# Chapter 6 <br> Preparing Various <br> Types of Budgets 

## Introduction

- We have examined the concepts of business budget and budgetary control in the preceding chapter. Let us now turn to an analysis of the types of business budgets. There are mainly three bases for classification of business budgets. They are - time, purpose and function. Since functional classification is most important, we shall discuss it in more details in the present chapter.
- Business budgets can be classified from various point of view: (1) From the viewpoint of its purpose, it can be classified into three classes: (a) Product costing budget, (b) Responsibility or Control budget and (c) Fore-cast budget. (2) From the viewpoint of time, budget can be divided into two categories: (a) Long - term budget and (b) Short - term budget. (3) From the viewpoint of flexibility, budgets can be divided into two classes: (a) Fixed budget and (b) Flexible budget.


## Functional Classification of Budgets

(1) Sales budget
(2) Production Cost budget
a) Materials budget
b) Direct labour budget
c) Factory overhead budget
d) Service department budget
(3) Administration cost budget
(4) Sales and distribution cost budget

## Production Budget

- The targets of production during budget period can be had from the production budget. The quantity to be produced can be ascertained on the basis of sales estimates set in the sales budget, the stock of finished product at the beginning of the budget period and the stock desired to be held at the end of this period. In addition to production budget three other budgets are also required to conduct production operation. They are materials budget, labour cost budget and other production cost budget.
- It is difficult to decide whether sales budget should precede production budget or the other way round. The solution of this problem depends on such factors as the nature of business and type of product, etc. Where sale does not pose a difficult problem, production estimates are made before sales budget is prepared. Conversely where sale is not an easy function for the management, sales budget with forecasts of future sales is prepared before production budget is framed.


## Production Budget

- Following issues are included in the production budget:
I. To lay down the policy about the stock of finished products,
II. To make an estimate of the quantity to be produced during the budget period,
III. To fix a schedule of output to be produced during every week, month or three months,
IV. To give approval to the production budget,
V. To determine the procedure of production control,
VI. To make a comparison between actual production and estimated production every day, every week or every month, so that discrepancies between the two may not go unnoticed.


## Materials Budget

- Materials budget is concerned with determining quantities of raw materials required for budgeted production. First, the annual requirements of raw materials is determined and then it is divided into, daily, weekly and monthly requirement.
- Generally, an executive officer of the production department is entrusted with the task of preparing materials budget.
- If the amount of materials required per unit of output is known, total requirement can be easily determined on the basis of production budget.


## Purchase Budget

- If purchases of raw materials are planned carefully, expenditure can be reduced to a great extent and financial resources of the company can be saved considerably. If the quantity of raw materials that would be required at different points of time during a year is specified in the materials budget, a detailed plan of purchase can be formulated.
- It is the responsibility of the purchase officer to prepare a purchase budget which includes such matters as (i) the quantity of each type of material to be purchased, (ii) the time of purchase and (iii) the cost of purchase.
- While preparing purchase budget, it is necessary to give thought to the maximum and minimum levels of inventories because the timing of purchase depends on these limits. The maximum and minimum levels of inventories can be determined on the basis of past experience and seasonal demand etc.
- Example - 1: A company wants to prepare its Production Budget. It manufactures three product M, N and Z. The sales budget for 2013 of the company shows the sales of $25,000,20,000$ and 30,000 units respectively of the three products. The details of their opening and closing stock are as follows:

| Product | Opening Stock | Closing Stock |
| :---: | :---: | :---: |
| M | 4,800 units | 6,000 units |
| N | 3,200 units | 2,600 units |
| Z | 6,400 units | 9,800 units |

From the above information, prepare Production Budget for the year 2013.

- Solution:

Production Budget for the year 2013

| Particulars | Products |  |  |
| :--- | ---: | ---: | ---: |
|  | $\mathbf{M}$ | $\mathbf{N}$ | $\mathbf{Z}$ |
| Estimated Sales Units | 25,000 | 20,000 | 30,000 |
| Add: Closing Stock | 6,000 | 2,600 | 9,800 |
|  | 31,000 | 22,600 | 39,800 |
| Less: Opening Stock | 4,800 | 3,200 | 6,400 |
| Required Production (in units) |  | $\mathbf{2 6 , 2 0 0}$ | $\mathbf{1 9 , 4 0 0}$ |

- Example - 2: A company wants to prepare its Material Requirements Budget on the basis of its Production Budget. There are four departments in the company. The details of consumption of raw materials in each department are as under:

Raw material X and Y are used in department 1.
Raw material M and N are used in department 2.
Raw material A is used in department 3.
Raw material B is used in department 4.
The consumption of each type of materials is as follows:
(1) 2 units of $Y$ and 3 units of $A$ and $B$ each are used in product $O$.
(2) 3 units of X and 2 units of each $\mathrm{M}, \mathrm{N}$ and B are used in product P .
(3) 2 units of $\mathrm{X}, 3$ units of M and 2 units of B are used in product Q .

