

Q No 1: Moon Manufacturing Company discloses the following information of February, 2016; you are required to prepare journal entries to record the transaction in the general and factory office books:

Total Payroll Cost for the month Rs. 178,000, employee's income tax withholds Rs. 8,000 deduction for provident fund at the rate of 10% of gross payroll were recorded to pay.

Payroll analysis sheet revealed the following: Director Labor Rs. 95,000, Indirect labor Rs. 20,000, Sales Salaries Rs. 35,000 and office Salaries Rs. 28,000.

Employer provident fund contribution (EPFC) is at the same rate. Rate of social security fund contribution (SSCF) is 5% of gross pay.

Solution:

Head office Books			\Factory office Books		
Payroll	178,000				
Income tax withhold		8,000			
Provident fund payable		17,800			
Accrued Payroll		152,200			
Accrued Payroll	152,200				
Voucher Payable		152,200			
Voucher Payable	152,200				
Bank		152,200			
Factory ledger	115,000		Work in process	95,000	
Marketing expenses	35,000		Factory overhead control	20,000	
Administration expenses	28,000		General ledger		115,000
Payroll		178,000			
Factory ledger	18,300		Factory overhead control	18,300	
Marketing expenses	5,040		General ledger		18,300
Administration expenses	3,360				
Provident fund payable		17,800			
Social security fund		8,900			

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Q No 2: The Normal annual capacity of Suzuki Motor Company is 60,000 vehicles with production being constant throughout the year. The April budget shows fixed factory overheads of Rs. 2,500,000 and variable factory overhead rate of Rs. 2,500 per vehicle. During April, actual output was 4,800 vehicles with total factory overhead cost of Rs. 15,500,000. You are required to

- (i) Compute the under or over applied factory overheads cost.
- (ii) Work out the spending Variance.
- (iii) Determine the idle Capacity Variance.

Solution: Factory Overhead Absorption Rate:

$$\begin{aligned}
 &= \text{Fixed rate} + \text{Variable rate} \\
 &= (\text{Fixed FOH} / \text{Estimated volume}) + \text{Variable rate} \\
 &= (\text{Rs. } 2,500,000 / 60,000) + \text{Rs. } 2,500 \\
 &= \text{Rs. } 41 + \text{Rs. } 2,500 \\
 &= \text{Rs. } 2,541
 \end{aligned}$$

Under or Over applied factory overhead:	Rs.
Actual Factory Overhead	15,500,000
Applied Factory Overhead Actual Volume × Factory overhead applied rate (4,800 units × 2541)	12,196,800
Over applied factory overhead	3,303,200
Spending Variance:	Rs.
Budgeted Factory overhead for actual volume Fixed FOH + (4,800 × 2500) 2,500,000 + (4,800 × 2541)	14,500,000
Actual Factory Overhead	15,500,000
Un-Favorable	1,000,000
Idle Capacity Variance:	Rs.
Applied Factory Overhead	12,196,800
Budgeted overhead	14,500,000
Un-Favorable	2,303,200

Q No 3: Zoya Manufacturer has two production departments A and B and two services department X and Y. Department factory overhead costs after primary apportionment are as follows:

A = Rs. 75,000 B = Rs. 88,000 X = Rs. 65,000 Y = Rs. 46,000

Service departments render services in the following proportions:

	A	B	X	Y
Service dept. X	40%	45%	----	15%
Service dept. Y	30%	50%	20%	----

Required: Calculate total factory overheads of production departments by preparing factory overhead distribution sheet.

