## Semester 4

CMA 2
4THSEMESTER
Prof. Sunita Saha (SS)

## Budget and Budgetary Control

# CMA-2 (COST AND MANAGEMENT ACCOUNTING) PRODUCTION AND CASH BUDGET 

$4^{\text {th }}$ 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

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| Budgetary control system | $\underline{\text { Standard Costing }}$ |
| :--- | :--- |
| It is very board in nature | Is technically more sound system of cost <br> control |
| Budgetary control system can be operated in <br> parts | Standard costing system can be operated for <br> material, labour overhead |
| It covers all aspects of business like <br> manufacturing, trading operations, marketing <br> operations | Standard costing covers all aspects of the <br> 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) | $\mathbf{1 0 , 0 0 0}$ | $\mathbf{1 2 , 0 0 0}$ | $\mathbf{1 4 , 0 0 0}$ | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{1 6 , 0 0 0}$ |

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: $\mathbf{4} \mathbf{k g s} @ 10 / \mathrm{kg}$; Material Y: $\mathbf{6 K g @ 1 5 / k g}$
Material on hand on jan 12019 was $19,000 \mathrm{kgs}$ of materials $\mathbf{X}$ and $29,000 \mathrm{Kg}$ 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 | 20 | $-12,000$ | 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 | $\mathbf{9 7 0 0}$ | $\mathbf{1 2 , 4 0 0}$ | $\mathbf{1 4 , 2 0 0}$ |  |

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

|  | Budgeted <br> production | Material X@4 kg | Material <br> 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 |
|  | $\mathbf{3 6 , 3 0 0}$ | $\mathbf{1 , 4 5 , 2 0 0}$ | $\mathbf{2 , 1 7 , 8 0 0}$ |

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

| Product | Material X (KG) | Material Y <br> $(\mathbf{K G})$ |
| :--- | :--- | :--- |
| 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 | $\mathbf{1 , 5 6 , 2 0 0}$ | $\mathbf{2 , 3 3 , 8 0 0}$ |

WORKING NOTES:

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

| Budgeted sales | 15,000 |
| :--- | :--- |
| Add: desired closing stock $(20 \%$ of <br> $15,000)$ (may) | 3,000 |
|  | $\mathbf{1 8 , 0 0 0}$ |
| Less: opening stock | 3,000 |
| Budgeted production | $\mathbf{1 5 , 0 0 0}$ |

Raw materials required for production of $\mathbf{1 5 , 0 0 0}$ units:
Material X: $15,000 * 4 \mathrm{KG}=60,000 \mathrm{KG}$; Material Y: $15,000 * 6 \mathrm{~kg}=90,000 \mathrm{~kg}$
Closing stock of raw materials at the end of March:
$\mathrm{X}=60,000 \mathrm{~kg} * 1 / 2=30,000 \mathrm{~kg} \quad \mathrm{Y}=90,000 * 1 / 2=45,000 \mathrm{~kg}$
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 | $\mathbf{3 , 0 0 , 0 0 0}$ |
| C | $\mathbf{4 , 0 0 , 0 0 0}$ |

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|  | Estimated stock on 1.1. 2016 | Estimated stock on <br> $\mathbf{3 1 . 1 2 . 2 0 1 6}$ |
| :--- | :--- | :--- |
| 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

|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ |
| :--- | :--- | :--- | :--- |
| 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 <br> 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 | $\mathbf{1 0 , 8 0 0}$ |
| Feb | $\mathbf{1 5 , 6 0 0}$ |
| March | $\mathbf{1 2 , 2 0 0}$ |
| April | $\mathbf{1 0 , 4 0 0}$ |
| May | $\mathbf{9 , 8 0 0}$ |

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 $\mathbf{2 , 7 0 0}$ 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: $\mathbf{5 ~ K g}$

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

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2. Material purchase budget

Solutions

## NLTD

Production budget for the quarter 31.03.2011

| Particulars | January | February | March |
| :---: | :---: | :---: | :---: |
| Units of budgeted sales | $\mathbf{1 0 , 8 0 0}$ | $\mathbf{1 5 , 6 0 0}$ | $\mathbf{1 2 , 2 0 0}$ |
| Add: closing stock (25\% of sales | $\mathbf{3 9 0 0}$ | $\mathbf{3 0 5 0}$ | $\mathbf{2 6 0 0}$ |
| estimated for the next month) | $\mathbf{1 4 , 7 0 0}$ | $\mathbf{1 8 , 6 5 0}$ | $\mathbf{1 4 , 8 0 0}$ |
| Less: opening stock (closing stock of <br> last month) | $\mathbf{2 7 0 0}$ | $\mathbf{3 9 0 0}$ | $\mathbf{3 0 5 0}$ |
|  | $\mathbf{1 2 , 0 0 0}$ | $\mathbf{1 4 , 7 5 0}$ | $\mathbf{1 1 , 7 5 0}$ |