The standard price of each of them is as follows:
X : 80 paise; $\mathrm{Y}: 20$ paise; $\mathrm{M}: 50$ paise
$\mathrm{N}: 40$ paise; A : 60 paise; $\mathrm{B}: 90$ paise
The production budget shows the production of all the three products at 40,000 units, 48,000 units and 60,000 units respectively.

From the above information, prepare Raw Material Budget for year 2013.

- Solution:

Material Requirement Budget for the year 2013

| Product | Units <br> Required | Raw Materials |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | X | Y | M | N | A | B |
| O (40,000) | 2 | -- | 80,000 | -- | -- | -- | -- |
|  | 3 | -- | -- | -- | -- | 1,20,000 | 1,20,000 |
| $\mathbf{P}(48,000)$ | 2 | -- | -- | 96,000 | 96,000 | -- | 96,000 |
|  | 3 | 1,44,000 | -- | -- | -- | -- | -- |
| Q (60,000) | 2 | 1,20,000 | -- | -- | -- | -- | 1,20,000 |
|  | 3 | -- | -- | 1,80,000 | -- | -- | -- |
| Required Raw Materials <br> $\times$ Price per unit |  | 2,64,000 | 80,000 | 2,76,000 | 96,000 | 1,20,000 | 3,36,000 |
|  |  | 0.80 | 0.20 | 0.50 | 0.40 | 0.60 | 0.90 |
| Material Required (In ₹) |  | 2,11,200 | 16,000 | 1,38,000 | 38,400 | 72,000 | 3,02,400 |

- Example - 3: On the basis of raw material budget prepared in the previous example no. 2, the company wants to prepare its Purchase Budget for the year 2013. The following estimates are given for the opening stock of raw materials and raw material stock requirements at the end of the year.

|  | X | Y | M | N | A | B |
| :--- | :---: | :---: | :---: | ---: | :---: | :---: |
| Opening Stock | 40,000 | 15,000 | 55,000 | 6,000 | 30,000 | 60,000 |
| Closing Stock | 45,000 | 20,000 | 60,000 | 10,000 | 35,000 | 70,000 |

- Solution:

Material Purchase Budget for the year 2013

| Particulars | Raw Materials |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{M}$ | $\mathbf{N}$ | $\mathbf{A}$ | $\mathbf{B}$ |
| Required Raw Materials | $2,64,000$ | 80,000 | $2,76,000$ | 96,000 | $1,20,000$ | $3,36,000$ |
| Add: Closing Stock | 45,000 | 20,000 | 60,000 | 10,000 | 35,000 | 70,000 |
|  | $3,09,000$ | $1,00,000$ | $3,36,000$ | $1,06,000$ | $1,55,000$ | $4,06,000$ |
| Less: Opening Stock | $(40,000)$ | $(15,000)$ | $(55,000)$ | $(6,000)$ | $(30,000)$ | $(60,000)$ |
| Purchase of Materials | $2,69,000$ | 85,000 | $2,81,000$ | $1,00,000$ | $1,25,000$ | $3,46,000$ |
| $\times$ Price per unit | 0.80 | 0.20 | 0.50 | 0.40 | 0.60 | 0.90 |
| Material Purchase (In ₹) | $\mathbf{2 , 1 5 , 2 0 0}$ | $\mathbf{1 7 , 0 0 0}$ | $\mathbf{1 , 4 0 , 5 0 0}$ | $\mathbf{4 0 , 0 0 0}$ | $\mathbf{7 5 , 0 0 0}$ | $\mathbf{3 , 1 1 , 4 0 0}$ |

Total Purchase $=2,15,200+17,000+1,40,500+40,000+75,000+3,11,400$ $=₹ 7,99,100$
[9.] A factory manufactures two products $M$ and $N$ by using two types of raw materials in the proportion shown below:
Product $M$ : Raw Material $X: 60 \%$, Y $40 \%$. Prodict $N$ : Raw Material A: $75 \%$, B $25 \%$
The finished weight of products $M$ and $N$ are equal to the weight of their ingredients.

