information:

- Cash in hand 1.4.2005-- 10,000

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2. Sales 20% realized in the month of sale and discount allowed 2% the balance realized after two months of sales
3. 4/5th of the credit purchases is paid after one month of that purchases and next to that month the balance 1/5th is paid.
4. Wages are paid 3/4th on the due date while 1/4th during the next month
5. Other expenses are paid at a lag of one month
6. Income tax Rs 25,000 due on or before 30.06.2005

Solutions

Particulars	April	May	June
Opening cash balance	10,000	5760	21832
Receipts:			
Collection from debtors	2,23,360	2,53,472	1,62,496
Total cash available before current financing	2,33,360	2,59,232	1,84,328
Disbursements			
Payment to suppliers	1,93,600	2,06,400	2,11,200
Payment of wages	18,000	19,000	17,000
Other expenses	16,000	12,000	24,000
Payment of income tax			25,000
Total disbursements	227600	237400	227200
Excess(deficiencies)	5760	21832	(92872)

Working Notes:

1. 20% of the credit sales will be collected in the month of sales after allowing 2% discount. The balance will be collected after two months of sale.

Feb sales of Rs 240000	
20% of 240,000*98%	47040 has been collected in feb
80% of 240,000 *100%	192000 has been collected in april
March sales of Rs 260000	
20% of 260,000*98%	50960 has been collected in march
80% of 260000*100%	208000has been collected in may
April sales of Rs 160,000	
20 % of 160000*98%	31360has been collected in april
80% of 160000*100%	128000has been collected in june
May sales of Rs 232000	
20% of 232000*98%	45472 has been collected in may
80% of 232000*100%	185000 has been collected in july
June sales of Rs 176 000	
20% of 176000*98%	34496 has been collected in june
80% of 176000*100%	140800 has been collected in august

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Summary of collection from debtors

	April	May	June
	192000		
		208000	
	31360		128000
		45472	
			34496
	223360	253472	162496

Payment of suppliers

	April	May	June
1/5 th of feb purchase (168000)	33600		
4/5 th march purchase (2,00,000)	160000		
1/5 th of march purchase (2,00,000)		40,000	
4/5 th of april purchase (208000)		166400	
1/5 th april purchase (208000)			41600
4/5 th of may purchase (212000)			169600
	193600	206400	211200

Payment of wages

	April	May	June
3/4 th of current month	12,000	15,000	12,000
1/4 th of previous month	6000	4000	5000
	18,000	19,000	17,000

Ques6:

From the following particulars prepare monthly budget of the Sunclear ltd of October, November, December 2011

Month	Purchase	Sales	Wages	Expenses
July	40,000	60,000	8,000	10,000
August	60,000	80,000	10,500	12,000
September	50,000	70,000	17500	12500
October	70,000	90,000	17100	11600

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November	80,000	100000	12000	11800
December	60000	120000	12000	12300

It is expected that 50% of sales will be in cash and 25% of the purchase can be made in credit.

Debtors are allowed 2 months credit but will receive 5% cash discount if they will pay off their dues within the month next to the month of sale. 80% of the debtors normally clear their dues at the end of the period to avail the cash discount. Rest 20% of the debtors pay on the due date

4/5th of the credit purchase is paid after 1 month of that purchase and next to that month the balance 1/5th is paid.

Wages are paid within 5th of the following month.

Expenses includes selling and distribution expenses which are 10% of the sales.

Any deficiencies in cash at the end of a month will be met by taking short term loan for two months from the bank

At the end of September 2011 the sunclear ltd Rs40,000 cash in hand.

Solutions:

Cash budget for the month of October, November and December 2011

	October	November	December
Opening cash	40,000	25,000	10,800
Receipts			
Cash sales	45,000	50,000	60,000
Collection from debtors	34600	41200	47,000
Total cash available before current financing (A)	1,19,600	1,16,200	1,17,800
Disbursement			
Cash purchases	52,500	60,000	45,000
Payment to suppliers	13,000	16500	19500
Payment of wages	17,500	17,100	12,000
Payment of selling and disbursement expenses	9,000	10,000	12,000
Payment of other expenses of the month	2600	1800	300
Total disbursements (B)	94600	105400	88800
EXCESS(A-B)	25,000	10,800	29,000
financing			
Closing cash balance	25,000	10,800	29,000

Calculation of cash sales

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MONTH	JULY	AUG	SEPT	OCT	NOV	DEC
Total sales	60,000	80,000	70,000	90,000	1,00,000	120,000
Less: cash sales (50%)	30,000	40,000	35,000	45,000	50,000	60,000
Credit sales	30,000	40,000	35,000	45,000	50,000	60,000