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 <br> production | $12,000 * 4 \mathrm{~kg}$ | 48000 | $14750 * 4$ | 59,000 | $11,750 * 4$ | 47,000 |
| Add closing stock | $1 / 2 * 14,750 * 4$ | 29,500 | $1 / 2 * 11,750 * 4$ | 23,500 | $1 / 2 * 10,250 * 4$ | 20,500 |
|  |  | 77500 |  | 82500 |  | 67500 |
| Less: opening stock | $50 \%$ of <br>  <br> 48,000 | 24,000 | $50 \%$ of <br> 59,000 | 29,500 | $50 \%$ of <br> 47,000 | 23,500 |
|  |  | $\mathbf{5 3 , 5 0 0}$ |  | $\mathbf{5 3 , 0 0 0}$ |  | $\mathbf{4 4 , 0 0 0}$ |


| PARTICULARS | JANUARY |  |  | FEBRUARY |  | MARCH |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | Basis | Qty (kg) | Basis | Qty (kg) | Basis | Qty (kg) |  |
| Material required for <br> production | $12,000 * 5 \mathrm{~kg}$ | 60000 | $14750 * 5$ | 73,750 | $11,750 * 4$ | 58,750 |  |
| Add closing stock | $1 / 2 * 14,750 * 5$ | 36,875 | $1 / 2 * 11,750 * 5$ | 29,375 | $1 / 2 * 10,250 * 5$ | 25,625 |  |
|  |  | 96875 |  | 103125 |  | 84375 |  |
| Less: opening stock | $50 \%$ of | 30,000 | $50 \%$ of | 36875 | $50 \%$ of <br> 58750 | 29,375 |  |
|  | 60,000 | $\mathbf{6 6 8 7 5}$ |  | $\mathbf{6 6 2 5 0}$ |  | $\mathbf{5 5 , 0 0 0}$ |  |

## 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

| PARTICULARS | JAN | FEB | MARCH |
| :--- | :--- | :--- | :--- |
| 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) |  |  |  |
| 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) | $\mathbf{1 , 0 0 , 0 0 0}$ | $\mathbf{1 , 2 0 , 0 0 0}$ | $\mathbf{9 0 , 0 0 0}$ | $\mathbf{1 , 0 5 , 0 0 0}$ | $\mathbf{1 , 2 5 , 0 0 0}$ |

$\mathbf{2 0 \%}$ of sales are made in cash. Debtors are allowed 2 months credit. Debtors will receive $\mathbf{5 \%}$ discount on sale if they pay off their dues within one month from the date of sales. $4 / 5^{\text {th }}$ 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) | $\mathbf{1 , 0 0 , 0 0 0}$ | $\mathbf{1 , 2 0 , 0 0 0}$ | $\mathbf{9 0 , 0 0 0}$ | $\mathbf{1 , 0 5 , 0 0 0}$ | $\mathbf{1 , 2 5 , 0 0 0}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Less: Cash <br> sales (20\%) | $\mathbf{2 0 , 0 0}$ | $\mathbf{2 4 , 0 0 0}$ | $\mathbf{1 8 , 0 0 0}$ | $\mathbf{2 1 , 0 0 0}$ | $\mathbf{2 5 , 0 0 0}$ |
| Credit sales | $\mathbf{8 0 , 0 0 0}$ | $\mathbf{9 6 , 0 0}$ | $\mathbf{7 2 , 0 0 0}$ | $\mathbf{8 4 , 0 0 0}$ | $\mathbf{1 , 0 0 , 0 0 0}$ |