During August, 2012, it is expected that $1,000 \mathrm{kgs}$ of product M and $5,000 \mathrm{kgs}$. of product $N$ will be sold.

Actual and budgeted inventories for the month of August are as follows :

|  |  | Actual <br> $(\mathbf{1 - 8 - 2 0 1 2})$ | Budgeted <br> $(\mathbf{3 1 - 8 - 2 0 1 2 )}$ |
| :--- | :---: | :---: | :---: |
| Raw Material : | X | 200 | 160 |
|  | Y | 100 | 80 |
| Product : | A | 1,000 | 950 |
|  | B | 500 | 550 |
|  |  | M | 120 |

The purchase price of materials for August is expected to remain as follows :
$\begin{array}{lllll}X: R s . & 60 & \text { per kg. } & Y & \text { Rs. } 50 \text { per kg. } \\ \text { A : Rs. } 25 & \text { per kg. } & B \quad \text { Rs. } 45 \text { per kg. }\end{array}$
All materials will be purchased on 10-8-2008. From the above information, prepare :
(1) Production Budget for August, 2012.
(2) Material Requirement Hudget for August, 2012.
(3) Material Purchase Budget for August, 2012.

- Solution:

Production Budget for August, 2012

| Particulars | Products |  |
| :--- | :---: | :---: |
|  | $\mathbf{M}$ | $\mathbf{N}$ |
| Estimated Sales Units | 1,000 | 5,000 |
| Add: Closing Stock | 100 | 1,200 |
|  | 1,100 | 6,200 |
| Less: Opening Stock | $(120)$ | $(1,000)$ |
| Required Production (in units) |  | $\mathbf{9 8 0}$ |
| $\mathbf{n y y}$ | $\mathbf{5 , 2 0 0}$ |  |

Material Requirement Budget for August, 2012

| Product | Raw Materials |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | X | Y | A | B |
| M (980 units) $60 \%$ | 588 | -- | -- | -- |
| 40 \% | -- | 392 | -- | -- |
| $\mathbf{N}(5,200$ units) $75 \%$ | -- | -- | 3,900 | -- |
| 25 \% | -- | -- | -- | 1,300 |
| Required Raw Materials <br> $\times$ Price per unit <br> Material Required (In ₹) | 588 | 392 | 3,900 | 1,300 |
|  | 60 | 50 | 25 | 45 |
|  | 35,280 | 19,600 | 97,500 | 58,500 |

## Material Purchase Budget for August, 2012

| Particulars | Raw Materials |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{A}$ | $\mathbf{B}$ |
| Required Raw Materials | 588 | 392 | 3,900 | 1,300 |
| Add: Closing Stock | 160 | 80 | 950 | 550 |
| Less: Opening Stock | 748 | 472 | 4,850 | 1,850 |
| Purchase of Materials | $(200)$ | $(100)$ | $(1,000)$ | $(500)$ |
| $\times$ Price per unit | 548 | 372 | 3,850 | 1,350 |
| Material Purchase (In ₹) | 60 | 50 | 25 | 45 |
|  | $\mathbf{3 2 , 8 8 0}$ | $\mathbf{1 8 , 6 0 0}$ | $\mathbf{9 6 , 2 5 0}$ | $\mathbf{6 0 , 7 5 0}$ |

Total Purchase of Raw Materials $=32,880+18,600+96,250+60,750$
17. Santa Chumash Company ltd. manuflaters
 Moprotion shewn is under:

Raw Materials Product AB A

H

$$
\begin{array}{ccc}
80 \% & & - \\
20 \% & - & - \\
- & 50 \%
\end{array}
$$

## Product CD

1) 

The finished weigh of product $A B$ ind $(D$ ate cion? t: weight of their ingredients.

During the month of June. it is expected that 60 time af produce $B$ and 200 bans of product $C D$ will te sold.