Cash collected from debtors

80% of the credit sales will be collected after one month after 5% cash discount. The balance amount will be collected after two months of sale. Calculation:

july sales of Rs 30000	
80% of 30,000*95%	22800 has been collected in aug
20% of 30000 *100%	6000 has been collected in sept
aug sales of Rs 40000	
80% of 40000*95%	30400has been collected in sept
20% of 40000*100%	8000 has been collected in oct
sept sales of Rs 35000	
80% of 35000*95%	26600has been collected in oct
20% of 35,000*100%	7000 has been collected in nov
Oct sales of Rs 45,000	
80% of 45000 *95%	34200 has been collected in nov
20% of 45000*100%	9000 has been collected in dec
Nov sales of Rs 50 000	
80% of 50000*95%	38000 has been collected in dec
20% of 50000*100%	10000has been collected in jan of next year

Summary of collection from debtors

	Oct	Nov	dec
	8000		
	26600	7000	-
		34200	9000
			38000
	34600	41200	47000

Calculation of cash purchases

MONTH	JULY	AUG	SEPT	OCT	NOV	DEC
Total purchases	40,000	60,000	50,000	70,000	80,000	60,000
Less: credit purchases(25%)	10,000	15,000	12,500	17,500	20,000	15,000

of purchases)						
Cash purchases	30,000	45000	37500	52500	60000	45000

Payment to suppliers

4/5th of the credit purchase is paid after one month of that purchase and 1/5th is paid after two months of that purchase. Calculation has made as follow:

August credit purchase of Rs 15,000 4/5 th of 15,000 will be paid in September	12,000
1/5 th of 15,000 will be paid in October	3,000
September credit purchases of Rs 12,500 4/5 th of Rs12,500 will be paid in October 1/5 th of Rs12,500 will be paid in November	10,000 2500
October credit Purchase of Rs17,500 4/5 th of Rs17,500 will be paid in November 1/5 th of 17,500 will be paid in December	14,000 3500
November credit purchases of Rs20,000 4/5 th of Rs20,000 will be paid in December 1/5 of 20,000 will be paid in January	16,000 4000

Summary of cash paid to Suppliers

Month	October	November	December
	3000		
	10,000	2500	-
		14,000	3500
			16000
	13,000	16500	19500

Wages were paid in the next month. It means September wages will be paid in October and Octobers wages will be paid in November and so on.

Ques 7:

From the following information prepare a cash budget for the three month ended on 30.09.2018:

[CU BCOM 2018]

- 1. Expected cash in hand and at bank Rs50,000 on 1.07.2018**

2. Monthly wages and salaries Rs20,000
3. Interest payable in august Rs10,000

Estimated	June	July	August	September
Cash sales	2,40,000	2,80,000	3,04,000	2,42,000
Credit sales	2,00,000	1,60,000	2,80,000	2,40,000
Purchases	3,20,000	3,40,000	4,80,000	3,60,000
Expenses	36,000	40,000	44,000	40,000

1. Credit sales are collected 50% in the month of sale and 50% in the following month. Collections are subject to 10% discount if received in the month of sales.
2. 10% of the purchases are in cash and balance is paid in the next month
3. Wages and salaries are payable at the end of the month of such expenses
4. 50% of expenses are paid in the month of such expenses and balance in the next month
5. Expenses include depreciation Rs4000

Solutions

Cash budget for three months ended on 30.09.2018

Particulars	July	August	September
1. Opening cash in hand	50000	126000	214000
2. Cash sales	280000	304000	242000
3. Collection from debtors	172000	206000	248000
4. Total receipts	452000	510000	490000
5. Total sources of cash	502000	636000	704000
6. Cash purchases of goods	34000	48000	36000
7. Payment to creditors	288000	306000	432000
8. Payment of salaries and wages	20,000	20,000	20000
9. Payment of expenses	34000	38000	38000
10. Payment of interest	--	10,000	--
11. Payment of cash (6+7+8+9+10)	376000	422000	526000
12. Closing cash in hand (5-11)	126000	214000	178000
13. Uses or applicants	502000	636000	704000

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of cash (11+12)			
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Workings:

1. Calculation of collection from debtors in different months 2018

	June	July	August	September
1. Credit sales	200000	160000	280000	240000
2. 50% collection in that month less 10% discount	90,000	72000	126000	108000
3. 50% collection in the following month	--	1,00,000	80,000	1,40,000
4. Collection from debtors (2+3)		172000	206000	248000

2. Calculation of cash paid for cash purchases and payments to creditors in different months of 2018.

	June	July	August	September
1. Total purchases	3,20,000	340000	480000	360000
Cash purchases (1*10%)	32,000	34,000	48,000	36,000
Credit purchase (1*90%)	2,88,000	3,06,000	4,32,000	3,24,000
Payment to creditors after one month	---	2,88,000	3,06,000	432000

2. Calculation of cash paid for expenses different months 2018:

	June	July	August	Septmber
1. Total expenses	36,000	40,000	44,000	40,000
2. Depreciation	4,000	4,000	4,000	4,000
3. Non depreciation (1-2)	32,000	36,000	40,000	36,000
4. 50% of expenses are paid in the month of such expenses	16,000	18,000	20,000	18,000
5. Balance (50% in the next month)	-	16,000	18,000	20,000
6. Expenses paid	--	34,000	38,000	38,000

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in cash (4+5)				
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