Though the debtors are allowed two months credit $4 / 5^{\text {th }}$ 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 ${ }^{\text {th }}$ of $80,000 * 95 \%$ | 60,800 has been collected in May |
| $1 / 5^{\text {th }}$ of $80,000 * 100 \%$ | 16,000 has been collected in June |
| May sales of Rs 96,000 |  |
| 4/5 ${ }^{\text {th }}$ of 96,000*95\% | 72960 has been collected in june |
| 1/5 ${ }^{\text {th }}$ of $96000 * 100 \%$ | 19200 has been collected in July |
| June sales of Rs 72,000 |  |
| 4/5 ${ }^{\text {th }}$ of 72,000*95\% | 54720 has been collected in july |
| $1 / 5{ }^{\text {th }}$ of $72000 * 100 \%$ | 14400 has been collected in august |
| July sales of Rs 84,000 |  |
| 4/5 ${ }^{\text {th }}$ of $84,000 * 95 \%$ | 63840 has been collected in july |
| 1/5 ${ }^{\text {th }}$ 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 |
|  | $\mathbf{8 8 9 6 0}$ | $\mathbf{7 3 9 2 0}$ | $\mathbf{7 8 2 4 0}$ |

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:

1. Cash in hand $1.4 .2005-1 \mathbf{1 0 , 0 0 0}$

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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. $4 / 5^{\text {th }}$ of the credit purchases is paid after one month of that purchases and next to that month the balance $1 / 5^{\text {th }}$ is paid.
4. Wages are paid $3 / 4^{\text {th }}$ on the due date while $1 / 4^{\text {th }}$ during the next month
5. Other expenses are paid at a lag of one month
6. Income tax Rs $\mathbf{2 5 , 0 0 0}$ due on or before 30.06.2005

Solutions

| Particulars | April | May | June |
| :--- | :--- | :--- | :--- |
| Opening cash balance | 10,000 | 5760 | 21832 |
| Receipts: <br> Collection from debtors | $2,23,360$ | $2,53,472$ | $1,62,496$ |
| Total cash available before current <br> financing | $\mathbf{2 , 3 3 , 3 6 0}$ | $\mathbf{2 , 5 9 , 2 3 2}$ | $\mathbf{1 , 8 4 , 3 2 8}$ |
| Disbursements <br> 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 | $\mathbf{2 2 7 6 0 0}$ | $\mathbf{2 3 7 4 0 0}$ | $\mathbf{2 2 7 2 0 0}$ |
| Excess(deficiencies) | $\mathbf{5 7 6 0}$ | $\mathbf{2 1 8 3 2}$ | $\mathbf{9 2 8 7 2}$ |

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 |  |
| $\mathbf{2 0 \%}$ of $\mathbf{2 6 0 , 0 0 0 * 9 8 \%}$ | 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 176000 |  |
| $\mathbf{2 0 \%}$ 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 |  |  |
|  | 31360 | 208000 | 128000 |
|  |  | 45472 |  |
|  |  |  | 34496 |
|  | $\mathbf{2 2 3 3 6}$ | $\mathbf{2 5 3 4 7 2}$ | $\mathbf{1 6 2 4 9 6}$ |

Payment of suppliers

|  | April | May | June |
| :--- | :--- | :--- | :--- |
| $1 / 5^{\text {th }}$ of feb purchase <br> $(168000)$ | 33600 |  |  |
| $4 / 5^{\text {th }}$ march purchase <br> $(2,00,000)$ | 160000 |  |  |
| $1 / 5^{\text {th }}$ of march <br> purchase $(2,00,000)$ | 40,000 |  |  |
| $4 / 5^{\text {th }}$ of april purchase <br> $(208000)$ | 166400 | 41600 |  |
| $1 / 5^{\text {th }}$ april purchase <br> $(208000)$ |  |  | 169600 |
| $4 / 5^{\text {th }}$ of may purchase <br> $(212000)$ |  | 206400 | 211200 |
|  | 193600 |  |  |

## Payment of wages

|  | April | May | June |
| :--- | :--- | :--- | :--- |
| $3 / 4^{\text {th }}$ of current month | 12,000 | 15,000 | 12,000 |
| $1 / 4^{\text {th }}$ of previous <br> month | 6000 | 4000 | 5000 |
|  | $\mathbf{1 8 , 0 0 0}$ | $\mathbf{1 9 , 0 0 0}$ | $\mathbf{1 7 , 0 0 0}$ |