Actual and budgeted inconories for the month of tease .re follow: :


- Solution:

Production Budget for the month of June

| Particulars | Products |  |
| :--- | :---: | :---: |
|  | AB | CD |
| Estimated Sales Units | 60 | 200 |
| Add: Closing Stock | 5 | 60 |
|  | Less: Opening Stock | 65 |
| Required Production (in units) | $(10)$ | 260 |

Material Requirement Budget for the month of June

| Product Proportion | Raw Materials |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D |
| $\mathbf{A B}(55$ tons) | 44 | -- | -- | -- |
|  | -- | 11 | -- | -- |
| CD (210 tons) | -- | -- | 105 | -- |
|  | -- | -- | -- | 105 |
| Required Raw Materials <br> $\times$ Price per unit | 44 | 11 | 105 | 105 |
|  | 500 | 400 | 100 | 200 |
| Material Required (In ₹) | 22,000 | 4,400 | 10,500 | 21,000 |

## Material Purchase Budget for the month of June

| Particulars | Raw Materials |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ |
| Required Raw Materials | 44 | 11 | 105 | 105 |
|  | 20 | 40 | 300 | 200 |
|  | 64 | 51 | 405 | 305 |
|  | $(15)$ | $(10)$ | $(200)$ | $(250)$ |
| $\times$ Price per unit | 49 | 41 | 205 | 55 |
| Purchase of Material (In ₹) | 500 | 400 | 100 | 200 |
|  | $\mathbf{2 4 , 5 0 0}$ | $\mathbf{1 6 , 4 0 0}$ | $\mathbf{2 0 , 5 0 0}$ | $\mathbf{1 1 , 0 0 0}$ |

Total Purchase of Raw Materials $=24,500+16,400+20,500+11,000$

$$
=₹ 72,400
$$

 for manufacturing three products $X$. $Y$ and $Z$. Production is carried in fout departments. The following information is furnished.

Details of Pre-determined Product Cost
Material Department Material (Per Unit) Product Units
Cost Rs.
A I
1.50
1.80
1.00
0.50

| $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :---: | :---: | :---: |
| - | 2 | 1 |
| 1 | 2 | - |
| 2 | - | 1 |
| 2 | - | 2 |
| $10 \%$ | $8 \%$ | $5 \%$ |

Generally rejected at final inspection Budgeted Data :
(1) Sales :

Sales during the year Rs.
Selling price per unit Rs.
(2) Finished Goods stock (units) :

In the beginning At the end

| $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| ---: | ---: | ---: |
| $6,00,000$ | $10,00,000$ | $9.60,000$ |
| 12 | 25 | 16 |
| 3,000 | 4,800 | 9,000 |
| 16,000 | 20,000 | 25,000 |

(3) Raw Material Stock (units) :
In beginning of the year $\quad 30,000 \quad 20,000 \quad 30,000 \quad 40,000$ $\begin{array}{llll}\text { At the close of the year } \quad 50,000 & 60,000 & 40,000 & 30,000\end{array}$ Prepare for year 2001 :
(i) Production Budget.
(ii) Production Cost Budget for Direct Material of various. departments for year.
(iii) Purchase Budget.

- Solution:

Production Budget for the year 2001

| Particulars | Products |  |  |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| Estimated Sales Units | 50,000 | 40,000 | 60,000 |
| Add: Closing Stock | 16,000 | 20,000 | 25,000 |
|  | 66,000 | 60,000 | 85,000 |
| Less: Opening Stock | $(3,000)$ | $(4,800)$ | $(9,000)$ |
| Required Production (in units) |  | $\mathbf{6 3 , 0 0 0}$ | $\mathbf{5 5 , 2 0 0}$ |

Working Notes: (1) Estimated Sales Units $=\frac{\text { Total Sales in ₹ }}{\text { Selling price per unit }}$

$$
\begin{array}{ll}
X=\frac{6,00,000}{12} & =50,000 \text { units } \\
Z=\frac{9,60,000}{16} & =60,000 \text { units }
\end{array}
$$

$>$ Due to wastage we need to manufacturing more units of products.
$>$ Here, percentage of wastage are given for all products.
$>$ Suppose, we produced 100 units of X, then 10 units are wastage and only 90 units are available.
$>$ So, if we want 63,000 units of $X$ then we need to manufacture 70,000 units $\left(63,000 \times \frac{100}{90}\right)$ of X .
$>$ Same for Product $\mathrm{Y}=55,200 \times \frac{100}{92} \quad=60,000$ units
$\Rightarrow$ And for Product $\mathrm{Z}=76,000 \times \frac{100}{95} \quad=80,000$ units
$>$ So, actual production of $\mathrm{X}=70,000$ units ; $\mathrm{Y}=60,000$ units and $\mathrm{Z}=$ 80,000 units.