Solution:

Algebraic Method:

Let X = Total cost of department X

Y = Total cost of department Y

Then X = Rs. 65,000 + 15% Y Eq.1

Y = Rs. 46,000 + 20% X Eq.2

By substituting Y = Rs. 46,000 + 20% X in eq.1 we get

X = 65,000 + 15% (46,000 + 20% X)

X = 65,000 + 46,000 x 15% + 15% x 20% X

X = 65,000 + 6,900 + 3% X

X - 3% X = 71,900

97 %X = 71,900

X = 71,900 x 100 / 97

X = Rs. 74,124

By substituting X = Rs. 65,000 + 15% Y in eq.2 we get

Y = Rs. 46,000 + 20% (65,000 + 15% Y)

Y = 46,000 + 65,000 x 20% + 20% x 15% Y

Y = 46,000 + 13,000 + 3% Y

Y - 3% Y = 59,000

97 %Y = 59,000

Y = 59,000 x 100 / 97

Y = Rs. 60,824

	Production Departments		Service Departments	
	A	B	X	Y
Departmental cost after	Rs.	Rs.	Rs.	Rs.
Primary distribution	75,000	88,000	65,000	46,000
Secondary distribution				
Service Department X	29,950	33,356	(74,124)	30412
Service Department Y	18,247	30412	29,950	(60,824)
	48,197	63,768	----	----

Q No 4: Narrate the sequence in which the major components of the master budget are prepared. Why is it necessary to prepare the components in such a sequence?

Answer: Definition:

The master budgeted is a summary of company's plans that sets specific targets for sales, production, distribution and financing activities. It generally culminates in a cash budget, a budgeted, and a budgeted balance sheet. In short, this budget represents a comprehensive expression of management's plans for future and how these plans are to be accomplished.

It usually consists of a number of separate but interdependent budgets. One budget may be necessary before the other can be initiated. More one budget estimate affects other budget estimates because the figures of one budget are usually used in the preparation of other budget. This is the reason why these budgets are called interdependent budgets.

Components of Master Budget: Master budget has two major sections which are the operational budget and the financial budget. They have following components:

Operational Budget

1. Sales Budget
2. Production Budget
3. Direct Material Purchases Budget
4. Direct Labor Budget
5. Overhead Budget
6. Selling and Administrative Expenses Budget
7. Cost of Goods Manufactured Budget

Financial Budget

1. Schedule of Expected Cash Receipts from Customers
2. Schedule of Expected Cash Payments to Suppliers
3. Cash Budget
4. Budgeted Income Statement
5. Budgeted Balance Sheet

Note that all of the above component budgets may not be included in the master budget of every business. Some of these such as production budget and cost of goods manufactured budget are not need by a non-manufacturing business.

Order of components of master budget: As we said earlier, the components of master budget are interconnected, which means that numbers from one component budget flow to another one. For example sales budget numbers are used in schedule of cash receipts from customers and unless the sales budget is prepared we are unable to prepare schedule of receipts from customers because of lack of information. This means that components of master budget must be prepared in a specific order. We have ordered the above list in such a way that the necessary information needed by any component budget is provided by a preceding component.

Q No 5: Bill's Cabinet sells a product for Rs. 360 per unit. The company's variable cost per unit is Rs. 60 for direct material, Rs. 50 per unit for direct labor and Rs. 34 per unit for overhead. Annual fixed production overhead is Rs. 74,800 and fixed selling and administrative overhead is Rs. 50,480.

- a) Determine the contribution margin per unit and CM Ratio.
- b) Calculate the break-even point in units and in Rupees.
- c) If Bill's Cabinet wants to earn a per-tax profit for Rs. 51,840, how many units must the company sell?

Solution:

Contribution margin per unit = variable cost + direct material + direct labor

Contribution margin per unit = Rs. 60 + Rs. 50 + Rs. 34

Contribution margin per unit = Rs. 144

CM Ratio = Fixed cost / variable per unit

CM Ratio = 74,800 / 60

CM Ratio = 1,246

Break-Even points = Revenue per unit - Variable expenses per unit

= 360 - 60

= 300 per unit

Sales: = (Fixed cost + variable cost + profit) / total units

= (74,800 + 20880 + 51480) / 348

= 147160 / 348

= 422 per units

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