## Ques6:

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

| Month | Purchase | Sales | Wages | Expenses |
| :--- | :--- | :--- | :--- | :--- |
| July | 40,000 | $\mathbf{6 0 , 0 0 0}$ | $\mathbf{8 , 0 0 0}$ | $\mathbf{1 0 , 0 0 0}$ |
| August | $\mathbf{6 0 , 0 0 0}$ | $\mathbf{8 0 , 0 0 0}$ | $\mathbf{1 0 , 5 0 0}$ | $\mathbf{1 2 , 0 0 0}$ |
| September | $\mathbf{5 0 , 0 0 0}$ | $\mathbf{7 0 , 0 0 0}$ | $\mathbf{1 7 5 0 0}$ | $\mathbf{1 2 5 0 0}$ |
| October | $\mathbf{7 0 , 0 0 0}$ | $\mathbf{9 0 , 0 0 0}$ | $\mathbf{1 7 1 0 0}$ | $\mathbf{1 1 6 0 0}$ |

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| November | 80,000 | 100000 | 12000 | 11800 |
| :--- | :--- | :--- | :--- | :--- |
| December | 60000 | 120000 | 12000 | 12300 |

It is expected that $\mathbf{5 0 \%}$ 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 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
$4 / 5^{\text {th }}$ of the credit purchase is paid after 1 month of that purchase and next to that month the balance $1 / 5^{\text {th }}$ is paid.

Wages are paid within $5^{\text {th }}$ 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 Itd 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 <br> Cash sales | 45,000 | 50,000 | 60,000 |
| Collection from debtors | 34600 | 41200 | 47,000 |
| Total cash available before current financing (A) | $\mathbf{1 , 1 9 , 6 0 0}$ | $\mathbf{1 , 1 6 , 2 0 0}$ | $\mathbf{1 , 1 7 , 8 0 0}$ |
| Disbursement <br> 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 $(\mathbf{B})$ | $\mathbf{9 4 6 0 0}$ | $\mathbf{1 0 5 4 0 0}$ | $\mathbf{8 8 8 0 0}$ |
| EXCESS(A-B) | 25,000 | 10,800 | 29,000 |
| financing |  |  |  |
| Closing cash balance | $\mathbf{2 5 , 0 0 0}$ | $\mathbf{1 0 , 8 0 0}$ | $\mathbf{2 9 , 0 0 0}$ |

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 <br> sales $(50 \%)$ | 30,000 | 40,000 | 35,000 | 45,000 | 50,000 | 60,000 |
| Credit <br> sales | $\mathbf{3 0 , 0 0 0}$ | $\mathbf{4 0 , 0 0 0}$ | $\mathbf{3 5 , 0 0 0}$ | $\mathbf{4 5 , 0 0 0}$ | $\mathbf{5 0 , 0 0 0}$ | $\mathbf{6 0 , 0 0 0}$ |

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 $\mathbf{3 0 0 0 0}$ |  |
| :---: | :---: |
| 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 50000 |  |
| $\mathbf{8 0 \%}$ 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 |
|  | $\mathbf{3 4 6 0 0}$ | $\mathbf{4 1 2 0 0}$ | $\mathbf{4 7 0 0 0}$ |

Calculation of cash purchases

| MONTH | JULY | AUG | SEPT | OCT | NOV | DEC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total <br> purchases | $\mathbf{4 0 , 0 0 0}$ | $\mathbf{6 0 , 0 0 0}$ | $\mathbf{5 0 , 0 0 0}$ | $\mathbf{7 0 , 0 0 0}$ | $\mathbf{8 0 , 0 0 0}$ | $\mathbf{6 0 , 0 0 0}$ |
| Less: credit <br> purchases(25\% | $\mathbf{1 0 , 0 0 0}$ | $\mathbf{1 5 , 0 0 0}$ | $\mathbf{1 2 , 5 0 0}$ | $\mathbf{1 7 , 5 0 0}$ | $\mathbf{2 0 , 0 0 0}$ | $\mathbf{1 5 , 0 0 0}$ |

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| of purchases) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash <br> purchases | $\mathbf{3 0 , 0 0 0}$ | $\mathbf{4 5 0 0 0}$ | 37500 | 52500 | 60000 | 45000 |