Material Requirement Budget for the year 2001

| Product | Units Required | Raw Materials |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | D |
| X (70,000) | 1 | -- | 70,000 | -- | -- |
|  | 2 | -- | -- | 1,40,000 | 1,40,000 |
| Y (60,000) | 2 | 1,20,000 | 1,20,000 | -- | -- |
| Z (80,000) | 1 | 80,000 | -- | 80,000 | -- |
|  | 2 | -- | -- | -- | 1,60,000 |
| Required Raw Materials <br> $\times$ Price per unit |  | 2,00,000 | 1,90,000 | 2,20,000 | 3,00,000 |
|  |  | 1.50 | 1.80 | 1.00 | 0.50 |
| Material Required (In ₹) |  | 3,00,000 | 3,42,000 | 2,20,000 | 1,50,000 |

## Material Purchase Budget for the year 2001

| Particulars | Raw Materials |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | $\mathbf{A}$ | $\mathbf{B}$ | $\mathbf{C}$ | $\mathbf{D}$ |
| Required Raw Materials | $2,00,000$ | $1,90,000$ | $2,20,000$ | $3,00,000$ |
|  | 50,000 | 60,000 | 40,000 | 30,000 |
|  | $2,50,000$ | $2,50,000$ | $2,60,000$ | $3,30,000$ |
| Purchase of Materials | $(30,000)$ | $(20,000)$ | $(30,000)$ | $(40,000)$ |
| $\times$ Price per unit | $2,20,000$ | $2,30,000$ | $2,30,000$ | $2,90,000$ |
| Purchase of Material (In ₹) | 1.50 | 1.80 | 1.00 | 0.50 |
|  | $3,30,000$ | $4,14,000$ | $2,30,000$ | $1,45,000$ |

Total Purchase of Raw Materials $=3,30,000+4,14,000+2,30,000+1,45,000$

## Sales Budget

- Generally, all other budgets of a company are based on its sales budget. The management faces tremendous difficulties in preparing sales budget. It is required to forecast the volume of sales and level of price during the budget period. This forecast is based on a careful consideration of such factors as the nature of product, method of distribution, size of business unit and degree of competition in the market etc. Generally following procedures are used to arrive at definite forecasts of sales and price
$\square$ Collection of Data
$\square$ To fix the final figure of future sales
$\square$ Regional Allocation of Sales
$\square$ Responsibility of sales Manager
$\square$ Period of sales budget

5. A Company manufacturers two products A and B. It has three shops in Ahmedatad selling these products. The sales manager of the company has siven following entimates for the year 2012.

Shop No. $1 \quad$ Shop No. $2 \quad$ Shop No. 3
$\begin{array}{llll}\text { Product A (Units) } 50.000 & 70,000 & 25,000\end{array}$
Product B (Units) $\quad 00,000 \quad 90,000 \quad 15,000$.
The selling price of $A$ is Rs. So per unit and selling price of $B$ is Rs. 60 . Ih is estimated by the sales manager that sales of B in Shop No.1. can be increased by 20.000 units by substantial increase in advertisement and the sale of B in Shop No . 3 can be increalsed by 10,000 units by making necessary \%adjustments in the administration of Production and Sales office. In respect of both products, the sale of Shop No. 2 is not satisfactory and increase of -15 $20 \%$ is required.

Prepare Sales Budget for the year 2012.

- Solution:

Sales Budget for the year 2012

| Shop | Product A <br> No. |  | Product B <br> (Sales Price ₹ 80 ) |  | Total Sales <br> (Sales Price ₹ 60 ) |  |  |
| :---: | :---: | :---: | ---: | ---: | ---: | :---: | :---: |
|  | Units | ₹ | Units | $₹$ |  |  |  |
| 1 | 50,000 | $40,00,000$ | 80,000 | $48,00,000$ | $88,00,000$ |  |  |
| 2 | 84,000 | $67,20,000$ | $1,08,000$ | $64,80,000$ | $1,32,00,000$ |  |  |
| 3 | 25,000 | $20,00,000$ | 25,000 | $15,00,000$ | $35,00,000$ |  |  |
| Total | $1,59,000$ | $1,27,20,000$ | $2,13,000$ | $1,27,80,000$ | $\mathbf{2 , 5 5 , 0 0 , 0 0 0}$ |  |  |

Working Notes:
(1) The sales of B in shop no. 1 can be increased by 20,000 units, so new sales unit of B in shop no. 1 is 80,000 units $(60,000+20,000)$.
(2) In respect of both products, the sale of shop no. 2 is increased by $20 \%$. So, Sales of Product A is 84,000 units $(70,000+20 \%)$ and of Product B is $1,08,000$ units $(90,000+20 \%)$.
(3) The sales of B in shop no. 3 can be increased by 10,000 units. So, the new sales is 25,000 units $(15,000+10,000)$.

- Example - 8: Atul Engineering Co. Ltd. operates three sales divisions, selling there branded products $\mathrm{X}, \mathrm{Y}$ and Z .

Prepare Sales budget for the next budget period of 2013. For this purpose, the following information has been made available.

The budget figures for the current period are as follows:

|  | Division 1 | Division 2 | Division 3 |
| :--- | :---: | :---: | :---: |
| Product X (Units) | 16,000 | 24,000 | 24,000 |
| Product Y (Units) | 10,000 | 25,000 | 12,000 |
| Product Z (Units) | 8,000 | 40,000 | 15,000 |

Selling price of Product X per unit is ₹ 12 , that of Y is ₹ 20 and of Z ₹ 25 .
The figures of actual sales for the current year 2012 are given below:

Product X (Units)
Product Y (Units)
Product Z (Units)

Division 1
Division 2
15,000
8,000
5,000

25,000
30,000
32,000

## Division 3

22,000
15,000
15,000

There is no change in selling price. The following information is available as a result of consultations of the Budget Committee.
(1) Product X is selling at a higher rate than expected. Market surveys have revealed that it is popular and possibly under - priced. It is anticipated that even if the price was increased by ₹ 2 per unit, the product would find a ready market.
(2) Product Z is not selling at the expected rate. Market surveys have revealed that customers feel it to be over - priced and market can absorb more, if the price is reduced by ₹ 3 per unit.

The management has agreed to make price changes. The divisional sales managers have prepared following estimates.

## Increase or Decrease in previous budget (in percentage)

Division 1 Division 2

| Product X (Units) | +20 | +40 | +25 |
| :--- | :--- | :--- | :--- |
| Product Y (Units) | -15 | +30 | -10 |
| Product Z (Units) | +15 | +20 | +15 |

Besides it is decided to increase advertisement for the product Y and as a result the sales of product Y is likely to rise as follows:

> Division $1: 12 \%$ Increase
> Division $2: 8 \%$ Increase
> Division $3: 25 \%$ Increase

You are required to prepare Sales Budget for the year 2013 and give the Budgeted sales and Actual Sales for the current period:

- Solution:

Sales Budget for the year 2013

|  |  | Budget for Current Year 2012 |  |  | Actual for Current Year 2012 |  |  | Budget for the Year 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Division | Product | Qty. | Price | ₹ | Qty. | Price | ₹ | Qty. | Price | ₹ |
| 1 | X | 16,000 | 12 | 192000 | 15,000 | 12 | 180000 | 19,200 | 14 | 268800 |
|  | Y | 10,000 | 20 | 200000 | 8,000 | 20 | 160000 | 9,520 | 20 | 190400 |
|  | Z | 8,000 | 25 | 200000 | 5,000 | 25 | 125000 | 9,200 | 22 | 202400 |
|  | Total | 34,000 | -- | 592000 | 28,000 | -- | 465000 | 37,920 | -- | 661600 |
| 2 | X | 24,000 | 12 | 288000 | 25,000 | 12 | 300000 | 33,600 | 14 | 470400 |
|  | Y | 25,000 | 20 | 500000 | 30,000 | 20 | 600000 | 35,100 | 20 | 702000 |
|  | Z | 40,000 | 25 | 1000000 | 32,000 | 25 | 800000 | 48,000 | 22 | 1056000 |
| 3 | Total | 89,000 | -- | 1788000 | 87,000 | -- | 1700000 | 1,16,700 | -- | 2228400 |
|  | X | 24,000 | 12 | 288000 | 22,000 | 12 | 264000 | 30,000 | 14 | 420000 |
|  | Y | 12,000 | 20 | 240000 | 15,000 | 20 | 300000 | 13,500 | 20 | 270000 |
|  | Z | 15,000 | 25 | 375000 | 15,000 | 25 | 375000 | 17,250 | 22 | 379500 |
|  | Total | 51,000 | -- | 903000 | 52,000 | -- | 939000 | 60,750 | -- | 1069500 |
| Total | X | 64,000 | 12 | 768000 | 62,000 | 12 | 744000 | 82,800 | 14 | 1159200 |
|  | Y | 47,000 | 20 | 940000 | 53,000 | 20 | 1060000 | 58,120 | 20 | 1162400 |
|  | Z | 63,000 | 25 | 1575000 | 52,000 | 25 | 1300000 | 74,450 | 22 | 1637900 |
|  | Total | 174,000 | -- | 3283000 | 167,000 | -- | 3104000 | 215,370 | -- | 3959500 |