Payment to suppliers
$4 / 5^{\text {th }}$ of the credit purchase is paid after one month of thst purchase and $1 / 5^{\text {th }}$ is paid after two months of that purchase. Calculation has made as follow:

| August credit purchase of Rs $\mathbf{1 5 , 0 0 0}$ $4 / 5^{\text {th }}$ of 15,000 will be paid in September | 12,000 |
| :---: | :---: |
| $1 / 5^{\text {th }}$ of 15,000 will be paid in October | 3,000 |
| September credit purchases of Rs $\mathbf{1 2 , 5 0 0}$ 4/5 ${ }^{\text {th }}$ of Rs12,500 will be paid in October $1 / 5^{\text {th }}$ of Rs 12,500 will be paid in November | $\begin{aligned} & \mathbf{1 0 , 0 0 0} \\ & \mathbf{2 5 0 0} \end{aligned}$ |
| October credit Purchase of Rs17,500 $4 / 5^{\text {th }}$ of Rs 17,500 will be paid in November $1 / 5^{\text {th }}$ of 17,500 will be paid in December | $\begin{aligned} & 14,000 \\ & 3500 \end{aligned}$ |
| November credit purchases of Rs 20,000 $4 / 5^{\text {th }}$ of Rs 20,000 will be paid in December $\mathbf{1 / 5}$ of $\mathbf{2 0 , 0 0 0}$ will be paid in January | $\begin{aligned} & 16,000 \\ & 4000 \end{aligned}$ |

Summary of cash paid to Suppliers

| Month | October | November | December |
| :--- | :--- | :--- | :--- |
|  | $\mathbf{3 0 0 0}$ |  |  |
|  | $\mathbf{1 0 , 0 0 0}$ | $\mathbf{2 5 0 0}$ | - |
|  |  | $\mathbf{1 4 , 0 0 0}$ | $\mathbf{3 5 0 0}$ |
|  |  | $\mathbf{1 6 5 0 0}$ | $\mathbf{1 6 0 0 0}$ |
|  | $\mathbf{1 3 , 0 0 0}$ | $\mathbf{1 9 5 0 0}$ |  |

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

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2. Monthly wages and salaries Rs 20,000
3. Interest payable in august Rs10,000

| Estimated | June | July | August | September |
| :--- | :--- | :--- | :--- | :--- |
| Cash sales | $\mathbf{2 , 4 0 , 0 0 0}$ | $\mathbf{2 , 8 0 , 0 0 0}$ | $\mathbf{3 , 0 4 , 0 0 0}$ | $\mathbf{2 , 4 2 , 0 0 0}$ |
| Credit sales | $\mathbf{2 , 0 0 , 0 0 0}$ | $\mathbf{1 , 6 0 , 0 0 0}$ | $\mathbf{2 , 8 0 , 0 0 0}$ | $\mathbf{2 , 4 0 , 0 0 0}$ |
| Purchases | $\mathbf{3 , 2 0 , 0 0 0}$ | $\mathbf{3 , 4 0 , 0 0 0}$ | $\mathbf{4 , 8 0 , 0 0 0}$ | $\mathbf{3 , 6 0 , 0 0 0}$ |
| Expenses | $\mathbf{3 6 , 0 0 0}$ | $\mathbf{4 0 , 0 0 0}$ | $\mathbf{4 4 , 0 0 0}$ | $\mathbf{4 0 , 0 0 0}$ |

1. Credit sales are collected $50 \%$ in the month of sale and $50 \%$ in the following month. Collections are subject to $\mathbf{1 0 \%}$ 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. $\mathbf{5 0 \%} \%$ of expenses are paid in the month of such expenses and balance in the next month
5. Expenses include depreciation Rs 4000

Solutions
Cash budget for three months ended on $\mathbf{3 0 . 0 9 . 2 0 1 8}$

| 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)
```

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 |
| :--- | :--- | :--- | :--- | :--- |
| T. Total <br> purchases | $3,20,000$ | 340000 | 480000 | 360000 |
| Cash purchases <br> $(1 * 10 \%)$ | 32,000 | 34,000 | 48,000 | 36,000 |
| Credit purchase <br> $(1 * 90 \%)$ | $2,88,000$ | $3,06,000$ | $4,32,000$ | $3,24,000$ |
| Payment to <br> creditors after <br> one month | --- | $2,88,000$ | $3,06,000$ | 432000 |

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

|  | June | July | August | Septmember |
| :--- | :--- | :--- | :--- | :--- |
| 1. Total expenses | 36,000 | 40,000 | 44,000 | 40,000 |
| 2. Depreciation | 4,000 | 4,000 | 4,000 | 4,000 |
| 3. Non <br> depreciation (1- <br> 2) | 32,000 | 36,000 | 40,000 | 36,000 |
| 4. $50 \%$ of <br> expenses are <br> paid in the <br> month of such <br> expenses | 16,000 | 18,000 | 20,000 | 18,000 |
| 5. Balance (50\% in <br> 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)