## Working Notes:

(1) The selling price of X has been increased from ₹ 12 to ₹ 14 per unit for the next budget period, while the selling price of Z is shown at reduced figure of $₹ 22$ per unit in place of ₹ 25 .
(2) Increase or Decrease in units for budget of 2013 from previous budget:

|  | Product X | Product Y | Product Z |
| :--- | :---: | :---: | :---: |
| Division 1 | 19,200 | 9,520 | 9,200 |
|  | $(16,000+20 \%)$ | $(10,000-15 \%+12 \%)$ | $(8,000+15 \%)$ |
| Division 2 | 33,600 | 35,100 | 48,000 |
|  | $(24,000+40 \%)$ | $(25,000+30 \%+8 \%)$ | $(40,000+20 \%)$ |
| Division 3 | 30,000 | 13,500 | 17,250 |
|  | $(24,000+25 \%)$ | $(12,000-10 \%+25 \%)$ | $(15,000+15 \%)$ |

6. The estimated figures of the selling expenses of Vimal Limited for the year ending 31st March, 2013 are given below :

Sales Office Salaries
Fixed Expenses of Sales Office
Advertisement (Fixed)
Travelling Salesmen's remuneration (Fixed)
In addition, the travelling salesmen are paid $1 \%$ commission on sales effected by them.

Carriage outward is paid at 4\% of the sales and other agent's commission is paid at $5 \%$ on the sales.

You are required to prepare a Selling Overhead Budget for the following level of Sales:
(1) Total Sales of Rs. 40 Lacs (Including agent's sales of Rs. 5 lacs)
(2) Total Sales of Rs. 50 lacs (Including agent's sales of Rs. 8 lacs)
(3) Total Sales of Rs. 60 lacs (Including agent's sales of Rs. 9 lacs) for the year ended 31 ${ }^{\text {st }}$ March, 2013

| Particulars | $\boldsymbol{₹}$ | $\boldsymbol{₹}$ | $\boldsymbol{₹}$ |
| :--- | ---: | ---: | ---: |
| Estimated Total Sales | $40,00,000$ | $50,00,000$ | $60,00,000$ |
| Fixed Overheads: |  |  |  |
| Sales office Salaries | 44,000 | 44,000 | 44,000 |
| Fixed Expenses of sales office | 32,000 | 32,000 | 32,000 |
| Advertisement (Fixed) | 55,000 | 55,000 | 55,000 |
| Travelling Salesmen's Remuneration | $1,50,000$ | $1,50,000$ | $1,50,000$ |
| $\quad$ Total (A) | $2,81,000$ | $2,81,000$ | $2,81,000$ |
| Variable Overheads: |  |  |  |
| Travelling Salesmen's Commission (1\%) | 35,000 | 42,000 | 51,000 |
| Carriage Outward (4\% of sales) | $1,60,000$ | $2,00,000$ | $2,40,000$ |
| Agent's Commission (5\% of sales by them) | 25,000 | 40,000 | 45,000 |
|  | $2,20,000$ | $2,82,000$ | $3,36,000$ |
| Total (B) |  | $\mathbf{5 , 0 1 , 0 0 0}$ | $\mathbf{5 , 6 3 , 0 0 0}$ |
| $\mathbf{6 , 1 7 , 0 0 0}$ |  |  |  |

7. The data regarding selling expenses of Rajnagar Co. Ltd. for the yea 2012 are as below:

| Particulars | Surat Rs. | Rajkot Rs. | Navsari Rs. | Tota Rs. |
| :---: | :---: | :---: | :---: | :---: |
| Salaries $V$ | 3.500 | 4,000 | 2.500 | 10.00C |
| Adverising ${ }^{\text {A }}$ | 2.000 | 2,500 | 1,000 | 5.500 |
| Warehouse Salary $V$ | 7.000 | 8.000 | 6,000 | 21,000 |
| Warehouse expenses 9 | 4,000 | 5,000 | 3,000 | 12.000 |
| Rent and Rates $\checkmark$ | 1.000 | 2,000 | 1,200 | 4,200 |
| Commission on sales $\sim$ | 8.000 | 6.000 | 7,000 | 21,000 |
| Selling expenses | 6.000 | 8.000 | 4,000 | 18.000 |
| Total | 31.500 | 35.500 | 24.700 | 91.700 |

During year 2013 budget period, the following changes are to be allowed:
(1) Commission in each area is to be increased by $4 \%$.
(2) Warehouse salary in case of Surat and Navsari will increase by $5 \%$.
(3) Total salaries will increase by Rs. 300, Rs. 400 and Rs. 200 in all three areas respectively.
(4) Rent will increase by $10 \%$.
(5) In Navsari area advertisement expnses will increase by $10 \%$. You are required to prepare the Selling Expenses Budget for the year 2013.

- Solution:

Selling Overheads Budget
for the year 2013

| Particulars | Surat (₹) | Rajkot (₹) | Navsari (₹) | Total (₹) |
| :--- | :---: | :---: | :---: | ---: |
| Salaries (Adj. No. 3) | 3,800 | 4,400 | 2,700 | 10,900 |
| Advertising (Adj. No. 5) | 2,000 | 2,500 | 1,100 | 5,600 |
| Warehouse Salary (Adj. 2) | 7,350 | 8,000 | 6,300 | 21,650 |
| Warehouse Expenses | 4,000 | 5,000 | 3,000 | 12,000 |
| Rent and Rates (Adj. No. 4) | 1,100 | 2,200 | 1,320 | 4,620 |
| Commission on sales (Adj.1) | 8,320 | 6,240 | 7,280 | 21,840 |
| Selling Expenses | 6,000 | 8,000 | 4,000 | 18,000 |
| Total Selling Overheads | $\mathbf{3 2 , 5 7 0}$ | $\mathbf{3 6 , 3 4 0}$ | $\mathbf{2 5 , 7 0 0}$ | $\mathbf{9 4 , 6 1 0}$ |

20 The data regarding selling expenses of a company for the year 2008 are as under :

| Particulars | Ahmedabad <br> Rs. | Vadodara <br> Rs. | Surat <br> Rs. | Total <br> Rs. |
| :--- | ---: | ---: | ---: | ---: |
| Salesmen's Salary | 2,200 | 2,600 | 1,800 | 6,600 |
| Rent and rates | 1,000 | 1,200 | 1,000 | 3,200 |
| Advertisement | 1,500 | 2,000 | 1,500 | 5,000 |
| Warehouse expenses | 4,000 | 4,500 | 3,500 | 12,000 |
| Commission on sale | 4,000 | 3,000 | 4,000 | 11,000 |
| Selling expenses | 3,000 | 3,500 | 2,500 | 9,000 |

During the year 2009 budget period, the following changes are to be considered :
(1) Sales Commission is to be increased by $5 \%$.
(2) Rent will increase by $10 \%$
(3) In Ahmedabad and Surat advertisement expenses will increase by $20 \%$
(4) Salesmen's total salary will increase by Rs. 2,400 , which would be increased in all three cities in proportion of $2: 1: 3$ respectively. Prepare the Selling Expenses Budget for the year 2009.

- Solution:

Selling Overheads Budget
for the year 2009

| Particulars | Ahmedabad <br> $(₹)$ | Vadodara <br> $(\mathbf{₹})$ | Surat <br> $(₹)$ | Total <br> $(₹)$ |
| :--- | :---: | :---: | :---: | :---: |
| Salesmen's Salary (Adj. 4) | 3,000 | 3,000 | 3,000 | 9,000 |
| Rent and Rates (Adj. 2) | 1,100 | 1,320 | 1,100 | 3,520 |
| Advertisement (Adj. 3) | 1,800 | 2,000 | 1,800 | 5,600 |
| Warehouse Expenses | 4,000 | 4,500 | 3,500 | 12,000 |
| Commission on Sales (Adj.1) | 4,200 | 3,150 | 4,200 | 11,550 |
| Selling Expenses | 3,000 | 3,500 | 2,500 | 9,000 |
| Total Selling Overheads | $\mathbf{1 7 , 1 0 0}$ | $\mathbf{1 7 , 4 7 0}$ | $\mathbf{1 6 , 1 0 0}$ | $\mathbf{5 0 , 6 7 0}$ |

